

Legislative Appropriations Request for Fiscal Years 2016 and 2017

**Submitted to the
Governor's Office of Budget, Planning and Policy
and the Legislative Budget Board**

by

Howard County Junior College District

July 31, 2014

Original electronically filed with LBB on July 31, 2014

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Howard College

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CERTIFICATE

Agency Name: Howard College and Southwest Collegiate Institute for the Deaf

This is to certify that the information contained in the agency Legislative Appropriations Request filed with the Legislative Budget Board (LBB) and the Governor's Office of Budget, Planning and Policy (GOBPP) is accurate to the best of my knowledge and that the electronic submission to the LBB via the Automated Budget and Evaluation System of Texas (ABEST) and the PDF file submitted via the LBB Document Submission application are identical.

Additionally, should it become likely at any time that unexpended balances will accrue for any account, the LBB and the GOBPP will be notified in writing in accordance with Article IX, Section 7.01 (2014-15 GAA).

Chief Executive Office or Presiding Judge

Cheryl T. Sparks
Signature

Cheryl T. Sparks
Printed Name

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7/31/14
Date

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Marie Ethridge
Printed Name

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Title

7/31/14
Date

Chief Financial Officer

Brenda Claxton
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Brenda Claxton
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CFO
Title

7/31/14
Date

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Administrator's Statement

7/31/2014 9:17:05PM

84th Regular Session, Agency Submission, Version 1
Automated Budget and Evaluation System of Texas (ABEST)

966 Howard College

The Howard County Junior College District was created by the voters of Howard County in 1945. The taxing authority of the district is Howard County. However, the service area encompasses thirteen counties covering 13,000 square miles in rural West Texas.

In addition, the Howard County Junior College District has administrative responsibility for the SouthWest Collegiate Institute for the Deaf (SWCID). Established by the Legislature in 1981 (Chapter 131, V.T.C.A., Education Code), SWCID is a post-secondary, self-contained institution with mainstreaming opportunities that provides educational and career training for the deaf and hard-of-hearing in Texas and the Southwest. It is the third self-contained post-secondary institution for the deaf and hard-of-hearing in the United States and the only community college solely designed for the deaf and hard-of-hearing in the nation.

Howard College strives to provide our students with a quality learning experience. In recent years we have funded lost state revenue through the increase of local taxes in Howard County for the Big Spring site only, increases in student tuition and fees, and private grants and contracts. We serve three main communities (Big Spring/Howard County, Lamesa and San Angelo) and 26 small school districts throughout our 13-county service area in addition to a deaf community across the state and nation. Each site has a different situation relative to funding sources and student growth patterns. Our District operation as well as the SWCID and Big Spring sites have been the most impacted by the decline in the state appropriation. Since 2010 we have downsized our District and SWCID workforce by around 20% through attrition and retirements and have realigned and reassigned positions. The Big Spring area workforce has been downsized by almost 8%. The successful awarding of three Title V and private grants as well as partnerships with business and industry have allowed us to keep and add some personnel as well as upgrade equipment throughout the district.

Without adequate funding, community colleges face providing reduced services for regional areas of rural Texas, continued increases in tuition and fee burdens on students, and/or continued increases in the tax burdens on the few communities that support community colleges. Although the tax base has improved in our area, the human and business migrations to the urban areas continue to erode rural communities, particularly west of I-35. Rural residents and businesses struggle to maintain their communities, as well as advance them. Certainly, the current oil boom in West Texas has benefited this region as well as the state, resulting in many individuals choosing to go to work in this economy and delaying their education. However, business and industry are increasingly seeking workforce training opportunities for their employees which the community colleges strive to provide. Community college instructional delivery serves both the individual and the local business economy, making it a state asset. The sustenance, maintenance and planned growth of an asset are sound business practices. The local area benefits from the mission of the community college as does the individual student but the state will benefit ultimately as all regions of the state progress together.

Based on these reasons, the Howard County Junior College District endorses the \$2.011 billion request for student success funding for the 2016-17 biennium and recommends, as the July 16, 2014 Texas Association of Community Colleges (TACC) letter outlines, that funding for community colleges be appropriated through three strategies: Core Operations, Student Success Points, and Contact Hour funding. As a small, rural college, this new method of funding addresses the need for basic operational costs while focusing on the importance of student success and access. Further, Howard College agrees that student success points should be funded at a rate no less than the rate student success points were funded for the 2014-15 biennium.

The community colleges of Texas are unified in their stance against special and exceptional items with the exception of a limited number of initiatives. At its recent summer conference, SWCID was one of the special items supported and reaffirmed by the Texas Association of Community Colleges. From its inception, SWCID has received state appropriations for operation based on its unique mission. The original buildings were structures that remained from the closure of Webb Air Force Base and needed extensive renovations in some cases. In previous sessions the Legislature has appropriated funds for the physical plant upgrades, renovation and new construction based on exceptional item requests submitted. This request contains operating funds for SWCID as a special item based on the reductions required with two exceptional items included above the base funding request. In the first exceptional item, we respectfully request consideration of restoration of funding to funding levels for operational costs as appropriated in 2009 (\$3,100,924) for this unique special item. Due to the fact that SWCID does not receive local taxes, and in-state deaf

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students receive tuition waivers, an adequate state special appropriation is critical to the existence of SWCID. For historical perspective, the Special Item Request that SWCID received for funding in 1981 was \$1,532,000. In the second exceptional item, we respectfully request consideration of upgrades to the HVAC systems for both the central plant located in the main building which serves as an instructional, student support services and administration building as well as the residential complex. A study completed by Parkhill, Smith and Cooper delineates the HVAC needs and is referenced in the appropriate section.

Preparation of the local institutional budget certainly fosters an appreciation for the tremendous task of state budgeting. Howard College pledges to do its part to be fiscally responsible and conservative while forwarding the interests of the region, state, and individual student through its designated role in the business and advancement of this state. Central to this effort will always be the success of the individual student.

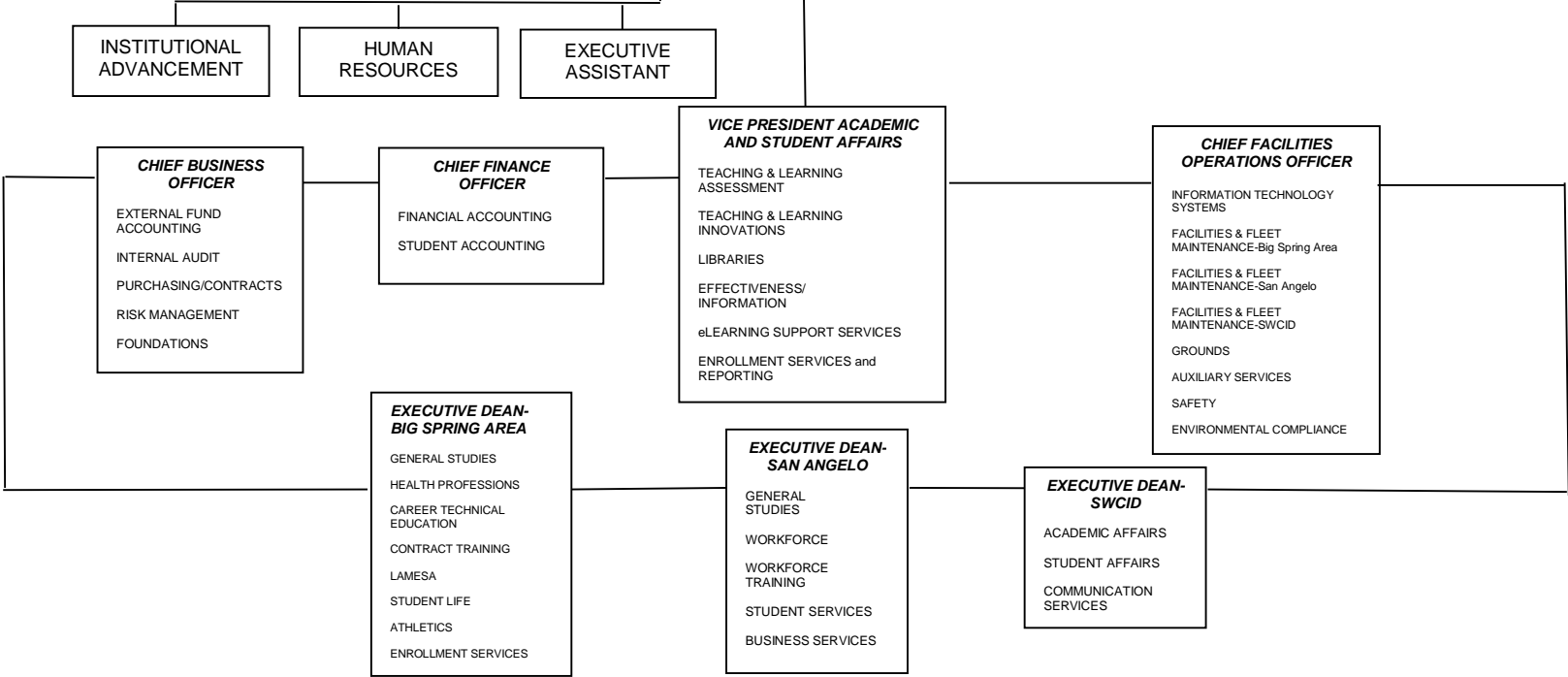
This report reflects financial and personnel data for Howard College. Data for the SouthWest Collegiate Institute for the Deaf is contained as a part of Howard College with a supplemental Schedule 3 C per instructions from the LBB. As the appropriation process proceeds, it will be important to remember this reporting methodology and to ensure that SWCID and SWCID's personnel are factored into the appropriation calculations for Howard College.

