

CITY of NOVI CITY COUNCIL

Agenda Item 5 June 18, 2007

SUBJECT: Approval to award a construction contract for the 2007 Neighborhood Road Program Contract 1 to Hard Rock Concrete, Inc., the lowest qualified bidder, in the amount of \$960,475 (the contract to be signed after July 1, 2007).

SUBMITTING DEPARTMENT: Engineering Department

CITY MANAGER APPROVAL: PWA FOR CUP

EXPENDITURE REQUIRED	\$960,475.00 (2007-2008 Road and General Funds)
AMOUNT BUDGETED	\$2,500,000.00 (FY2007-08)
APPROPRIATION REQUIRED	N/A
LINE ITEM NUMBER	409-000.00-865.417

BACKGROUND INFORMATION:

Each year, the City of Novi selects residential local streets for reconstruction, repaving, and/or rehabilitation using Pavement Surface Evaluation and Rating system (PASER) ratings and input from Public Works and Engineering staff based on field observations and resident concerns. Unlike past years when an even balance of asphalt and concrete streets had been addressed, this year's program includes only concrete streets. The reason is that there are many more miles of concrete streets that have more serious problems than asphalt streets; and, the vast majority of the worst asphalt streets have been repaved/rehabilitated in recent years.

Following the completion of the 2006 PASER analysis, Engineering staff reviewed the conditions of 56 street segments that received the lowest (worst) PASER ratings in the 2004 and 2006 studies and identified 18 street segments for additional study by URS - the City's consultant for this project (Rob Hayes' March 22, 2007 memo with Scoping Report Executive Summary, attached). URS's study prioritized the 18 street segments and identified \$4,166,000 worth of street reconstruction. The FY2007-08 budget includes \$2,500,000 for the reconstruction of concrete streets this construction season and will include 13 of the 18 street segments identified in the URS study.

The project has been divided into two contracts to make the work more manageable and to help ensure all work gets completed this construction season. Contract 1 includes the following street segments – all of which will be fully reconstructed (as opposed to strictly reconstructing individual panels):

- Windridge Lane (Remington to Willingham)
- Ashford Circle (all)
- Devonshire Drive (all)
- Willingham Drive (all)
- Lathum Drive (all)

Although some street segments in this year's program may not have a uniformly poor condition over their entire lengths, it is more economical to reconstruct an entire segment that has an overall poor PASER rating, rather than just reconstructing a portion of the segment in piecemeal fashion. This approach is especially valid when 40% or more of a concrete street's transverse and longitudinal joints have failed, which is the case for all of the streets in this year's program.

The five remaining street segments that were studied this year and will be unaddressed upon completion of this year's program are:

- Sunnybrook Lane (Autumn Park)
- Elizabeth Lane (Addington)
- Worcester Drive (Bradford of Novi)
- Welch Road (North Hills Estates)
- Welch Road Court (North Hills Estates)

Reconstruction of these five streets will be designed by 3rd Quarter of FY 2007/2008, and they will be reconstructed during the 2008 construction season at an estimated cost of \$1.5 million. Next year's program will also include other high-priority local streets that will be studied and recommended for reconstruction during FY 2008/2009 budget discussions.

Nine bids were received and opened on June 7, 2007 following a public bid solicitation period. The low bidder for Contract 1 is Hard Rock Concrete. Hard Rock's bid is recommended as being in the best interest of the City as it is responsive (i.e., Hard Rock has complied with all requirements of the bidding instructions) and it is the lowest price. (URS's award recommendation letter dated June 8, 2007 is attached).

A summary of the nine bids is as follows:

Bidder	Total Bid
Hard Rock Concrete, Inc.	\$960,475.00
Florence Cement Co.	\$1,021,060.80
Major Cement Co.	\$1,101,458.00
Six-S	\$1,105,325.50
Lacaria Concrete Construction	\$1,134,383.00
Dilisio Contracting	\$1,150,455.20
Peter A. Basile Sons, Inc.	\$1,208,024.45
Summit Transport	\$1,234,801.20
Tony Angelo Cement Co.	\$1,261,470.34

Hard Rock successfully completed the concrete portion of the 2006 Neighborhood Road Program. The other contract for 2007 Neighborhood Road Program is also being recommended for award to Hard Rock Concrete. URS has discussed the combined workload with the contractor and is comfortable recommending award of both contracts to Hard Rock.

The project is funded for FY2007-08. The project is being awarded now so that the Contractor can begin acquiring bonds and insurance to facilitate the signing of the contract as soon as possible after the start of the fiscal year on July 1, 2007.

