



CITY OF RALEIGH, NORTH CAROLINA EVALUATION OF REMOTE OPERATIONAL FACILITIES

2009 UPDATE

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Introduction

This update of the Remote Operational Facilities Study completed in 2008, was commissioned by the City of Raleigh due to the following events:

- At the completion of the original study, no property was available for the proposed Northeast location.
- In Spring 2009, property in the vicinity of the proposed Northeast site came on the market with large existing buildings that could be put into service much quicker than building new facilities and at a lower cost.
- Since this new Northeast property included existing buildings that contained more space than originally planned for the Northeast site, the overall program requirements needed to be re-evaluated and redistributed to accommodate the inclusion of this new Northeast site.

Our approach for this update is as follows:

- Assess the new potential Northeast site for purchase by the City.
- Develop a new space program that will maximize the use of the existing building on the potential new Northeast site.
- Review and validate the original programming data with the inclusion of the new Northeast space.

Study Locations

There are 5 main sites that were evaluated in this update of the Remote Operational Facilities Study, including the potential new Northeast site:

- Parker Lincoln Site (Downtown)
 - Including John Deere acquisition
- Marsh Creek
- Wilders Grove
- Mt Herman
- Northeast Site (which includes three parcels)
 - 3222-3228 Spottswood Street
 - 7704 Burwell Street
 - 7708 Burwell Street

Study Approach

Due to the accelerated timing associated with the purchase decisions that needed to be made with respect to the Northeast parcels, our project approach was modified to focus first on the viability of the Northeast parcels as a suitable solution for the various operational departments and included:

1. Physical Assessment of the Northeast parcels
2. Program and Budget Development
3. Balancing of the Remote Operational Facilities overall Program
4. Development of an overall Budget and timeline for the fulfillment of that Program

The first step in the evaluation process was to assess the 3 parcels that comprise the potential Northeast site. These buildings and sites were visited and a visual assessment was completed.

Physical Assessment of the Northeast Parcels

The Study team began an assessment of the Northeast parcels by visiting them along with the City Stakeholders, including the managers for various operational departments that would be housed in this location. The parcels were visually assessed to determine their suitability for each of the stakeholder groups and the condition of the facilities. Jacobs identified renovation and repairs that would be necessary prior to the City moving into the facilities and developed order of magnitude construction budgets. The construction budgets indicated that the City could save money by purchasing these parcels and renovating the buildings when compared to new construction. It was decided by the stakeholders that these parcels could be put into service quickly to relieve overcrowding at existing City facilities, so the City moved forward with the purchase of the parcels.

Program and Budget Development

Once it was agreed upon by all the Stakeholders that these parcels provided viable space options for their various operational departments, a series of meetings were scheduled to determine which groups would be willing to locate staff at these sites and Jacobs identified programming options for each of the Stakeholders. These Stakeholders included:

- Vehicle Fleet Services
- Parks and Recreation
- Building Maintenance
- Streets Maintenance
- Solid Waste
- Public Utilities
- Police Department
- Fire Department
- Traffic Engineering

Through these series of meetings it was determined which groups were interested in locating some program at the Northeast site. The departments interested in the Northeast site included:

- Parks and Recreation
- Vehicle Fleet Services
- Building Maintenance
- Streets Maintenance
- Police Department
- Traffic Engineering
- Inspections

Several options were developed to demonstrate how the Northeast site could best be utilized by the groups mentioned above. As the program options were developed, an order of magnitude project budget was developed for each program option. These program and budget options were vetted by the group and a preferred option was chosen.

Balancing of the Overall Remote Operations Program

As the program was being developed for the Northeast site it was apparent that a rebalancing of the program would need to occur due to the large amount of available existing space at the Northeast location. The new program information that was developed for the Northeast site was fed back into the original study and rebalanced for the whole remote operational facilities program.