Dr. Cheryl T. Sparks, President

2013-2014

BOARD OF TRUSTEES

PRESIDENT



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2.A. Summary of Base Request by Strategy

7/31/2014 9:17:06PM

84th Regular Session, Agency Submission, Version 1

Automated Budget and Evaluation System of Texas (ABEST)

966 Howard College

Goal / Objective / STRATEGY	Exp 2013	Est 2014	Bud 2015	Req 2016	Req 2017
1 Provide Instruction					
1 Provide Administration and Instructional Services					
1 ACADEMIC EDUCATION (1)	3,185,447	0	0	0	0
2 VOCATIONAL/TECHNICAL EDUCATION (1)	3,688,492	0	0	0	0
3 SMALL INSTITUTION SUPPLEMENT	250,000	0	0	0	0
4 CORE OPERATIONS	0	500,000	500,000	0	0
5 SUCCESS POINTS	0	594,905	594,905	0	0
6 CONTACT HOUR FUNDING	0	6,019,337	6,019,337	0	0
2 Provide Special Item Instructional Support					
1 SWCID	2,651,292	2,651,292	2,651,292	2,651,292	2,651,292
TOTAL, GOAL 1	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
TOTAL, AGENCY STRATEGY REQUEST	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292

(1) - Formula funded strategies are not requested in 2016-17 because amounts are not determined by institutions.

2.A. Summary of Base Request by Strategy

7/31/2014 9:17:06PM

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Automated Budget and Evaluation System of Texas (ABEST)

966 Howard College

Goal / Objective / STRATEGY	Exp 2013	Est 2014	Bud 2015	Req 2016	Req 2017
TOTAL, AGENCY RIDER APPROPRIATIONS REQUEST*				\$0	\$0
GRAND TOTAL, AGENCY REQUEST	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
<u>METHOD OF FINANCING:</u>					
General Revenue Funds:					
1 General Revenue Fund	9,775,231	9,765,534	9,765,534	2,651,292	2,651,292
SUBTOTAL	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
TOTAL, METHOD OF FINANCING	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292

*Rider appropriations for the historical years are included in the strategy amounts.

2.B. Summary of Base Request by Method of Finance
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 Automated Budget and Evaluation System of Texas (ABEST)

7/31/2014 9:17:06PM

Agency code: 966		Agency name: Howard College				
METHOD OF FINANCING		Exp 2013	Est 2014	Bud 2015	Req 2016	Req 2017
<u>GENERAL REVENUE</u>						
<u>1</u> General Revenue Fund						
<i>REGULAR APPROPRIATIONS</i>						
Regular Appropriations from MOF Table (2012-13 GAA)						
		\$9,775,231	\$0	\$0	\$0	\$0
Regular Appropriations from MOF Table (2014-15 GAA)						
		\$0	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
TOTAL,	General Revenue Fund	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
TOTAL, ALL	GENERAL REVENUE	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
GRAND TOTAL		\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
FULL-TIME-EQUIVALENT POSITIONS						
TOTAL, ADJUSTED FTES						

2.B. Summary of Base Request by Method of Finance

7/31/2014 9:17:06PM

84th Regular Session, Agency Submission, Version 1

Automated Budget and Evaluation System of Texas (ABEST)

Agency code: **966**

Agency name: **Howard College**

METHOD OF FINANCING

Exp 2013

Est 2014

Bud 2015

Req 2016

Req 2017

**NUMBER OF 100% FEDERALLY
FUNDED FTEs**

2.C. Summary of Base Request by Object of Expense

7/31/2014 9:17:06PM

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Automated Budget and Evaluation System of Texas (ABEST)

966 Howard College

OBJECT OF EXPENSE	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
1001 SALARIES AND WAGES	\$9,020,882	\$9,096,427	\$9,204,242	\$2,110,000	\$2,130,000
1002 OTHER PERSONNEL COSTS	\$458,204	\$513,610	\$544,000	\$541,292	\$521,292
2004 UTILITIES	\$222,925	\$155,497	\$17,292	\$0	\$0
2009 OTHER OPERATING EXPENSE	\$73,220	\$0	\$0	\$0	\$0
5000 CAPITAL EXPENDITURES	\$0	\$0	\$0	\$0	\$0
OOE Total (Excluding Riders)	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
OOE Total (Riders)					
Grand Total	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292

966 Howard College

GOAL: 1 Provide Instruction Statewide Goal/Benchmark: 2 0
 OBJECTIVE: 1 Provide Administration and Instructional Services Service Categories:
 STRATEGY: 1 Academic Education Service: 19 Income: A.2 Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$3,185,447	\$0	\$0	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$3,185,447	\$0	\$0	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$3,185,447	\$0	\$0	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$3,185,447	\$0	\$0	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$3,185,447	\$0	\$0	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

(1) - Formula funded strategies are not requested in 2016-17 because amounts are not determined by institutions.

966 Howard College

GOAL: 1 Provide Instruction Statewide Goal/Benchmark: 2 0
 OBJECTIVE: 1 Provide Administration and Instructional Services Service Categories:
 STRATEGY: 2 Vocational/Technical Education Service: 19 Income: A.2 Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$3,688,492	\$0	\$0	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$3,688,492	\$0	\$0	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$3,688,492	\$0	\$0	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$3,688,492	\$0	\$0	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$3,688,492	\$0	\$0	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

(1) - Formula funded strategies are not requested in 2016-17 because amounts are not determined by institutions.