Construction is scheduled to begin in July 2007 and will be completed by the end of October 2007.

RECOMMENDED ACTION: Approval to award a construction contract for the 2007 Neighborhood Road Program Contract 1 to Hard Rock Concrete, Inc., the lowest qualified bidder, in the amount of \$960,475 (the contract to be signed after July 1, 2007).

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Mayor Landry				
Mayor Pro Tem Capello				
Council Member Gatt				
Council Member Margolis				

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Council Member Nagy			
Council Member Paul			

MEMORANDUM



To:

Clay Pearson

From:

Kathy Smith-Roy

Cc:

Pam Antil Rob Hayes

Subject:

2007-8 Neighborhood Roads, Novi Link Project & Road Bond Funds

Date:

May 23, 2007

Given the recent information on the construction timeline of the Novi Road link from Grand River to 10 Mile Road, I would recommend that we use the Road Bond Funds remaining of approximately \$1,516,000 (plus future interest earnings) for the 2007-8 Neighborhood Roads. Further, would recommend that once the Road Bond funds have been completely depleted for this project, the total amount of those proceeds should then be established through a budget amendment in the Municipal Street Fund for the MDOT final accounting of the Road Bond projects: Grand River-CSX Bridge, Grand River - Beck to CSX; Grand River - City limits east to Beck; Novi Rd - 10 Mile Intersection; Novi Rd - Grand River Intersection; as well as for the Novi Road link project. Next week we will have the individual project costs actual/budget for each of the remaining RCOC/MDOT Road Bond projects.

The rationale for the recommendation is as follows: (a) close the Road Bond as soon as possible to save on consulting fees (arbitrage reporting, audit fees, etc.); (b) avoid any potential arbitrage interest rebate, and (c) provide funding sooner for the 2007-8 Neighborhood Road project.

If you have any questions or need any additional information, please let me know. Thanks.



MEMORANDUM

To:

Clav Pearson, City Manager

Pam Antil, Assistant City Manager

From:

Rob Hayes, P.E., City Engineer

Re:

2007 Neighborhood Streets Project Update

Date:

March 22, 2007

To Mayor and City Council Marks on reighborhood roads reviewand plan for year shead construction.

We have completed the study and recommendation phase for the referenced project. Attached is the executive summary from the final Scoping Report that lists the recommended streets to be included in Filling and I this year's project. Street selection is based on the average pavement quality index (PQI) rating from Avillable the 2004 and 2006 PASER studies, and the results of detailed field inspections (including pavement core and soil boring analyses) conducted for each candidate street.

As indicated in the table titled, "2007 Project Summary", we have listed \$1.1 million in street reconstruction for this year. We are also proposing that another \$1.2 million in street reconstruction be designed now and listed as alternate bid items in this year's project. One or more of these alternates would be awarded depending on two primary variables: 1) the approved FY 07/08 budget amount for this project; and 2) bid prices received. Regardless of the amount budgeted, our hope is that we can again retain a contractor that can give us the competitive bid prices similar to what were submitted in 2006. Last year, Hard Rock Concrete's prices were 35% below the engineer's estimate and we were able to add several streets to the 2006 project. Streets that cannot be funded for reconstruction this year will be moved to the top of next year's list.

As part of the proposed FY 07/08 Capital Improvements Program, we have requested \$1.5 million for the Neighborhood Streets Project, which is broken-down as follows:

Engineering (for Construction Year 2008):

\$ 200,000

Construction (for Construction Year 2007):

\$1,100,000

20% Construction Contingency Factor:

\$ 200,000

\$1,500,000

We have directed URS to commence the Design Phase for this project. Final design plans will be submitted in late April; the project will be advertised in May; and, work will begin in early July and be completed by early September.

Please let me know if you have any questions or comments regarding our plans for proceeding with this important City project.

CÓ!

Brian Coburn, Civil Engineer

Benny McCusker, Public Works Director

SCOPING REPORT

2007 NEIGHBORHOOD ROADS PROGRAM STUDY AND RECOMMENDATION PHASE

CITY OF NOVI OAKLAND COUNTY, MICHIGAN

Prepared For:

CITY OF NOVI ENGINEERING DEPARTMENT

Prepared By:



DETROIT - FARMINGTON HILLS - GRAND RAPIDS - TRAVERSE CITY

March 19, 2007

Section 1 Summary and Recommendations

1.1 Summary

The City of Novi is continuing to move forward with an annual Neighborhood Roads Program. This year's program includes the review and evaluation of 18 different roadways. Each of these roadways is broken into segments as established by the City of Novi Engineering Department. In 2006, these individual segments were rated based on a pavement analysis survey (Pavement Quality Index (PQI) rating).