Development of the Overall Budget and Funding Timeline

It was necessary to rebalance the budget and develop a funding timeline for the Remote operations projects. The projects are broken down into 3 phases:

1. Immediate Needs: \$78 Million
2. Phase I (funding begins 2011): \$89 Million
3. Phase II (funding begins 2016): \$113 Million

Based upon input from the various operations groups it was determined that the budget and funding plan shown in this study would meet the present operations needs of the City of Raleigh.

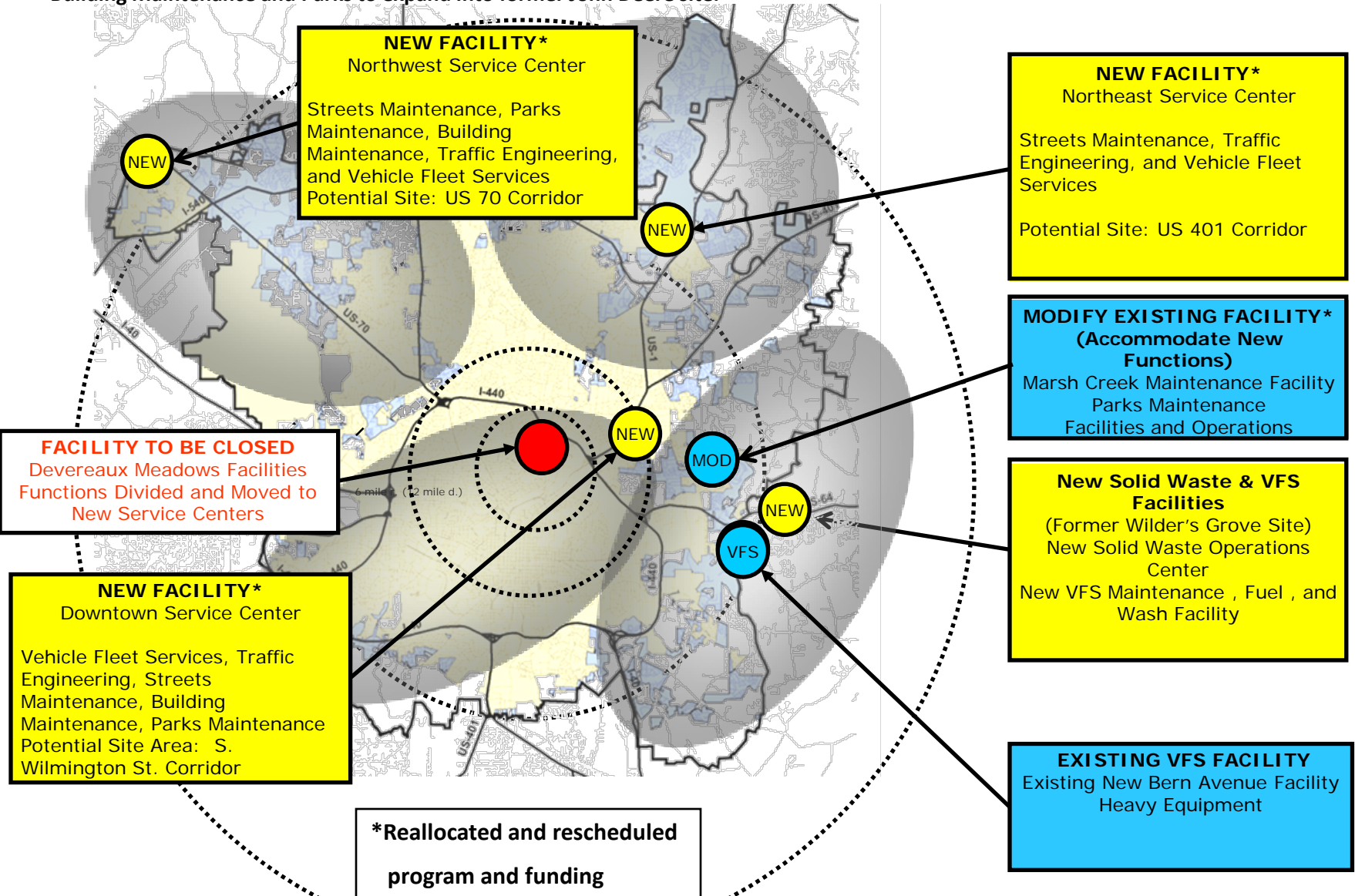
Conclusion

Based on the cost savings and immediate relief of overcrowding the Northeast parcels provide, it was recommended that the City purchase the three Northeast parcels. The space programs for all five of the remote operational facilities sites were rebalanced to incorporate the existing buildings that are included in the Northeast site and new project budgets were developed for each site. To maximize the use of the existing buildings at the new Northeast site, the timeline for the Remote Operational Facilities build-out was adjusted to include immediate renovation of Northeast site buildings to provide immediate relief of overcrowding for multiple City departments including Vehicle Fleet Services, Streets Maintenance along with Parks and Recreation. The following data was developed during the course of this study and is included:

- Revised space program for all five new and existing remote operational facilities which were vetted with all stakeholders.
- Preliminary site arrangements for all five remote operational facility sites.
- A complete funding plan broken down in phases which were timed to coincide with the growth needs of the City's operational departments.

Remote Operations Facilities Timeline												
ID	Task Name	Start	Finish	2005	2006	2007	2008	2009	2010	2011		
1	Develop Remote Operational Center Requirements	February 1, 2005	March 30, 2006									
2	Search and Identify NW Site	February 1, 2006	January 1, 2007									