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	1	Provide Administration and Instructional Services	Service Categories:		
STRATEGY:	3	Small Institution Supplement	Service: 19	Income: A.2	Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$250,000	\$0	\$0	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$250,000	\$0	\$0	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$250,000	\$0	\$0	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$250,000	\$0	\$0	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$250,000	\$0	\$0	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	1	Provide Administration and Instructional Services	Service Categories:		
STRATEGY:	4	Core Operations	Service: 19	Income: A.2	Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$0	\$500,000	\$500,000	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$0	\$500,000	\$500,000	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$0	\$500,000	\$500,000	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$0	\$500,000	\$500,000	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$0	\$500,000	\$500,000	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	1	Provide Administration and Instructional Services	Service Categories:		
STRATEGY:	5	Success Points	Service:	19	Income: A.2 Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$0	\$594,905	\$594,905	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$0	\$594,905	\$594,905	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$0	\$594,905	\$594,905	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$0	\$594,905	\$594,905	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$0	\$594,905	\$594,905	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	1	Provide Administration and Instructional Services	Service Categories:		
STRATEGY:	6	Contact Hour Funding	Service: 19	Income: A.2	Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$0	\$6,019,337	\$6,019,337	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$0	\$6,019,337	\$6,019,337	\$0	\$0
Method of Financing:						
1	General Revenue Fund	\$0	\$6,019,337	\$6,019,337	\$0	\$0
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$0	\$6,019,337	\$6,019,337	\$0	\$0
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$0	\$0
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$0	\$6,019,337	\$6,019,337	\$0	\$0

FULL TIME EQUIVALENT POSITIONS:

STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	2	Provide Special Item Instructional Support	Service Categories:		
STRATEGY:	1	Southwest Collegiate Institute for the Deaf	Service:	19	Income: A.2 Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
Objects of Expense:						
1001	SALARIES AND WAGES	\$1,896,943	\$1,982,185	\$2,090,000	\$2,110,000	\$2,130,000
1002	OTHER PERSONNEL COSTS	\$458,204	\$513,610	\$544,000	\$541,292	\$521,292
2004	UTILITIES	\$222,925	\$155,497	\$17,292	\$0	\$0
2009	OTHER OPERATING EXPENSE	\$73,220	\$0	\$0	\$0	\$0
5000	CAPITAL EXPENDITURES	\$0	\$0	\$0	\$0	\$0
TOTAL, OBJECT OF EXPENSE		\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292
Method of Financing:						
1	General Revenue Fund	\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292
SUBTOTAL, MOF (GENERAL REVENUE FUNDS)		\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292
TOTAL, METHOD OF FINANCE (INCLUDING RIDERS)					\$2,651,292	\$2,651,292
TOTAL, METHOD OF FINANCE (EXCLUDING RIDERS)		\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292	\$2,651,292
FULL TIME EQUIVALENT POSITIONS:						

966 Howard College

GOAL:	1	Provide Instruction	Statewide Goal/Benchmark:	2	0
OBJECTIVE:	2	Provide Special Item Instructional Support	Service Categories:		
STRATEGY:	1	Southwest Collegiate Institute for the Deaf	Service: 19	Income: A.2	Age: B.3

CODE	DESCRIPTION	Exp 2013	Est 2014	Bud 2015	BL 2016	BL 2017
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STRATEGY DESCRIPTION AND JUSTIFICATION:

EXTERNAL/INTERNAL FACTORS IMPACTING STRATEGY:

SUMMARY TOTALS:

OBJECTS OF EXPENSE:	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
METHODS OF FINANCE (INCLUDING RIDERS):				\$2,651,292	\$2,651,292
METHODS OF FINANCE (EXCLUDING RIDERS):	\$9,775,231	\$9,765,534	\$9,765,534	\$2,651,292	\$2,651,292
FULL TIME EQUIVALENT POSITIONS:					

4.A. Exceptional Item Request Schedule
 84th Regular Session, Agency Submission, Version 1
 Automated Budget and Evaluation System of Texas (ABEST)

DATE: 7/31/2014
 TIME: 9:17:07PM

Agency code: 966

Agency name:
Howard College

CODE	DESCRIPTION		Excp 2016	Excp 2017
		Item Name: Restore Funds to 2009 Levels		
		Item Priority: 1		
		Includes Funding for the Following Strategy or Strategies: 01-02-01 Southwest Collegiate Institute for the Deaf		
OBJECTS OF EXPENSE:				
1001	SALARIES AND WAGES		250,000	360,000
1002	OTHER PERSONNEL COSTS		70,000	89,634
2009	OTHER OPERATING EXPENSE		129,633	0
TOTAL, OBJECT OF EXPENSE			\$449,633	\$449,634
METHOD OF FINANCING:				
1	General Revenue Fund		449,633	449,634
TOTAL, METHOD OF FINANCING			\$449,633	\$449,634

DESCRIPTION / JUSTIFICATION:

SWCID is a unique institution in Texas. It provides postsecondary education to deaf and hard of hearing individuals in a self-contained, hybrid mainstream or totally mainstreamed environment based on the need of the student. It also provides a live laboratory for those individuals interested in working in the field of deafness as an interpreter or teacher/child care aide. By statute, tuition and fees are waived for deaf and hard-of-hearing Texas resident students. Non-resident students pay tuition and fees based on university rates as directed by the State of Texas in the originating legislation. SWCID does not levy local taxes and therefore is almost completely dependent on state funding for operational funds. When budgetary cuts are made by the state, there are limited changes that can be made within the existing budget. Cuts beyond this must be made in reduced programs, services and staff. Since 2010 when the 5% reductions in the 2010/11 biennium plus the 10% reduction in the 2012/13 biennium were enacted and then carried forward in the 2014/15 biennium, only minimal costs of living increases have been provided to the employees while workloads have increased. This needs to be addressed. The leadership position has been frozen until the financial situation could be stabilized and so those funds can be used for emergency purposes. Leadership stabilization needs to happen and some flexibility needs to exist in the budget for emergency situations. We are short-staffed in the clerical and maintenance areas through hiring freezes. At least two positions need to be restored. The new benefits funding model for community colleges has had a significant impact on SWCID. Monies to offset this loss are needed as well. Restored funding can also address the rising cost of doing business.

EXTERNAL/INTERNAL FACTORS:

SWCID is a special item appropriation for Howard College in the state budget. The tuition and fees revenue stream are restricted as described above plus no taxes are levied, making SWCID highly dependent on state funding for operational funds. Most Higher Ed institutions have other significant sources of funding. SWCID has none. There are limited numbers of deaf and hard-of-hearing students but the costs to educate are high. SWCID is a cost-effective means of providing a quality education and life experience for deaf and hard-of-hearing students to prepare them for the workforce.

4.A. Exceptional Item Request Schedule
 84th Regular Session, Agency Submission, Version 1
 Automated Budget and Evaluation System of Texas (ABEST)

DATE: 7/31/2014
 TIME: 9:17:07PM

Agency code: 966

Agency name:
Howard College

CODE	DESCRIPTION	Excp 2016	Excp 2017
	Item Name: Central Plant and HVAC Upgrades for Main Building and Residential Complex		
	Item Priority: 2		
	Includes Funding for the Following Strategy or Strategies: 01-02-01 Southwest Collegiate Institute for the Deaf		
 OBJECTS OF EXPENSE:			
5000	CAPITAL EXPENDITURES	1,992,158	0
	TOTAL, OBJECT OF EXPENSE	\$1,992,158	\$0
 METHOD OF FINANCING:			
1	General Revenue Fund	1,992,158	0
	TOTAL, METHOD OF FINANCING	\$1,992,158	\$0

DESCRIPTION / JUSTIFICATION:

SWCID began the HVAC controls system upgrade during the 2008 air handler replacement project. State budget constraints curtailed further progress. The need to address HVAC equipment has increased. A study recently completed by Parkhill, Smith and Cooper delineates the HVAC needs (see attached). Option 4 for the residential complex upgrade project (Variable Refrigerant, Flow System Heat Pump/VRF System) is considered the best approach for value, optimal usage and efficiency. The proposed central plant modifications (\$995,444) and the residential complex upgrade project (Option 4-\$996,714) can be done independently.

EXTERNAL/INTERNAL FACTORS:

SWCID does not have an alternative source of funds adequate to complete projects of this size. Although some equipment has not quite reached its useful life at this juncture, much has and this exceptional item can address current and pending needs. The HVAC system is critical to the daily learning and living environment.

