# **Project Summary and Justification**

Department	Public Utilities
Division	Sanitary Landfill

The Capital Improvement Program for the 2004-2010 period is a continuing effort to provide an environmentally sound and integrated solid waste management system for Lincoln and Lancaster County An Occupation Tax was implemented in June of 2003 and provided an equitable approach to finance Lincoln's and Lancaster County's integrated solid waste management program. The Occupation Tax is the funding source for those projects listed in Project 2 - North 48<sup>th</sup> Street Landfill and Transfer Station Site and Project 3 - Solid Waste Management System - Recycling, Composting, and Volume Reduction. The projects identified in Project 1- Bluff Road Landfill are funded by landfill user fees and not the Occupation Tax.

# Project 1 Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)

The Bluff Road Landfill is essential to assure proper disposal of solid wastes for the City of Lincoln and Lancaster County in a manner protective to human health and the environment and to meet State and Federal regulatory requirements. The overall project involves the expansion, environmental monitoring, and closure of the facility. The Bluff Road Landfill capacity is expected to close in the year 2026. The Bluff Road projects are funded by landfill user fees.

### a. Landfill Expansions - Leachate Collection and Liner Systems, Phase 10 and Phase 11 Expansions and Stormwater Control. (569279)

Funds provide for the construction of leachate collection and liner system required by State and Federal regulations that become necessary as the landfill consumes capacity. Collectively, these systems protect the groundwater from contamination by landfill leachate. Regulations also require stormwater from all areas of the landfill not having a final cover system constructed to be detained and tested prior to release to waters of the State. The existing stormwater detention basin must be relocated and stormwater ditches re-routed to allow for future landfill expansions.

## b. Site Maintenance and Closure. (569139)

Funding provides for annual site maintenance and closure activities such as litter fence construction, surface drainage improvements, maintenance of groundwater and landfill gas monitoring wells, seeding for adequate vegetation, and other landscaping needs. These activities are necessary to comply with State and Federal requirements as well as provide for aesthetic improvements necessary for operating in close proximity to the community.

c. Final Cover and Landfill Gas Control Systems; Phase 3 and Phase 4 Final Covers and Air Quality Assessment. (569340 and 569309)

Funding provides for the design and construction of sequenced final cover systems for the landfill as required by Federal and State regulations and to perform the site specific air quality assessment required by Clean Air Act regulations. The assessment is required every five (5) years to determine if an active landfill gas control system must be constructed to comply with the regulations.

# **Project Summary and Justification (cont.)**

Department Public Utilities

Division Sanitary Landfill

## d. Leachate Collection and Treatment Facilities. (569219)

Funds provide for design and construction of additional storage and pre-treatment facilities for leachate. Cost effective methods for managing leachate have been evaluated and a preliminary management plan has been completed.

## e. Site Re-permitting.

Funding provides for engineering, environmental, and operational review of the currently approved Operating Permit issued by NDEQ and preparation of the required documents for repermitting the landfill for operation. The current permit will expire in September of 2008.

# Project 2 North 48th Street Landfill and Transfer Station Site. Approximately 450 acres. (Continuation)

The North 48<sup>th</sup> Street location consists of a closed landfill, a permitted Construction and Demolition Landfill and a small vehicle Transfer Station. The Transfer Station provides disposal and recycling services for homeowners who chose to self-haul their wastes and recyclables in small vehicles. The closed landfill requires on-going maintenance and environmental assessment efforts. The projects identified below (in Project 2) are funded by the Occupation Tax.

# a. Closure Costs for Landfill East (310 acres) and Landfill West (140 acres). (569205 and 569399)

Funding provides additional cover soil, drainage improvements, and re-vegetation of landfill areas associated with the City's old North 48<sup>th</sup> Street Landfill that accepted wastes up until 1987. State regulations specify proper closure procedures for the closed landfill to prevent impacts to surface water, groundwater, and air quality. Additional funding may be necessary for corrective actions pending NDEQ's review of the data from on-going environmental assessments.

## b. Closure Costs for Construction and Demolition Site. (700060)

Funds provide for sequenced closure of the Construction and Demolition Landfill in accordance with State regulations.

## c. Air Quality Assessment and Site Re-permitting.

Funds provides for an air quality assessment required every five (5) years by the Clean Air Act regulations and for the engineering, environmental, and operational review and update of the Operating Permit issued by NDEQ for the Construction and Demolition Landfill. The current permit will expire in September of 2008.

## d. Parks Development.

No funding identified for this project during the six-year planning period. However, this project continues to be identified for the purpose of recognizing that additional capital improvements must occur prior to using the land for park purposes. An estimate of potential costs to develop this site for park use is shown in the "cost beyond" column.