In addition to the ratings provided by the Engineering Department, URS has performed a field inspection/survey of each segment of roadway. This field work included an evaluation of the existing joints (both longitudinal and transverse), existing cracking, and slab settlement. Pavement cores/soil borings were also obtained for each roadway.

Results from this field inspection were combined with the 2006 pavement analysis survey provided by Novi. Based on this information, recommendations have been provided for each roadway.

In general, the existing pavement, for all roadways, is experiencing deterioration at the transverse joints. In addition, portions of the longitudinal joints are spalling and deteriorating. Some slabs have experienced significant cracking and settling. It appears that many of the joints have been previously patched.

Based on the pavement cores/soil borings provided by our subconsultant, Professional Services Industries, Inc., the existing pavement section is typically 5 inches to 8 inches of non-reinforced concrete over sifty clay. Typically, a drainage course layer was not built with the pavement.

1.2 Recommendations

Based on the existing pavement condition and PQI Ratings, we ultimately recommend full reconstruction of the pavement section for every roadway. This reconstruction would include removal of the underlying material (silty clay) and replacement with an aggregate base drainage course. Underdrains are also recommended in conjunction with the aggregate base layer.

Other, less expensive fixes (i.e. joint repairs and individual slab replacement) can be applied to several of the road-ways. However, these fixes will be temporary in nature. Given the decay of the joints (both transverse and longitudinal) and the lack of a drainage course layer in the pavement section, the existing problems will likely reappear unless the pavement is reconstructed.

In order to reconstruct all of the roadways that were studied, a total budget of approximately \$4.2 million (2007 dollars) is required. It is our understanding that the City will likely budget approximately \$1.4 million dollars for the 2007 improvements. With this in mind, we have prioritized the roadways for construction based on condition.

To quantify the prioritization of the roadways, we have combined the ratings from both the pavement survey analysis and the pavement field inspection. As mentioned above, the pavement survey analysis was provided by the City of Novi Engineering Department. These ratings are broken down by segment for each roadway. The ratings were than averaged for the entire roadway. For example, Willingham Drive from Windridge Lane to Westmont Court has a PQI rating of 6 and Willingham Drive from Lathum Drive to Windridge Lane has a PQI rating of 7. This averages to an overall rating of 6.5.

For the field inspection portion, the existing joint condition (both transverse and longitudinal), supplemental cracking, and slab settlement have been quantified. The percentage of transverse joints and longitudinal joints that are in poor condition have been logged and calculated, as identified in the individual inspection reports. In addition, the supplemental cracking has been calculated on a per 100' of roadway basis.



The table below displays the roadways and their ranking based on both the pavement survey analysis and the pavement field inspection. This table also shows the overall ranking when the two are averaged.

PAVEMENT CONDITION RATINGS SUMMARY

Roadway Name	Average PQI Rating	THE REPORT OF THE PARTY OF THE	Field Inspec- tion Ranking		Overall Rank- ing/Priority
Ashford Circle	7.0	8	3	5.5	4
Elizabeth Lane	7.2	11	7	9.0	9
Chase Drive	6.0	2	11	6,5	6
Devonshire Drive	6.0	2	9	5,5	5
Dover Boulevard	7.0	8	14	11.0	13
Falmouth Avenue	7.0	8	12	10.0	12
Galway Drive (includes Galway	5.8	1	1	1.0	1 1
Circle)					,
Lathum Drive	8.0	12	6	9.0	10
Sullivan Lane	6.0	2	2	2.0	2
Sunnybrook Lane	6.8	7	13	10,0	11
Welch Road (includes Welch	8.3	15	8	11.5	14
Circle)				'	
White Plains Drive	8.0	12	4	9.8	8
Willingham Drive	6,5	5	10	7.5	7
Windridge Lane	6.5	5	5	5	3
Worcester Drive	8.0	12	15	13.5	15

Rankings are on a 1-15 scale as compared to other roadways (1 being highest ranking)

The following table shows this list, in order of priority, with the estimated construction cost.