Schedule 3C: Group Insurance Data Elements (Community Colleges)
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Automated Budget and Evaluation System of Texas (ABEST)

7/31/2014 9:20:34PM

966 Howard College

	Total I & A Enrollment	Local Non I & A	Total Enrollment
FULL TIME ACTIVES			
1a Employee Only	131	23	154
2a Employee and Children	40	2	42
3a Employee and Spouse	20	3	23
4a Employee and Family	22	2	24
5a Eligible, Opt Out	3	0	3
6a Eligible, Not Enrolled	3	1	4
Total for this Section	219	31	250
PART TIME ACTIVES			
1b Employee Only	0	0	0
2b Employee and Children	2	0	2
3b Employee and Spouse	0	0	0
4b Employee and Family	0	0	0
5b Eligible, Opt Out	0	1	1
6b Eligible, Not Enrolled	0	0	0
Total for this Section	2	1	3
Total Active Enrollment	221	32	253

966 Howard College

	Total I & A Enrollment	Local Non I & A	Total Enrollment
FULL TIME RETIREES by ERS			
1c Employee Only	0	0	0
2c Employee and Children	0	0	0
3c Employee and Spouse	0	0	0
4c Employee and Family	0	0	0
5c Eligible, Opt Out	0	0	0
6c Eligible, Not Enrolled	0	0	0
Total for this Section	0	0	0
PART TIME RETIREES by ERS			
1d Employee Only	0	0	0
2d Employee and Children	0	0	0
3d Employee and Spouse	0	0	0
4d Employee and Family	0	0	0
5d Eligible, Opt Out	0	0	0
6d Eligible, Not Enrolled	0	0	0
Total for this Section	0	0	0
Total Retirees Enrollment	0	0	0
TOTAL FULL TIME ENROLLMENT			
1e Employee Only	131	23	154
2e Employee and Children	40	2	42
3e Employee and Spouse	20	3	23
4e Employee and Family	22	2	24
5e Eligible, Opt Out	3	0	3
6e Eligible, Not Enrolled	3	1	4
Total for this Section	219	31	250

966 Howard College

	Total I & A Enrollment	Local Non I & A	Total Enrollment
TOTAL ENROLLMENT			
1f Employee Only	131	23	154
2f Employee and Children	42	2	44
3f Employee and Spouse	20	3	23
4f Employee and Family	22	2	24
5f Eligible, Opt Out	3	1	4
6f Eligible, Not Enrolled	3	1	4
Total for this Section	221	32	253

Schedule 3C: Group Health Insurance Headcount Enrollment (Public Community/Junior Colleges)

District Name: **SouthWest Collegiate Institute for the Deaf**
 District Code: **966**

Sec. I: Full Time Actives

		By Job Function		Total Enrollment
		I&A	Local Non-I&A	
		Enrollment		
1a	Employee Only	30	-	30
2a	Employee & Children	2	-	2
3a	Employee & Spouse	1	-	1
4a	Employee & Family	5	-	5
5a	Eligible, Opt-out	-	-	-
6a	Eligible, Not Enrolled	-	-	-
		38	-	38

Sec. II: Part Time Actives

		By Job Function		Total Enrollment
		I&A	Local Non-I&A	
		Enrollment		
1b	Employee Only	-	-	-
2b	Employee & Children	-	-	-
3b	Employee & Spouse	1	-	1
4b	Employee & Family	-	-	-
5b	Eligible, Opt-out	-	-	-
6b	Eligible, Not Enrolled	-	-	-
		1	-	1

Total Active Enrollment: **39** **-** **39**

Sec. III: Retirees (Provided by ERS)

		By Job Function		Total Enrollment
		I&A	Local Non-I&A	
		Enrollment		
1c	Employee Only	-	-	-
2c	Employee & Children	-	-	-
3c	Employee & Spouse	-	-	-
4c	Employee & Family	-	-	-
5c	Eligible, Opt-out	-	-	-
6c	Eligible, Not Enrolled	-	-	-
		-	-	-

Sec. IV: Total Full Time Enrollment

		By Job Function		Total Enrollment
		I&A	Local Non-I&A	
		Enrollment		
1d	Employee Only	30	-	30
2d	Employee & Children	2	-	2
3d	Employee & Spouse	1	-	1
4d	Employee & Family	5	-	5
5d	Eligible, Opt-out	-	-	-
6d	Eligible, Not Enrolled	-	-	-
		38	-	38

Sec. V: TOTAL ENROLLMENT

		By Job Function		Total Enrollment
		I&A	Local Non-I&A	
		Enrollment		
1e	Employee Only	30	-	30
2e	Employee & Children	2	-	2
3e	Employee & Spouse	2	-	2
4e	Employee & Family	5	-	5
5e	Eligible, Opt-out	-	-	-
6e	Eligible, Not Enrolled	-	-	-
		39	-	39

Total Enrollment: **39** **-** **39**

966 Howard College

Special Item: 1 **SouthWest Collegiate Institute for the Deaf**

(1) Year Special Item: 1981
Original Appropriations: \$1,532,000

(2) Mission of Special Item:

The primary purpose of the SouthWest Collegiate Institute for the Deaf (SWCID) is to provide a comprehensive educational environment to assist deaf students in achieving their educational and career objectives. This two year college program for the Deaf was established to provide course work and programs in developmental/preparatory studies, general studies and vocational/technical training. Hearing individuals preparing for vocations in deafness-related fields may also pursue their educational and career objectives at SWCID. Being unique, SWCID is equipped to provide a special population of students not only with educational course work and programs but also with necessary support services to accomplish their educational goals. We are seeing an increasing number of students with multiple disabilities which increases the operational costs as we strive to serve these students.

(3) (a) Major Accomplishments to Date:

SWCID has served a postsecondary deaf and hard of hearing student population in Texas, across the United States and throughout the world since 1980. SWCID has also served hearing students interested in pursuing programs and course work that serve a deaf population including programs in Interpreter Training and Paraprofessional for the Deaf and Hard of Hearing. SWCID has provided instruction in various vocational fields, college transfer and preparatory education. SWCID has occupied existing facilities left when Webb Air Force Base closed, renovated the buildings utilizing state funds, and then used them to serve the needs of students attending SWCID. Within recent years, again with the assistance of state funds, SWCID has replaced some of the older buildings with several new facilities designed to ADA specifications which now better meet the educational needs of deaf and hard of hearing students. New facilities added include a new Residential Complex, Residential Annex, an Activity Center and a Vocational Building which currently provides lab and classroom facilities for Welding, Auto Tech and Building Trades. Active efforts to increase the number of nonresident students, private fundraising as well as seeking federal funding sources such as Title V have offset some of the reductions in state funding. In addition efforts have been made to enhance the college experience and success for our students through focused student life and services.

(3) (b) Major Accomplishments Expected During the Next 2 Years:

The planned and phased renovation projects funded by the State of Texas beginning in the early 1990's are now complete. The facility and infrastructure improvements have more adequately positioned SWCID to serve the State's deaf post-secondary population although some HVAC needs must still be addressed. Increased enrollment has resulted in the need for additional housing. Private funding sources are being accumulated to construct the first cottage and infrastructure for a village-type concept. These improved facilities and additional housing will enhance the learning and living experiences. We anticipate a continuing trend of increased interest in diverse educational programs and opportunities and outreach to dual credit and non-traditional students through e-learning. Utilizing Title V monies, e-Learning technology has been improved to accomplish this goal. In particular, the new Technical Training Center (2009) has already been beneficial in providing workforce training in several fields for deaf students. Efforts are being made to increase opportunities for students with companies involved in the booming workforce of West Texas. Deaf students educated at SWCID will have new and better opportunities to become productive members of society instead of being supported by social welfare programs.

966 Howard College

(4) Funding Source Prior to Receiving Special Item Funding:

SWCID was not in existence prior to Legislative action.