## **Project Summary and Justification (cont.)**

DepartmentPublic UtilitiesDivisionSanitary Landfill

**Project 3** Solid Waste Management System - Recycling, Composting, and Volume Reduction. The City continues to evaluate and implement solid waste reduction and recycling alternatives to extend the life of the Bluff Road Landfill. The projects identified below (in Project 3) are funded by the Occupation Tax. Close to fifty percent of the people in Lincoln utilize the drop-off sites. Currently, there are nine (9) existing recycling sites in north Lincoln and eight (8) in south Lincoln. More people reside in south Lincoln than north Lincoln. The recycling drop-off sites in southeast Lincoln are the largest and receiving the greatest amounts of materials. These existing sites cannot be readily expanded to accept more material quantities. The siting of additional drop-off sites has become very difficult in commercial areas due to the amount of space required for a drop-off site, increased traffic volumes once the site is operational, added noise in the area, and concerns about litter and illegal dumping. Various publicly owned properties are being investigated in addition to searching for privately owned locations to site drop-offs.

#### a. Solid Waste Management Plan Update. (701174)

Funding provides for an update of the Solid Waste Management Plan for the City of Lincoln and Lancaster County in order to be eligible for multi-year funding through the NDEQ Waste Reduction, Recycling, and Incentive Fund.

#### b. Construction and Demolition Landfill (C&D) Site.

Funding for the siting of a new construction and demolition disposal facility is beyond the sixyear planning period based on the projected capacity of the current Construction and Demolition landfill to last through the year 2015. Although no funding is identified in the six-year period, the project is listed as a reminder that the community will be considering a new location for a Construction and Demolition landfill in the relative near term to provide for disposal of this waste stream.

#### c. Existing Site Maintenance/Improvements. (700850)

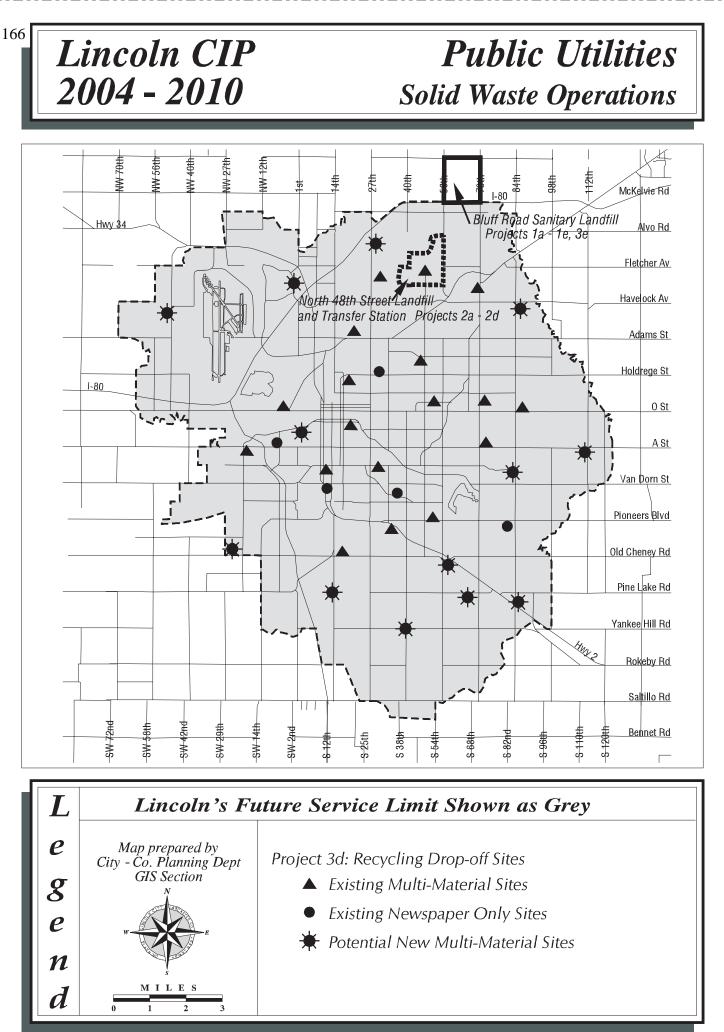
Funding provides for repairs and improvements to existing drop-off sites and includes anticipated asphalt resurfacing, fencing, and landscaping. These improvements are critical to continuing the operation of the sites and improving the appearance of the sites gains greater acceptance of the program by nearby commercial and residential property owners.

#### d. Expansion of Recycling Drop-Off Program. (700942)

Funs provide for the paving, fencing, signage, landscaping and other construction costs necessary to develop new recycling drop-off sites.