3	Search and Identify Downtown Site	October 26, 2006	December 21, 2007									
4	Completed Remote Operation Center Study - without NE Site	March 18, 2009	March 18, 2009					◆ 3/18				
5	Search and identify NE Site	February 2, 2006	April 1, 2009									
6	Purchase of John Deere property for Building Maint.	March 12, 2009	March 12, 2009					◆ 3/12				
7	Design of Solid Waste Operations Center	September 4, 2008	August 4, 2009									
8	Purchase of NE Site (Burwell St.)	December 31, 2009	December 31, 2009						◆ 12/31			
9	Construction of Solid Waste Operations Center	March 1, 2010	August 30, 2011									

New Service Centers in NE, NW, Wilder's Grove and Parker-Lincoln (Downtown). Modify Marsh Creek, and Close Devereaux Meadows. Building Maintenance and Parks to expand into former John Deere site.



<u>Remote Operations Program</u>	<u>20 Year Projection</u>	<u>Immediate Needs</u>	<u>Phase 1 Projects</u>	<u>Phase 2 projects</u>
Street Maintenance:				
Building Square Feet	77,291	14270	63,021	
Parking Area/Exterior Storage	430,498	5000	202289	223,209
Subtotal:	507,789	19,270	265,310	223,209
Vehicle Fleet Services:				
Building Square Feet	190,760	101238	69778	19,744
Parking Area/Exterior Storage	275,004	10000	202289	62,715
Subtotal:	465,764	111,238	272,067	82,459
Building Maintenance:				
Building Square Feet	98,384	15252		83,132
Parking Area/Exterior Storage	125,000	600		124,400
Subtotal:	223,384	15,852	0	207,532
Parks Maintenance:				
Building Square Feet	257,757	21500	70238	166,019
Parking Area/Exterior Storage	385,900	25000	20000	340,900
Subtotal:	643,657	46,500	90,238	506,919
Traffic Engineering:				
Building Square Feet	40,922	5000		35,922
Parking Area/Exterior Storage	21,177			21,177
Subtotal:	62,099	5,000	0	57,099
Inspections				
Building Square Feet	1,500	1,500		
Parking Area/Exterior Storage	3,000	3,000		
Subtotal:	4,500	4,500	0	0
Police:				
Building Square Feet	0			
Parking Area/Exterior Storage	18,000		18000	
Subtotal:	18,000	0	18,000	0
Solid Waste:				
Building Square Feet	16,446	16,446		
Parking Area/Exterior Storage	269,064	269,064		
Subtotal:	285,510	285,510	0	0