(5) Formula Funding:

N

(6) Non-general Revenue Sources of Funding:

2014	Local Funds	\$525,900
	Auxiliary (Non-Athletic)	\$582,300
2015	Local Funds	\$659,000
	Auxiliary (Non-Athletic)	\$596,500
2016	Local Funds	\$672,200
	Auxiliary (Non-Athletic)	\$608,400
2017	Local Funds	\$685,600
	Auxiliary (Non-Athletic)	\$620,500

(7) Consequences of Not Funding:

Not funding SWCID as a special item will negate the opportunity for the deaf and hard of hearing, as well as hearing individuals, aspiring to achieve educational and career objectives in a unique setting specifically designed for the success of deaf and hard of hearing individuals. In addition a declining appropriation over the last few years has made it very difficult to operate as an educational institution. This special item has faces behind it and those faces are the deaf and hard of hearing students seeking a unique college experience. Further reductions in the appropriations by 10% will leave us in the difficult position of removal of funds held during this economic downturn in recent years for the lead administrative position, reduction of student services through the lay-off of personnel and closure of a workforce program through a hiring freeze. As we reduce workforce programs, the outcome is a focus on the college preparatory and core courses, removing a unique opportunity for deaf students seeking the community college avenue for workforce training in a deaf-setting. Although we have already downsized workforce in recent years, there is a critical mass of employees needed to serve a residential population which will impact further instructional decisions.

6.I. Percent Biennial Base Reduction Options

10 % REDUCTION

84th Regular Session, Agency Submission, Version 1
Automated Budget and Evaluation System of Texas (ABEST)

Date: 7/31/2014
Time: 9:20:34PM

Agency code: 966 Agency name: Howard College

Item Priority and Name/ Method of Financing	REVENUE LOSS			REDUCTION AMOUNT			TARGET
	2016	2017	Biennial Total	2016	2017	Biennial Total	

1 Eliminate an Instructional Program

Category: Programs - Service Reductions (FTEs-Hiring Freeze)

Item Comment: Due to the recent resignation of the Building Construction Technology instructor, a hiring freeze would be implemented resulting in the closure of the program since there is only one instructor assigned to the program. The workforce programs offer opportunities for the deaf and hard-of-hearing to actively participate in the workforce with strong skills. Erosion of the instructional area negates those opportunities.

Strategy: 1-2-1 Southwest Collegiate Institute for the Deaf

General Revenue Funds

1 General Revenue Fund	\$0	\$0	\$0	\$51,500	\$52,200	\$103,700	
General Revenue Funds Total	\$0	\$0	\$0	\$51,500	\$52,200	\$103,700	
Item Total	\$0	\$0	\$0	\$51,500	\$52,200	\$103,700	

FTE Reductions (From FY 2016 and FY 2017 Base Request)

2 Reduction in Administrative Operating Budget

Category: Administrative - FTEs / Hiring and Salary Freeze

Item Comment: During the reductions experienced in the last two biennia, the lead administrator resigned. In order to save funds as the economic situation was stabilized, a co-leadership approach utilizing two deans was implemented with the position being frozen but funds still allocated for emergency purposes. The goal has been to reinstate that position when funding was stabilized. A further destabilization of SWCID will occur.

Strategy: 1-2-1 Southwest Collegiate Institute for the Deaf

General Revenue Funds

1 General Revenue Fund	\$0	\$0	\$0	\$116,800	\$121,300	\$238,100	
General Revenue Funds Total	\$0	\$0	\$0	\$116,800	\$121,300	\$238,100	
Item Total	\$0	\$0	\$0	\$116,800	\$121,300	\$238,100	

FTE Reductions (From FY 2016 and FY 2017 Base Request)

6.I. Percent Biennial Base Reduction Options

10 % REDUCTION

84th Regular Session, Agency Submission, Version 1
Automated Budget and Evaluation System of Texas (ABEST)

Date: 7/31/2014
Time: 9:20:34PM

Agency code: 966 Agency name: Howard College

Item Priority and Name/ Method of Financing	REVENUE LOSS			REDUCTION AMOUNT			TARGET
	2016	2017	Biennial Total	2016	2017	Biennial Total	
3 Reduction in Student Services Operating Budgets							
Category: Administrative - FTEs / Layoffs							
Item Comment: Lay-offs and closures of these departments (Library, Media Center, Admissions/Counseling) would be implemented. Although these are not good choices, mainstreaming of these services on the Howard College campus would be a better choice than further closure of academic/workforce programs. As these types of actions are taken, the core mission of SWCID begins to erode.							
Strategy: 1-2-1 Southwest Collegiate Institute for the Deaf							
<u>General Revenue Funds</u>							
1 General Revenue Fund	\$0	\$0	\$0	\$96,830	\$91,629	\$188,459	
General Revenue Funds Total	\$0	\$0	\$0	\$96,830	\$91,629	\$188,459	
Item Total	\$0	\$0	\$0	\$96,830	\$91,629	\$188,459	
FTE Reductions (From FY 2016 and FY 2017 Base Request)							
AGENCY TOTALS							
General Revenue Total				\$265,130	\$265,129	\$530,259	\$530,259
Agency Grand Total	\$0	\$0	\$0	\$265,130	\$265,129	\$530,259	
Difference, Options Total Less Target							
Agency FTE Reductions (From FY 2016 and FY 2017 Base Request)							

Report

Southwest Collegiate Institute
for the Deaf (SWCID)
HVAC Assessment and Recommendations
Administration Building and Dormitory
Big Spring, Texas

June 2014

PSC Project # 03922513



Southwest Collegiate Institute
for the Deaf (SWCID)
HVAC Assessment and Recommendations
Administration Building and Dormitory
Big Spring, Texas



June 2014

PSC Project # 03922513

PSC

PARKHILL SMITH & COOPER

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SWCID
HVAC Assessment and Recommendations
Administrative Building and Dormitory
June 2014

APPENDICES

APPENDIX A – MECHANICAL PHOTOS

APPENDIX B – OPINION OF PROBABLE COST

1.0 MAIN BUILDING

1.1 EXISTING CONDITIONS

The existing central plant is located within the Main Administration Building, and was part of the original construction. Originally, the central plant included two chillers (one centrifugal and one absorption) and one fire tube steam boiler which produced chilled and heating water fed through a 4-pipe system to the building's air handlers. There have been multiple projects which modified the central plant. In the mid 90's the original chillers were abandoned in place and two air cooled chillers were installed outside on the pad used originally to contain the cooling towers. The original steam system has also been abandoned and two copper tube heating water boilers installed for heating water. During this same time period the system was converted to a 2 - pipe system within the central plant. The changeover from heating to cooling and back again is done by hand, no automation. The 4-pipe configuration to the air handlers is still being used, however only the chilled water loop or the heating water loop are available when that part of the plant is operating. Both the heating and chilled water loops are constant volume, once the pumps are started they run at maximum speed 24/7, which is not energy management efficient or maximizing equipment life cycle. Both the heating and chilled water systems have two pumps each which are run together in a parallel. Both pumps have to run to provide the required water in the system. Both chillers are also piped in parallel requiring the need for both to run when there is a need for chilled water. The heating water boilers are piped into the system using a primary/secondary pumping scheme. This allows one or the other boiler to operate, or both to operate depending on the system load. A second loop was added later to serve the new dormitory. This 2-pipe loop is utilized to serve both chilled water and heating water to the new dormitory so that both cooling and heating are not available at the same time.

Major equipment currently located at the central plant include, two Carrier 80 ton air cooled reciprocating chillers which serve the primary chilled water loop and two Lochinvar Copperfin 1,740,000 output gas fired boilers which serve the primary heating water loop. The chilled water pumps are frame mounted end-suction pumps and the heating water pumps are close coupled end suction pumps.

The five existing air handling units within the building are Trane blow-thru two deck multizone air handling units. All five are less than 10 years old and are in good condition. Several of the units also have return fans installed to return air to the air handlers. These fans appear to be original.

HVAC controls are the Metasys direct digital control system manufactured by Johnson Controls (JCI). This system controls both pneumatic and electronic sensors and actuators that control the air handling units. The system provides little to no control devices for the heating and chilled water systems. The chillers and boilers are controlled by their own internal controls. Pumps and system changeover are operated by hand.