#### e. Upgrades to the Existing Composting Facility. (569249)

Funds provide for asphalt and fence repairs, and maintenance of the ditches and storm water detention basins used to manage surface water run-off. Upgrades being considered include construction of a production well to provide for additional moisture in the compost windrow and additional asphalted areas to store finished compost products. Proper amounts of moisture are necessary to prevent odors.



(satchel/cip/cip04/landf04.aml)

(3/19/04)

*List of Projects* Department: Public Utilities / Sanitary Landfill

Project Project Number Title

	(Continuation	
		dfill Expansions - Leachate Collection and Liner Systems, Phase 10 and 11 Expansion Stormwater Control. (569279)
		Maintenance and Closure. (569139)
	c Fina	Il Cover and Landfill Gas Control Systems; Phase 3 and Phase 4 Final Covers and Air lity Assessment. (569340 and 569309)
		chate Collection and Treatment Facilities. (569219)
		Re-permitting.
2		1 STREET LANDFILL AND TRANSFER STATION SITE. Approximately 450 acre
	(Continuation	1)
	a Clos 5693	sure Costs for Landfill East (310 acres) and Landfill West (140 acres). (569205 and 399)
		sure Costs for Construction and Demolition Site. (700060)
		Quality Assessment and Site Re-permitting.
		ts Development.
3		TE MANAGEMENT SYSTEM - Recycling, Composting, and Volume Reduction.
		d Waste Management Plan Update. (701174)
		struction and Demolition (C&D) Site.
		sting Site Maintenance/Improvements. (700850)
		ansion of Recycling Drop-Off Program. (700942)
	e Upg	rades to the Existing Composting Facility. (569249)

\*Indicates project is not shown on the map.

168

## 2004 - 2010 CAPITAL IMPROVEMENT PROGRAM

DEPARTMENT:PUBLIC UTILITIESDIVISION:SANITARY LANDFILL

PROJECT TITLE fill. (Continuation) pansions - Leachate Collection and Line Phase 10 & Phase 11, and r Control (#569279) enance and Closure (#569139) r & Landfill Gas Control Phase 3 , Phase 4, and Air Quality ht(#569340 & #569309) Collection and Treatment Facilities rmitting PROJECT 1 (Landfill Revenue)	PROJ. PRIO.	2004-2005 FS	PROGRAMMED     2005-2006   FS     2,280.0   RB     150.0   LF     1,400.0   RB     3,830.0	XPENDITURES & F 2006-2007 FS 160.0 LF 20.0 LF 180.0	JNDING SOURCES     2007-2008   FS     200.0   LF     160.0   LF     150.0   LF     40.0   LF	(FS) (000's)   2008-2009 FS   2,450.0 LF   490.0 LF   1,320.0 LF   590.0 LF   4,850.0 LF	2009-2010 I 170.0 I 1,330.0 I
fill. (Continuation) pansions - Leachate Collection and Line Phase 10 & Phase 11, and r Control (#569279) enance and Closure (#569139) r & Landfill Gas Control Phase 3 , Phase 4, and Air Quality nt(#569340 & #569309) Collection and Treatment Facilities rmitting PROJECT 1 (Landfill Revenue)	PRIO. A A B	100.0 RB 150.0 RB 20.0 LF 70.0 RB	2,280.0 RB 150.0 LF 1,400.0 RB	160.0 LF 20.0 LF	200.0 LF 160.0 LF 150.0 LF	2,450.0 LF 490.0 LF 1,320.0 LF 590.0 LF	170.0
Phase 10 & Phase 11, and Phase 10 & Phase 11, and r Control (#569279) enance and Closure (#569139) r & Landfill Gas Control Phase 3, Phase 4, and Air Quality nt(#569340 & #569309) Collection and Treatment Facilities rmitting PROJECT 1 (Landfill Revenue)	A A B	150.0 RB 20.0 LF 70.0 RB	150.0 LF 1,400.0 RB	20.0 LF	160.0 LF 150.0 LF 40.0 LF	490.0 LF 1,320.0 LF 590.0 LF	1,330.0 1
Phase 10 & Phase 11, and r Control (#569279) enance and Closure (#569139) r & Landfill Gas Control Phase 3 , Phase 4, and Air Quality nt(#569340 & #569309) Collection and Treatment Facilities rmitting PROJECT 1 (Landfill Revenue)	A A B	150.0 RB 20.0 LF 70.0 RB	150.0 LF 1,400.0 RB	20.0 LF	160.0 LF 150.0 LF 40.0 LF	490.0 LF 1,320.0 LF 590.0 LF	1,330.0 1
r & Landfill Gas Control Phase 3 , Phase 4, and Air Quality nt(#569340 & #569309) Collection and Treatment Facilities rmitting PROJECT 1 (Landfill Revenue)	А	20.0 LF 70.0 RB	1,400.0 RB	20.0 LF	150.0 LF 40.0 LF	1,320.0 LF 590.0 LF	1,330.0
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rmitting PROJECT 1 (Landfill Revenue)		340.0	3,830.0	180.0			
PROJECT 1 (Landfill Revenue)	В	340.0	3,830.0	180.0		4,850.0	1,500.0
		340.0	3,830.0	180.0	550.0	4,850.0	1,500.0
et Landfill and Transfer Station Site. n) osts for Landfill East (310 acres) Il West (140 acres) - ( # 569205 9)	А	100.0 OT		390.0 OT	340.0 OT		
osts for Construction and Site - (# 700060)	A		50.0 OT	420.0 OT		200.0 OT	
Assessment & Site ting	в			25.0 OT	20.0 OT		
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169