Northeast Service Center	20 Year Projection	Immediate Needs	Phase 1 Projects	Phase 2 Projects	Relocated to NE Site	Total Program
Inspections						
Office and Support	1,100	1,100				1100
Shops/ Interior Storage	400	400				400
Parking	3,000	1,000		2000		3000
Subtotal:	4,500	2,500	0	2,000	0	4,500
Street Maintenance:						
Office and Support	2,970	2,970				2970
Shops/ Interior Storage	11,300	11,300				11300
Exterior Storage	16,700	16,700				16700
Salt Barn/Salt Brine	27,000	27,000				27000
Parking Covered	11,000	11,000				11000
Parking	24,000	5,000		19000		24000
Other Needs	45,000			45000		45000
Subtotal:	137,970	73,970	0	64,000	0	137,970
Vehicle Fleet Services:						
Office and Support	1,600	1,600				1600
Shops/ Interior Storage	30,760	30,760				30760
Down/Ready Line parking	18,000	18,000				18000
Parking	8,000	2,000		6000		8000
Fuel and Wash Structures	5,100	5,100				5100
Subtotal:	63,460	57,460	0	6,000	0	63,460
Parks and Recreation:						
Office and Support	1,500	1,500				1500
Shops/ Interior Storage	20,000	20,000				20000
Parking	6,000	1,500		4500		6000
Subtotal:	27,500	23,000	0	4,500	0	27,500
Building Maintenance:						
Office and Support	1,000	1,000				1000
Shops/ Interior Storage	6,000	6,000				6000
Exterior Storage	800	800				800
Subtotal:	7,800	7,800	0	0	0	7,800
Traffic Engineering:						
Office and Support	0	0				0
Shops/ Interior Storage	5,000	5,000				5000
Exterior Storage	0	0				0
Subtotal:	5,000	5,000	0	0	0	5,000
Police:						
Parking	18,000	10,500		7500		18000
Subtotal:	18,000	10,500	0	7,500	0	18,000
Site Program Total Square Feet						
	264,230	180,230	0	84,000	0	264,230
Site Circulation, main access, 75%	198,173					
Site square Feet	462,403					
Number of Acres	10.6					

SPACE PROGRAM BY LOCATION

<u>Marsh Creek Facility (Existing Site)</u>	<u>20 Year Projection</u>	<u>Immediate Needs</u>	<u>Phase 1 Projects</u>	<u>Phase 2 Projects</u>	<u>Relocated to NE Site</u>	<u>Total Program</u>
Building Maintenance:						
Shops/Interior Storage(Supply Storage)	4,400			4,400		4400
Shope/Interior Storage (Drop Storage)	17,200			17,200		17200
Shops/Interior Storage (Facility Storage)	21,624			19,624	2000	21624
Subtotal:	43,224	0	0	41,224	2,000	43,224
Parks Maintenance:						
Office and Support	5,238		5,238			5238
Shops/Interior Storage	98,200		53000	37,700	7500	98200
Exterior Areas/ Storage	108,400		20000	88,400		108400
						0
Parking Space Requirements (SF)	106,836			106,836		106836
Parking Space Req'ts-Employees	30,051			30,051		30051
Subtotal:	348,725	0	78,238	262,987	7,500	348,725
Site Program Total Square Feet	391,949					391,949
Number of Acres	9.0					
Site Size Available (acres)	9					