1.1.1 Central Plant Chillers

The existing air cooled chillers are 80 ton units constructed in 1994 and are approximately 20 years old. According to information published by ASHRAE, the American Society of Heating, Refrigerating and Air Conditioning Engineers, the expected useful life of an air cooled reciprocating chiller is 20 years. Therefore the existing 80 ton chillers have reached the end of their useful life.

1.1.2 Boilers

The two boilers within the central plant are in good condition and are less than 10 years old. The boilers are Lochinvar Copperfin II boilers with an input capacity of 2,000,000 Btuh. These boilers are water tube type with an acceptable efficiency so replacing them is not being considered.

1.1.3 Pumping Systems

There are several pumps in the central plant which serve the chilled water system, and heating water systems. These pumps are as follows:

- 2 frame mounted end suction pumps for the central chilled water loop
- 2 close coupled end suction pumps for the heating water loop
- 2 inline pump circulating water between each boiler and the main heating water loop

1.1.4 HVAC Controls

The existing Building Automation System (BAS) is fairly limited in its operation. A Johnson Controls Incorporated (JCI) Metasys System Architecture is utilized but primarily handles the operation of the air handling units. There are also a number of pneumatic actuators that still exist on several of the air-handlers within the facility. Recent study of office buildings before and after a BAS system was installed found that the energy reduction resulting from providing good control of building systems was as high as 57%. This potentially is possible in the classroom and other buildings that do not operate 24 hours per day. However, dorms and other buildings that are occupied during the day and night would see a much lower level of energy savings due directly to the BAS.

1.1.5 Electrical Distribution

The existing main switchboard consists of a 2000 amp main switch at 480/277 volt, three phase, four wire. The main switchboard is located within the central plant. The main switchboard feeds all downstream distribution panels and the motor control center (MCC). The existing chillers are also fed from this main switchboard. The main switchboard appears to be in fair to poor condition, with replacement parts probably not available.

The existing MCC is located within the central plant and is fed from the main switchboard with a 600 amp circuit breaker. The MCC consists of six sections, with the majority of the switches not being utilized. The existing chilled water pumps (CWP #1 and CWP #2) and heating water pumps (HWP #1 and HWP #2) are fed from the MCC. Air handling units (AHU) #1, 2, 4, and 5 are also fed from the MCC. One panel and dry type transformer are being fed from the MCC. The MCC appears to be in fair to poor condition.

1.2 PROPOSED CENTRAL PLANT UPGRADES

In developing a plan for upgrading the Central Plant it is important to consider that the chilled water system and the heating water system must include minimal system down time. This requirement will either extend the time required for the upgrade or will require doing modifications while the existing system is operational. The upgrade work recommended below will still need to be done whether the dormitory is separated from this plant and a new plant constructed for it. If the dorm remains on this system it will have to remain a 2-pipe system. Refer to the discussion of the dormitory.

1.2.1 System Upgrade

Because the new system upgrades will be done on both the chilled and heating water systems the upgrades will need to be done during the off season for that system. The majority of the required work will be done on the chilled water system, with this work being done over the winter months. This upgrade will leave the chillers in their present location although they would be replaced. Piping, electrical and pumps associated with the chilled water system would be replaced during this period. The chilled water system would be unavailable during this renovation work. Minor work to the heating water system will be required to upgrade of that system as well. Work includes:

- Replacing Chillers in Place
- Replacing the chilled water with variable driven pumps
- Replacing piping as required changing the chilled water system over to a variable primary pumping system.
- Modifying the electrical to provide power to the new chillers and pumps.
- Modify piping within the plant to convert the system back to a 4-pipe system.
- Provide new variable driven heating water pumps
- Upgrade of the existing controls system to operate the plant system
- Separating the dormitory systems from this plant. Refer to the dormitory discussion.

1.2.2 Chillers

It is recommended that the chillers be replaced with new high efficiency type scroll compressor air cooled chillers. The chilled water pumps will also be replaced. Designing the system with pumps that can operate satisfactorily when using variable frequency drives will also be included. It has been proven that adjusting pump speed to match flow requirements rather than blocking the flow with valves utilizes significantly less energy. Most of the piping within the plant will be replaced but existing piping can be evaluated during the design of this project. The new piping scheme recommended is a variable primary system. This system will allow either one or both chiller to be operated depending on the building load and will reduce water flow within the building when it is not needed.

1.2.3 Boilers

All existing boilers appear to be in good condition and are proposed to remain. Recommended modifications include changing the system over to a variable pumped system and to convert the system back to a 4-pipe separating the chilled and heating systems. It is proposed that the boilers also be serviced as part of the plant upgrade during the summer when not required.

1.2.4 HVAC Controls

It is recommended that any system upgrades be BACnet compliant. Recommended upgrades include the front end of the existing system and all the devices and controllers necessary to provide proper control operation of the central plant systems. Replacing all of the pneumatic system with electronic components is also recommended. This will save a significant amount of energy by eliminating air leaks seen in pneumatic systems, will increase control capability and will enhance reliability.

1.2.5 Electrical Upgrades

The existing main switchboard is at its rated service life. Recommendations include providing a new main switchboard and new electrical service entrance. Consideration will need to be taken to phase this portion of electrical upgrades with the new mechanical upgrades to limit downtime. All new mechanical equipment will be fed from the new switchboard.

Recommendations also include providing for the demolition of the motor control center (MCC). Since the majority of the switches are not being utilized, the MCC is not necessary. All equipment currently being fed from the MCC could be fed from the proposed new main switchboard. Removing the MCC would free up space in the central plant.

2.0 DORMITORY BUILDING

2.1 EXISTING CONDITIONS

The existing central plant located within the Main Administration Building currently serves chilled and heating water to the fan coil units. The fan coil units are located above ceiling in each dorm room to allow for individual room control of the room. A thermostat and fan speed controller for each fan coil is located in each room. Outside air is ducted to each fan coil unit from an outside air unit that supplies neutral temperature to the fan coil units. The fan coil units are 2-pipe type fan coil units, therefore the units are only capable of heating or cooling if that water is available from the plant systems.

The existing fan coil units were installed in 1997 and are approximately 17 years old. According to information published by ASHRAE, the American Society of Heating, Refrigerating and Air Conditioning Engineers, the expected useful life of a fan coil units is 20 years. Therefore the existing fan coil units are about to reach the end of their useful life expectancy.

The hydronic piping appears to be set up to allow for a variable pumped system, however only a constant volume system is available from the plant. The majority of the fan coil units have 2-way coil control valves with 3-way control valves located at the end of piping runs. Since only a constant volume pumped system is being used, the closing of 2-way valves can cause wide swings in system pressure. Couple this with circuit type setter balancing valves, instead of auto type balancing valves, flows can vary widely through the coils probably leading to coils short water. Thereby reducing the fan coils capacity. This is probably contributing to some of the cooling and heating problems within the building.

Other major problems with the heating and cooling the dorm have been noted by the maintenance staff. The major problem with the system noted appears to be air locking within the system. Specifically the fan coil units at the end of the main pipe runs. Other units periodically air lock too. To relief the air locking maintenance staff manually vents the system to remove the air. Typically a heating/chilled water system is a closed system that once the air is vented of air the system should not be very susceptible to entraining air again. Since the dorm's systems are higher in relation to the plant any air entrained into the system will find its way to the dorm. There are many possibilities to the problem with the air locking of the dorm's fan coil units. These include:

- Lack of a properly sized air separator in the plant.
- Due to the manual venting or leaks in the system, large amounts of water are being made up in the plant upsetting the chemical treatment of the water. This can lead to the oxygen in the water to separate out and causing addition air entrainment into the system.
- Lack of automatic air vents at the end to the main run of piping.

- Due to the 2-way versus 3-way control valve situation noted above, air could be introduced through failing automatic air vents at each fan coil unit.

HVAC controls are local to each fan coil units and are not connected to the plant's central Metasys system.