PAVEMENT CONDITION PRIORITY SUMMARY

Roadway Name	Estimated Construction Cost
1. Galway Drive	\$990,000
2. Galway Drive Circle	\$54,000
3. Sullivan Lane	\$186,000
4. Windridge Lane	\$180,000
5. Ashford Circle	\$308,000
6. Devonshire Drive	\$427,000
7. Chase Drive	\$251,000
8. Willingham Drive	\$163,000
9. White Plains Drive	\$164,000
10. Elîzabeth Lane	\$410,000
11, Lathum Drive	\$142,000
12. Sunnybrook Lane	\$210,000
13. Falmouth Avenue	\$72,000
14, Dover Boulevard	\$90,000
15. Welch Road	\$156,000
16. Welch Road Circle	\$36,000



16. Worcester Drive	\$326,000
Construction Total:	\$4,166,000

Preliminary Estimates are Rounded (2007 Dollars)

Although Galway Drive is listed as the top priority, we would recommend that only Galway Drive from Taft Road to Daleview Drive (including Galway Drive Circle) be reconstructed in 2007. This recommendation is based on the proposed construction along Taft Road scheduled for 2007. If Galway at Nine Mile Road were reconstructed this summer, all entrances to Lexington Green would be impacted by construction. Also it is recommended that Falmouth Avenue and Dover Boulevard be added in order to complete street reconstruction in the Yorkshire Place subdivision.

With this in mind, we propose the following projects in 2007:

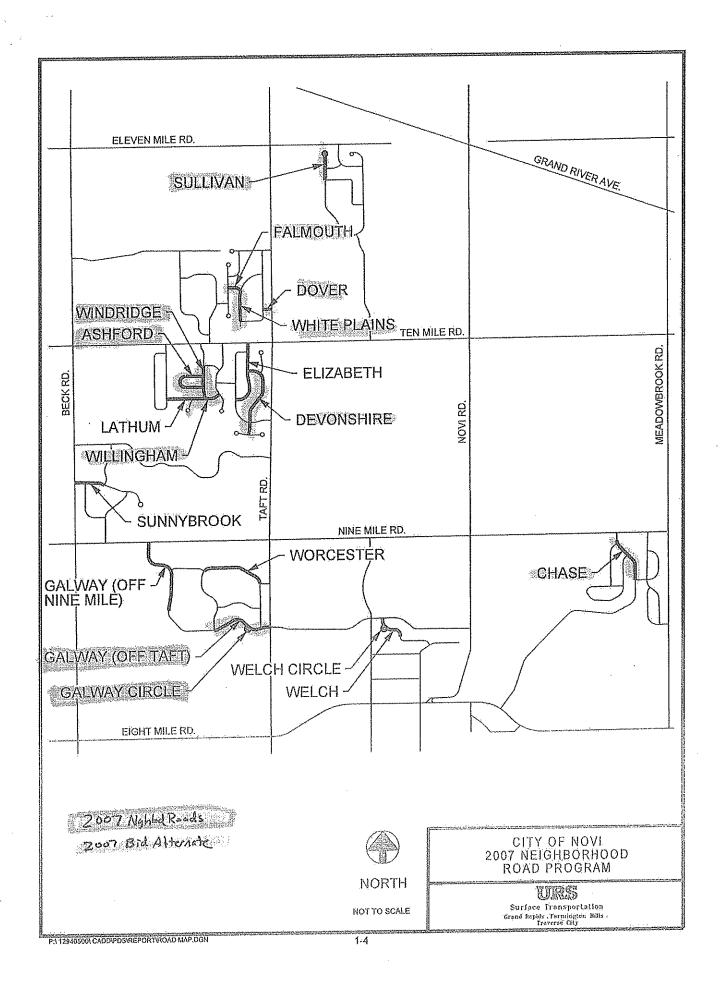
2007 PROJECT SUMMARY

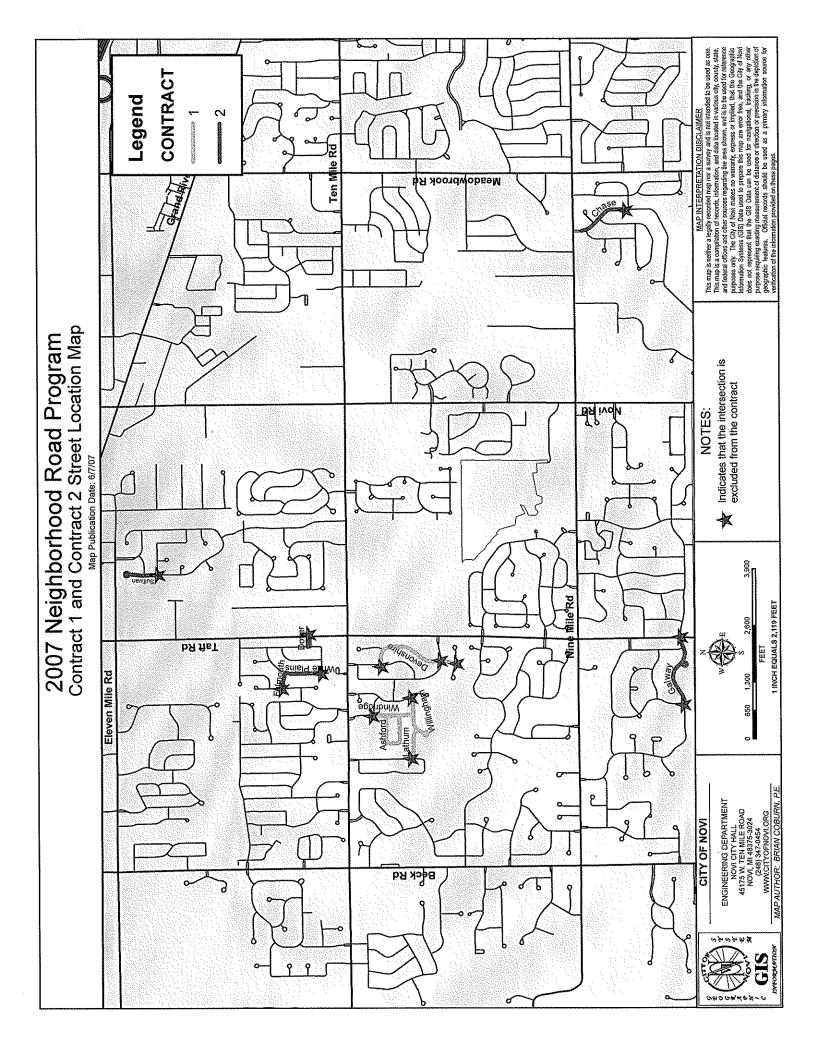
Roadway Name	Estimated Construction Cost	Base Bid or Alternative Bid
1. Galway Drive (from Taft to	\$406,000	Base Bid
Daleview)		
Galway Drive Circle	\$54,000	Base Bid
2. Sullivan Lane	\$186,000	Base Bid
3. Windridge Lane	\$180,000	Base Bid
4. Ashford Circle	\$308;000	Base Bid
Base Bid Total	\$1,134,000	
5. Devonshire Drive	\$427,000	Alternative Bid
6. Chase Drive	\$251,000	Alternative Bid
7. Willingham Drive	\$163,000	Alternative Bid
8. White Plains Drive	\$164,000	Alternative Bid
9. Falmouth Ave	\$72,000	Alternative Bld
10, Dover Blvd	\$90,000	Alternative Bid
Alternative Bid Total	\$1,167,000	

Preliminary Estimates are Rounded

Based on these preliminary estimates, the combined total for the Base Bid and Alternative Bid is \$2,301,000. Obviously, this is more than the likely \$1,400,000 budget amount. However, with the alternatives, the city can adjust the work to match the actual budget.







URS

June 8, 2007

Mr. Brian Coburn, PE City of Novi Engineering Department 45175 W. Ten Mile Road Novi, MI 48375-3024

Reference:

Bid Analysis and Contract Award Recommendation

2007 Neighborhood Roads Program - Contract 1

URS Project Number 12940500 City of Novi Contract Number 062-416A

Dear Mr. Coburn:

Attached is the Bid Tabulation for the above referenced project. Nine (9) bids were received. Competition appears to have been adequate. All bids appeared to be balanced and there were no irregularities noted in the bids.

Mathematical errors were found in the two highest bids, from Summit Transport and Tony Angelo Cement. These errors did not change the order of bidders.

Hard Rock Concrete is the low bidder for this project and also is the low bidder for the 2007 Neighborhood Roads Program – Contract 2 project. There were concerns that they may have problems providing the manpower to complete both projects per the contract schedules. We did discuss the situation with Hard Rock Concrete and they have assured us that they have the manpower available to complete both projects on schedule. They stated that they intend to use two crews and will be ready to start as soon as the Contract is signed. They told us they are confident that they can complete both projects on schedule, should the City award both contracts to them. We have asked Hard Rock to send a letter to your attention which includes the verbal assurances they provided to us that they have the capacity to complete both projects concurrently and on schedule.