SPACE PROGRAM BY LOCATION

Downtown Service Center (Parker-Lincoln Site)	20 Year- Projection	Immediate Needs	Phase 1 Projects	Phase 2 Projects	Relocated to NE Site	Total Program
Building Maintenance:						
Office and Support (Office & employee Facilities)	3,000			3,000		3000
Shops/Interior Storage (Wood Shop)	10,000			10,000		10000
Shops/Interior Storage (Storage)	6,000			4000	2000	6000
Shops/Interior Storage (Drop Storage)	6,000			4000	2000	6000
Subtotal:	25,000	0	0	21,000	4,000	25,000
Parks Maintenance:						
Office & Support	1,000			1000		1000
Shops & Storage	48,000			42,500	5500	48000
Exterior Areas/ Storage	60,000			60000		60000
Subtotal:	109,000	0	0	0	5,500	109,000
Traffic Engineering:						
Office and Support	1,800			1,800		1800
Exterior Storage	21,177			21,177		21177
Shops/ Interior Storage	14,645			14,645		14645
Subtotal:	37,622	0	0	37,622	0	37,622
Street Maintenance:						
Office and Support	13,500		10,500		3000	13500
Shops/ Interior Storage	32,281		20,981		11300	32281
Exterior Storage	236,070		181,385		54685	236070
Subtotal:	281,851	0	0	0	68,985	281,851
Shared Areas						
Parking Space Requirements (SF)	171,246		50,000	121,246		171246
Parking Space Req'ts-Employees	28,188		28188			28188
Subtotal:	199,434	0	78,188	121,246	0	199,434
Vehicle Fleet Services:						
Shops /Interior Storage (Shops, storage, admin)	60,778		36,778		24000	60778
Fuel, wash & service building	8,620		8620			8620
Down/Ready Line parking	35,320		35320			35320
Auction Vehicle Storage	15,000		15000			15000
Subtotal:	119,718	0	0	0	24,000	119,718
Site Program Total Square Feet						
Site Circulation, main access, setbacks, landscaping & storm water management	75%	579,469				0
Site square Feet:		1,352,094				
Number of Acres		31.0				

SPACE PROGRAM BY LOCATION

Northwest Service Center (Mount Herman Site)	20 Year Projection	Immediate Needs	Phase 1 Projects	Phase 2 Projects	Relocated to NE Site	Total Program
Parks Maintenance:						
Office and Support	2,619		1000	-1,000		0
Shops/Interior Storage	102,700		11000	86,200	5500	102700
Exterior Areas/ Storage	117,500		20000	93,500	4000	117500
Subtotal:	222,819	0	32,000	0	9,500	222,819
Building Maintenance						
Shops/Interior Storage (Supply Storage)	3,600			3,600		3600
Shops/Interior Storage (Drop Storage)	12,000			12,000		12000
Shops/Interior Storage (Facility Storage)	14,560			14,560		14560
Subtotal:	30,160	0	0	30,160	0	30,160
Traffic Engineering:						
Exterior Storage	21,177			21,177		21177
Shops/ Interior Storage	3,300			3,300		3300
Subtotal:	24,477	0	0	24,477	0	24,477
Street Maintenance:						
Office and Support	3,100		1000	2,100		3100
Shops/ Interior Storage	28,410		11000	7,410	10000	28410
Exterior Storage	94,428		20000	54,428	20000	94428
Parking Space Requirements (SF)	223,487			184,492	38995	223487
Parking Space Req'ts-Employees	52,448			52,448		52448
Subtotal:	401,873	0	32,000	0	68,995	401,873
Vehicle Fleet Services:						
Office and Support	1,596			1,596		1596
Shops/ Interior Storage	23,680			11,680	12000	23680
Down/Ready Line parking	24,708			12,708	12000	24708
Fuel and Wash Structures	5,880			5,880		5880
Subtotal:	55,864	0	0	0	24,000	55,864
Site Program Total Square Feet						
Site Circulation, main access, setbacks, landscaping & storm water management	75%	551,395				
Site square Feet:		1,286,588				
Number of Acres		29.5				