2.2 PROPOSED DORMITORY UPGRADES

2.2.1 Option #1: Replace the Existing Fan Coil Units

This option would replace the existing fan coil units, control valves, and automatic venting systems. The fan coil units would remain connected to the chilled/heating water plant in the Administration Building.

2.2.2 Option #2: Construct a New Chilled/Heating Water Plant

This option would construct a new chilled/heating water plant to serve the dorm's fan coil units, disconnecting the dorm from the chilled/heating water plant in the Administration Building. This would include a small building located next to the dorm to house the boilers, pumps, and electrical gear. The chiller would be located outside next to the building. Pipe would be routed over to the dorm to reconnect the chilled/heating water piping. This option would also include the work noted for the fan coils in Option #1.

2.2.3 Option #3: Provide Individual DX Mini Split Systems to Each Dorm Room

In this option the individual fan coil units would be replaced with DX split system heat pumps. The condensing units would be either roof or ground mounted. These systems can provide SEER's ratings of 18 or better due to use of variable driven compressors. When these units when in heat pump mode they recover compressor heat which increases the amount of heat produced from that of a typical heat pump. This eliminates the need for backup electric heat. The chilled/heating water piping would be abandoned in place and disconnected from the plant in the Administration building.

2.2.4 Option #4: Provide Variable Refrigerant Flow System Heat Pump (VRF System)

In this option the individual fan coil units would be replaced by a VRF system. These systems are capable of very high SEER ratings due to variable driven compressors and to the heat recovery capabilities of the system. The system allows for the connection of multiple room units to the single heat pump condensing unit. This system allows for simultaneous heating and cooling

between the spaces served. In other words if a dorm room is in cooling and an adjacent room is in heating the heat removed from the room in cooling is used to heat the other, thereby recovering the heat, saving energy. If the all the rooms are in cooling the heat is rejected as in a conventional condensing unit. As noted in the mini-splits discussion above, these units when in the heat pump mode recover compressor heat which increases the amount of heat produced from that of a typical heat pump. This eliminates the need for backup electric heat. The chilled/heating water piping would be abandoned in place and disconnected from the plant in the Administration building.

APPENDIX A

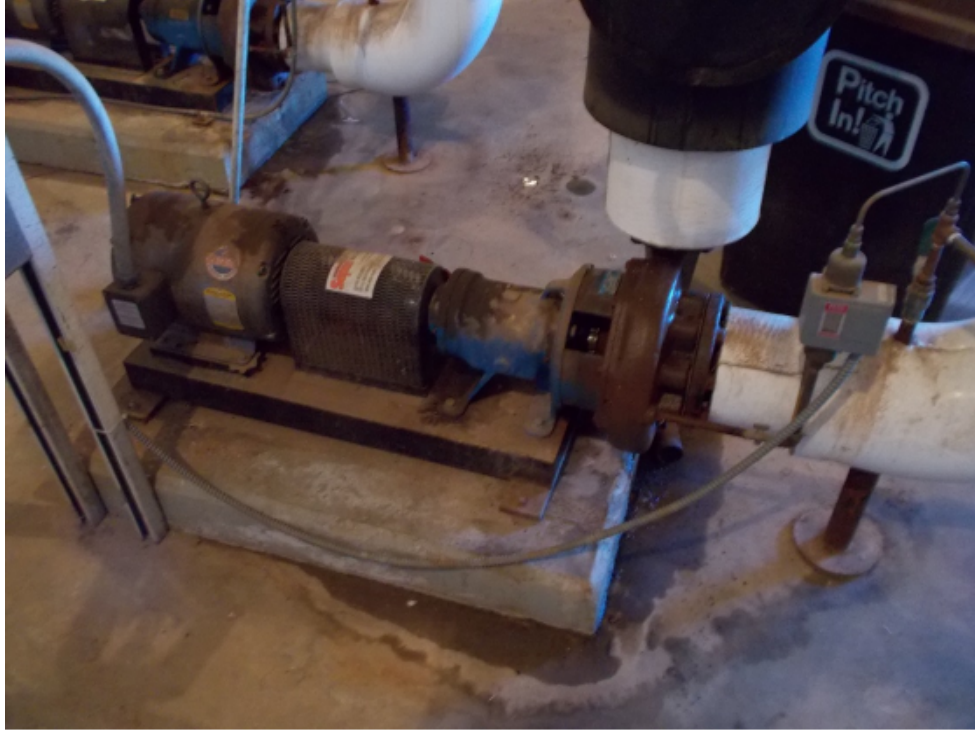
MECHANICAL PHOTOS



Existing Carrier Air Cooled Chiller



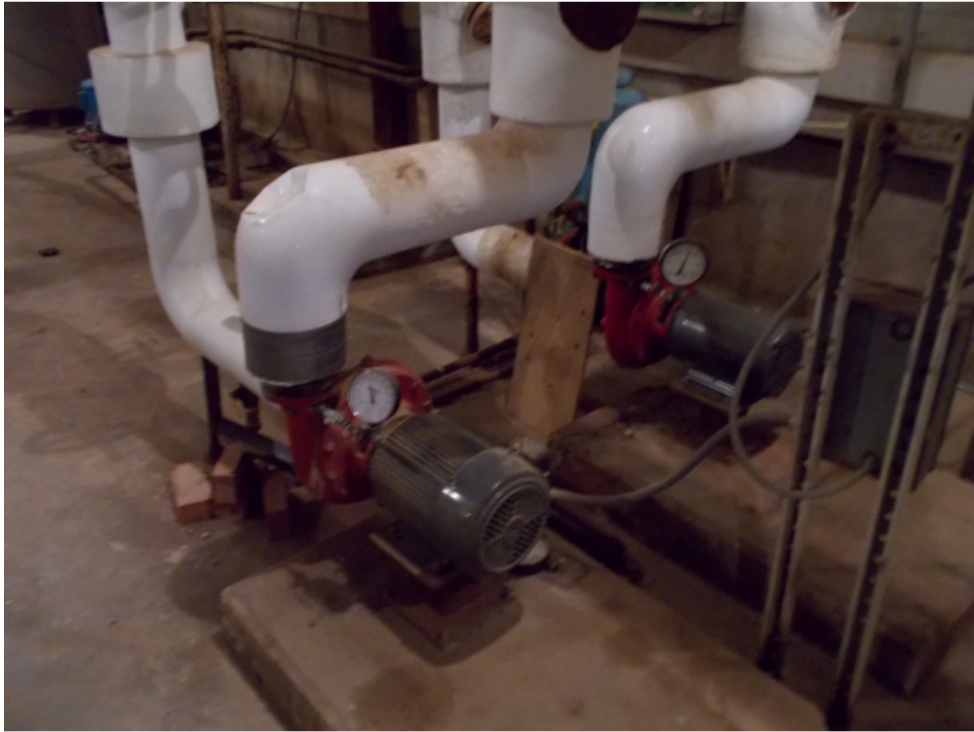
Typical Air Handling Units – Multizone Unit



Existing Chilled Water Pump



Existing Copper Fin Tube Gas Fired Boilers



Existing Heating Water Pumps



Possible Location of New Chilled/Heating Water Plant for the Dormitory

APPENDIX B
OPINION OF PROBABLE COST



June 16, 2014

PARKHILLSMITH&COOPER

PSC Project No. 03.9225.13

Howard College: Southwest Collegiate Institute for the Deaf
 Howard County Junior College District
 Big Spring, TX