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1,280.0	5,000.0	456.8	99-04 LF	6,736.8	GCP	0				1,280.0			
2,980.0	21,000.0	20,172.4	99-04 LI	44,152.4	GCP	7		90		2,890.0			
1,920.0	1,300.0	None		3,220.0	GCP	2	40.0	100.0		1,780.0			
40.0	300.0	None		340.0	GCP	1	40.0						
11,250.0	50,600.0	20,629.2	LF	82,479.2			80.0	690.0		10,480.0			
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830.0	5,400.0	1,366.4	99-04 Lf	7,596.4	GCP	7		90.0		740.0			
670.0	2,900.0	485.0	03-04 LF	4,055.0	GCP	5		50.0		620.0			
45.0	100.0	158.5	99-04 LF	303.5	GCP	0		45.0					
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												Page K - 1	(t

170

2004 - 2010 CAPITAL IMPROVEMENT PROGRAM

DEPARTMENT:PUBLIC UTILITIESDIVISION:SANITARY LANDFILL

FORM A

_	(2)	(3)	3% Inflation	per y	lear			(4)						_	
			PROGRAMMED EXPENDITURES & FUNDING SOURCES (FS) (000's)												
	PROJECT TITLE	Proj. Prio.	2004-2005	FS	2005-2006	FS	2006-2007	FS	2007-2008	FS	2008-2009	FS	2009-2010		
	Solid Waste Management System - Recycling,														
	Composting & Volume Reduction														
	a. Solid Waste Management Plan Update (# 700174)	В			80.0	от									
	b. Construction and Demolition (C & D) Site (See Narrative)	В													
	Recycling Drop-Off Program														
	c. Existing Site Maintenance/Improvements (# 700850)	A			10.0	от			10.0	от			10.0	0	
	d. Expansion of Recycling Drop-Off Program (# 700942)	А	60.0	от	40.0	от	40.0	ОТ	40.0	от	40.0	ОТ			
	e. Upgrades to Existing Composting Facility (# 569249)	A	200.0	от											
	TOTAL PROJECT 3 (Occupation Tax)		260.0		130.0		40.0		50.0		40.0		10.0	0	
	FUNDING SOURCE BREAKDOWN :														
	OT (Solid Waste Occupation Tax)		360.0		180.0		875.0		410.0		240.0		10.0	0	
	LF (Landfill Revenue)		20.0		150.0		180.0		550.0		4,850.0		1,500.0	0	
	RB (Revenue Bonds)		320.0		3,680.0		0.0		0.0		0.0		0.0	0	
	GR (General Revenue)		0.0		0.0		0.0		0.0		0.0		0.0		
	DIVISION TOTAL		700.0		4,010.0		1,055.0		960.0		5,090.0		1,510.0		

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FORM	R	

(5)	(6)		(7)		(8)	(9)	(10)				(11)			(
	соѕт				TOTAL			COST	BREAKDOW	NS FOR SIX	-YEAR EXPE	NDITURES (	(000's)	
TOTAL FOR SIX YEARS (000's)	BEYOND 2009-2010 (000's)	PRIOR APPROPRIATI (000's)	ONS YEAR	FS	CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	PRELIM PLANS	FINAL PLANS	LAND ACQUISI- TION	CONST	EQUIP / FURNISH	OTHER (EXPLAIN)	Pi
	(00.0													
80.0	100.0	20.0	99-04	LF	200.0	GCP	0						80.0 (Studies)	
	5,200.0	None			5,200.0	GCP	1							
30.0	366.0	93.8	99-04	IF	489.8	GCP	5		2.0		28.0			
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220.0	1,130.0	190.9	99-04	LF	1,540.9	GCP	5		10.0		210.0			
200.0	300.0	109.6	99-04	1 F	609.6	GCP	2		20.0		180.0			
530.0	7,096.0	414.3			8,040.3				32.0		418.0		80.0	C
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