SPACE PROGRAM BY LOCATION

<u>Wilder's Grove Property</u>	<u>20 Year Projection</u>	<u>Immediate Needs</u>	<u>Phase 1 Projects</u>	<u>Phase 2 Projects</u>	<u>Relocated to NE Site</u>	<u>Total Program</u>
Solid Waste:						
Office and Support	9,906	9,906				9906
Fuel and Wash Structures	6,540	6,540				6540
Parking Space Requirements (SF)	191,802	191,802				191802
Parking Space Req'ts-Employees	76,262	76,262				76262
						0
Transfer Facility	653,400	653,400				653400
Subtotal:	937,910	937,910	0	0	0	937,910
Vehicle Fleet Services:						
Office and Support	1,596		1000	596		1596
Shops/ Interior Storage	82,070		9000	61,070	12000	82070
Down/Ready Line parking	63,976			51,976	12000	63976
Fuel and Wash Structures	6,540			6,540		6540
Subtotal:	154,182	0	10,000	120,182	24,000	154,182
Site Program Total Square Feet	1,092,092					1,092,092
Site Circulation, main access, setbacks, landscaping & storm water management 75%	819,069					
Site square Feet:	1,911,161					
Number of Acres	43.9					

SPACE PROGRAM BY LOCATION

<u>John Deere Site</u>	<u>20 Year Projection</u>	<u>Immediate Needs</u>	<u>Phase 1 Projects</u>	<u>Phase 2 Projects</u>	<u>Relocated to NE Site</u>	<u>Total Program</u>
Building Maintenance						
Office and Support	8,252	8,252				8,252
Parking Space Requirements (SF)	0					0
Parking Space Req'ts-Employees	0					0
Subtotal:	8,252	8,252	0	0	0	8,252
Site Program Total Square Feet	8,252	8,252				8,252
Site Circulation, main access, setbacks, landscaping & storm water management 75%	6,189					
Site square Feet:	14,441					
Number of Acres	0.3					



NE SITE
DECEMBER 1ST 2009



CITY OF RALEIGH
PLANNING CHARRETTE





LEGEND	
OFFICE SPACE	
SHOP STORAGE	
PARKING COVERED	
PARKING EXTERIOR	
NEW CONSTRUCTION	
EXTERIOR STORAGE	
STREET MAINTENANCE	SM
VEHICLE FLEET SERVICE	VF
INSPECTIONS	IN
PARKS AND REC	PR
POLICE	P
BUILDING MAINTENANCE	EM
SOLID WASTE	SW

WILDERS GROVE SERVICE CENTER
DECEMBER 1ST 2009



CITY OF RALEIGH
PLANNING CHARRETTE





LEGEND	
OFFICE SPACE	[Yellow Box]
SHOP STORAGE	[Orange Box]
PARKING, COVERED	[Green Box]
PARKING, EXTERIOR	[Grey Box]
NEW CONSTRUCTION	[Light Green Box]
EXTERIOR STORAGE	[Purple Box]
STREET MAINTENANCE	SM
VEHICLE FLEET SERVICE	VF
INSPECTIONS	IN
PARKS AND REC	PR
POLICE	P
BUILDING MAINTENANCE	BM
SOLID WASTE	SW
TRAFFIC ENGINEERING	TE

DOWNTOWN SERVICE CENTER
DECEMBER 1ST 2009



CITY OF RALEIGH
PLANNING CHARRETTE





LEGEND	
OFFICE SPACE	
SHOP STORAGE	
PARKING COVERED	
PARKING EXTERIOR	
NEW CONSTRUCTION	
EXTERIOR STORAGE	
STREET MAINTENANCE	SM
VEHICLE FLEET SERVICE	VF
INSPECTIONS	IN
PARKS AND REC	PR
POLICE	P
BUILDING MAINTENANCE	BM

MARSH CREEK SERVICE CENTER
DECEMBER 1ST 2009



CITY OF RALEIGH
PLANNING CHARRETTE





LEGEND	
OFFICE SPACE	[Yellow Box]
SHOP STORAGE	[Orange Box]
PARKING, COVERED	[Green Box]
PARKING, EXTERIOR	[Light Green Box]
NEW CONSTRUCTION	[Light Green Box]
EXTERIOR STORAGE	[Purple Box]
STREET MAINTENANCE	SM
VEHICLE FLEET SERVICE	VF
INSPECTIONS	IN
PARKS AND REC	PR
POLICE	P
BUILDING MAINTENANCE	BM
SOLID WASTE	SW