We also reviewed the Bidders Qualifications and Experience Statements as submitted. As you're aware and as we discussed, Hard Rock has completed projects for the City before and have performed very well.

We therefore recommend award of the contract to the low bidder, Hard Rock Concrete, Inc. for the amount of \$960,475.00.

Please call me at 616 574-8497 if you need anything else or wish to discuss the project.

Sincerely,

URS, Inc.

Sean Kelsch, P.E. Project Manager

cc: Khaled Soubra, URS, Inc.

Carol Kalinovic, City of Novi

URS Corporation 3950 Sparks Drive, SE Grand Rapids, MI 49546 Tel: 616.574.8500 Fax: 616.574.8542

	cost	\$5,000.00	\$4,000.00	\$15,000.00	\$23,200,00	\$98,135,00	\$87,240.00	\$8,750.00	\$229,600,00	\$681,780.00	\$82,800.00	\$4,660.00	\$7,000.00	\$2,100,00	\$3,500.00	\$3,600.00	\$3,360.00	\$8,100.00	\$1,200.00	\$17,190.00	\$1,286,215,00
d 6 Engineer's Estimate	UNIT PRICE	2,000,00	4,000,00	15,000.00	100.001	4.75	1.50	35.00]	10,00	33.00	36.00	5.00	250.00	00'02	35.00	3.00	28.00	300,000	400,000	00.9	
Corrected Bid																					Total:
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\$1,286,215.00 \$960,475.00 \$1,021,060.80 \$1,101,488.00 \$1,134,383.00 \$1,130,456.20 \$1,208,024.45 \$1,208,124,403.45 \$1,208,124,401.20	TOTAL QTY UNIT	-	-	7	232	20,660	11,632	250	22,960	20,660	2,300	932	28	30	100	1,200	120	27	8	2,865	
Engineer's Estimate 1. Hard Rock Concrete, Inc. 2. Florence Cement Co. 3. Major Cement Co. 4. Six-Si, Inc. 5. Lacaria Concrete Construction 6. Dilisio Contracting 7. Peter A. Basile Sons, Inc. 8. Summit Transport 9. Tony Angelo Cement Co.	DESCRIPTION	1 Pre-Construction Audio-Visual	2 Soil Erosion Control	3 Maintaining Traffic	4 Tree Protection	5 Remove Concrete Pavement	6 Underdrain, 6-inch	7 Subgrade Undercut	8 Aggregate Base, 21AA, 8-inch	9 Concrete Pavement w/Integral Curb, Non-reinf, 7-inch	10 Remove and Replace Concrete Drives	11 Remove and Replace Concrete Sidewalk	12 Adjust Drainage Structure	13 Remove and Reset Mailboxes	14 Remove and Reset Sprinkler Heads	15 Sprinkler Piping	16 ADA Detectable Warning Plate - New Construction	177 Reconstruct Drainage Structure	18 Point-up Drainage Structure	19 Class A Sod	

Six-S, Inc

Major Cement Co.

Florence Cement Co.

Hard Rock Concrete, Inc.

UNIT PRICE

COST

COST

UNIT PRICE

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UNIT PRICE

	DESCRIPTION	TOTAL QTY UNIT	UNIT	
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7	2 Soil Erosion Control	1	ន្ទា	
3	3 Maintaining Traffic	7	S	
4	4 Tree Protection	232	Ë	
5	5 Remove Concrete Pavement	20,660	Syd	
9	6 Underdrain, 6-inch	11,632	Ħ	
7	7 Subgrade Undercut	250	ρλ	
8	8 Aggregate Base, 21AA, 8-inch	22,960	E	
6	9 Concrete Pavement w/Integral Curb, Non-reinf, 7-inch	20,660	Syd	
9	10 Remove and Replace Concrete Drives	2,300	Syd	
7	11 Remove and Replace Concrete Sidewalk	932	Sft	
12	12 Adjust Drainage Structure	28	Ea	
33	13 Remove and Reset Mailboxes	30	Ea	
4	14 Remove and Reset Sprinkler Heads	100	щ	
15	15 Sprinkter Piping	1,200	Œ	
16	16 ADA Detectable Warning Plate - New Construction	120	Š	
7	17 Reconstruct Drainage Structure	27	Ŧ	
3	18 Point-up Drainage Structure	3	Ea	
13	19 Class A Sod	2,865	Syd	

Prepared by URS Corporation

Sean Kelsch, PE Project Manager