MT HERMAN SERVICE CENTER
DECEMBER 1ST 2009



CITY OF RALEIGH
PLANNING CHARRETTE



ID	Task Name	Duration	Start	Finish	Project Budget	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Remote Operational Facilities Program	2390 days	January 1, 2010	February 28, 2019	\$280,000,000											
2																
3	Immediate Needs Projects	563 days	January 1, 2010	February 28, 2012												
4	Interim Funding Solid Waste & Mt. Herman	0 days	January 1, 2010	January 1, 2010	\$3,243,337											
5	Land Acquisition/Solid Waste Facility Construction	0 days	January 1, 2010	January 1, 2010	\$38,300,000											
6	Design and Planning Costs	131 days	March 1, 2010	August 30, 2010	\$5,324,670											
7	Construction Funding - Immediate Needs	390 days	September 1, 2010	February 28, 2012	30,820,265											
8																
9	Phase 1 Projects	652 days	September 1, 2011	February 28, 2014												
10	Design and Planning Fees	260 days	September 1, 2011	August 29, 2012	\$13,547,237											
11	Construction Funding	390 days	September 3, 2012	February 28, 2014	\$75,949,028											
12																
13	Phase 2 Projects	651 days	September 1, 2016	February 28, 2019												
14	Design and Planning Fees	260 days	September 1, 2016	August 30, 2017	\$16,839,108											
15	Construction Funding	390 days	September 1, 2017	February 28, 2019	\$96,144,240											

Remote Ops Sites	Immediate Needs	Phase 1 Projects	Phase 2 Projects	Total	Comments
Interim Funds					
Wilders grove Solid Waste Services, John Deere, and Mt Herman	\$3,243,337				
Subtotal:	\$3,243,337	\$0	\$0	\$3,243,337	
Northeast					
Parks and Recreation	\$3,522,940				
Street Maintenance	\$11,110,809				
Vehicle Fleet Services	\$8,671,851				
Building Maintenance	\$1,165,280				
Traffic Engineering	\$731,687				
Inspections	\$352,294				
Police	\$1,544,673				
Paving		\$7,504,086			
Site Design Services	\$250,000				
Subtotal:	\$27,349,534	\$7,504,086	\$0	\$34,853,620	
March Creek					
Code Corrections	\$400,000				
Parks and Recreation		\$26,959,036			
Building Maintenance					
Site Design Services	\$150,000				
Subtotal:	\$550,000	\$26,959,036	\$0	\$27,509,036	
Downtown					
Parks and Recreation			\$4,205,506		
Street Maintenance		\$19,000,511	\$12,799,367		
Vehicle Fleet Services		\$25,186,724	\$16,456,329		
Building Maintenance			\$3,108,418		
Site Design Services	\$250,000				
Subtotal:	\$250,000	\$44,187,235	\$36,569,620	\$81,006,855	
John Deere					
Building Maintenance					
Site Design Services					
Subtotal:	\$0	\$0	\$0	\$0	
Mt Herman					
Parks and Recreation		\$5,422,953	\$32,911,455		
Street Maintenance			\$3,625,838		
Vehicle Fleet Services		\$5,422,953	\$12,272,068		
Building Maintenance			\$5,857,123		
Traffic Engineering			\$1,115,643		
Site Design Services	\$250,000				
Subtotal:	\$250,000	\$10,845,906	\$55,782,127	\$66,878,033	
Wilders Grove					
Solid Waste Services	\$19,340,000				
Vehicle Fleet Services	\$5,405,400		\$20,631,600		
Site Design Services					
Subtotal:	\$24,745,400	\$0	\$20,631,600	\$45,377,000	
Land Acquisition Costs					
Downtown, John Deere, and Northeast	\$21,300,000				
Subtotal:	\$21,300,000	\$0	\$0	\$21,300,000	
Site Program Total Square Feet	\$77,688,271	\$89,496,263	\$112,983,347	\$280,167,881	