OPINION OF PROBABLE COST SUMMARY

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST	REMARKS
* Existing Central Plant Modifications & Electrical Upgrades (Supporting Existing Administration Building)					
<i>Hard Cost</i>					
Existing Plant Equipment Replacement	1	lot		\$866,639.81	Refer to Itemized Detailing
<i>Soft Cost</i>					
Design Professional Services Fees		ls	1.10 COW	\$86,663.98	Projected Third-Party Contract Cost
Testing, Adjusting and Balancing		ls	1.025 COW	\$21,666.00	Excludes Consultant and Reimb Fees
Subtotal				\$974,969.79	
<i>Inflation Escalation Factor (2.1%)</i>				\$20,474.37	Expected construction 2015
Total					\$995,444.15
* Note: Work to be completed regardless of chosen Option 1, 2, 3 or 4					
Option 1: SWCID Dormitory Replace Fan Coil Units					
<i>Hard Cost</i>					
Fan Coil Unit Replacement	56	ea		\$438,017.58	Refer to Itemized Detailing
Ceiling Repairs	1,680	sf	\$6.00	\$10,080.00	Re-work ceilings around FCU's
<i>Soft Cost</i>					
Design Professional Services Fees		ls	1.10 COW	\$44,809.76	Projected Third-Party Contract Cost
Testing, Adjusting and Balancing		ls	1.05 COW	\$21,900.88	Excludes Consultant and Reimb Fees
Subtotal - Option 1				\$514,808.22	
<i>Inflation Escalation Factor (2.1%)</i>				\$10,810.97	Expected construction 2015
Total					\$525,619.19
Option 2: New Central Plant (Supporting Existing Dormitory) + Fan Coil Replacement					
<i>Hard Cost</i>					
New Central Plant PEMB, Plant Equipment & Fan Coil Unit Replacement	1	lot		\$ 1,258,652.59	Refer to Itemized Detailing
Ceiling Repairs	1,680	sf	\$6.00	\$ 10,080.00	Re-work ceilings around FCU's
Exterior Masonry Chase for Piping	120	sf	\$30.00	\$ 3,600.00	Conceal Chiller/Heat Piping @ Bldg
Pavement Repairs/Compaction	30	sy	\$50.00	\$ 1,500.00	Trenching Across Street
<i>Soft Cost</i>					
Design Professional Services Fees		ls	1.15 COW	\$ 190,849.89	Excludes Consultant and Reimb Fees
Geotech Survey		ls		\$ 6,000.00	Two borings @ New Bldg footprint
Topo Survey		ls		\$ 5,000.00	Immediate Area @ New Bldg
TDLR - TAS review and Inspection				\$ 1,000.00	Accessible Plan Review and Inspection
Permitting				\$ 800.00	
Testing, Adjusting and Balancing			1.05 COW	\$ 62,932.63	Projected Third-Party Contract Cost
Subtotal - Option 2				\$1,540,415.11	
<i>Inflation Escalation Factor (2.1%)</i>				\$32,348.72	Expected construction 2015
Total					\$1,572,763.83



June 16, 2014

PARKHILLSMITH&COOPER

PSC Project No. 03.9225.13

Howard College: Southwest Collegiate Institute for the Deaf
Howard County Junior College District
Big Spring, TX

OPINION OF PROBABLE COST SUMMARY

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST	REMARKS
Option 3: New Mini-Split Systems					
<i>Hard Cost</i>					
New Mini-Split Systems	56			\$ 980,841.88	Refer to Itemized Detailing
Curbs and Roof Penetration Repairs	30	ea	\$ 750.00	\$ 22,500.00	
Ceiling Repairs	1,680	sf	\$6.00	\$ 10,080.00	Ceilings Re-work
<i>Soft Cost</i>					
Design Professional Services Fees		ls	1.15 COW	\$ 152,013.28	
Testing, Adjusting and Balancing		ls	1.05 COW	\$ 49,042.09	Excludes Consultant and Reimb Fees
<i>Subtotal - Option 3</i>				\$ 1,214,477.26	
<i>Inflation Escalation Factor (2.1%)</i>				\$ 25,504.02	Expected construction 2015
Total				\$ 1,239,981.28	
Option 4: New Variable Refrigerant Flow System (VRF)					
<i>Hard Cost</i>					
New VRF System (Zoned)	6	ea		\$ 798,604.54	Refer to Itemized Detailing
Concrete Equipment Pad	250	sf	\$7.50	\$ 1,875.00	Housekeeping Pad for VRF Units
Exterior Masonry Chase for Piping	120	sf	\$30.00	\$ 3,600.00	Conceal Refrig/Heat Pump Piping @ Bldg
Ceiling Repairs	1,680	sf	\$6.00	\$ 10,080.00	Re-work ceilings at FCU's
<i>Soft Cost</i>					
Design Professional Services Fees		ls	1.15 COW	\$ 122,123.93	
Testing, Adjusting and Balancing		ls	1.05 COW	\$ 39,930.23	
<i>Subtotal - Option 4</i>				\$ 976,213.70	
<i>Inflation Escalation Factor (2.1%)</i>				\$ 20,500.49	Expected construction 2015
Total				\$ 996,714.19	

OPINION OF PROBABLE COST RECAPITULATION

<i>Existing Central Plant Modifications & Electrical Upgrades (Supporting Existing Administration Building)</i>	\$995,444.15
Option 1: SWCID Dormitory Replace Fan Coil Units	\$1,521,063.34 OPC includes Central Plant Mods + Option 1
Option 2: New Central Plant (Supporting Existing Dormitory) + Fan Coil Replacement	\$2,568,207.98 OPC includes Central Plant Mods + Option 2
Option 3: New Mini-Split Systems	\$2,235,425.43 OPC includes Central Plant Mods + Option 3
Option 4: New Variable Refrigerant Flow System (VRF)	\$1,992,158.34 OPC includes Central Plant Mods + Option 4



Opinion of Probable Cost - 6/16/14
SWCID - Existing Central Plant & Electrical Modifications
Big Spring, Texas
PSC Job Number: 03.9225.13

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COSTS	EXTENDED COSTS
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Modifications to Existing Central Plant				
80 Ton Packaged Air Cooled Chiller w/ installation	2	ea	\$95,000.00	\$190,000.00
Plant piping modifications	1	LS	\$30,000.00	\$30,000.00
4 Pumps (Primary/Secondary for Heating & Chilled Water)	1	LS	\$25,000.00	\$25,000.00
DDC Controls	1	LS	\$75,000.00	\$75,000.00
Electrical	1	LS	\$60,000.00	\$60,000.00
Air/Dirt Separator	1	LS	\$50,000.00	\$50,000.00
Electrical				
Service Entrance	1	LS	\$35,000.00	\$35,000.00
Main Switchboard	1	LS	\$65,000.00	\$65,000.00
Electrical Demolition	1	LS	\$5,000.00	\$5,000.00
<p>This Opinion of Probable Cost is based on 2014 construction industry costs for the Howard County region and is susceptible to market area fluctuation. The OPC will require escalation due to inflation contingent on planned actual completion of work.</p>				

SUBTOTALS				\$535,000.00
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Area Multipliers	1.25	\$133,750.00
Tax		\$668,750.00
General Contractor Overhead	10%	\$668,750.00
		\$66,875.00
General Contractor Profit	5.0%	\$735,625.00
		\$36,781.25
Bond	2.00%	\$772,406.25
		\$15,448.13
Estimating Contingency	10%	\$787,854.38
		\$78,785.44
GRAND TOTAL		\$866,639.81



Opinion of Probable Cost - 6/16/14
SWCID - Option #1
Big Spring, Texas
PSC Job Number: 03.9225.13

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COSTS	EXTENDED COSTS
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Fan Coil Replacement				
Fan Coil Units - 56	56	ea	\$4,500.00	\$252,000.00
Demolition of FCU's - 56	1	LS	\$10,000.00	\$10,000.00
Electrical - 56	56	ea	\$150.00	\$8,400.00
Subtotal				\$270,400.00
<p>This Opinion of Probable Cost is based on 2014 construction industry costs for the Howard County region and is susceptible to market area fluctuation. The OPC will require escalation due to inflation contingent on planned actual completion of work.</p>				

SUBTOTALS				\$270,400.00
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Area Multipliers	1.25			\$67,600.00
Tax				\$338,000.00
General Contractor Overhead	10%			\$338,000.00
General Contractor Profit	5.0%			\$371,800.00
Bond	2.00%			\$18,590.00
Estimating Contingency	10%			\$398,197.80
GRAND TOTAL				\$438,017.58



Opinion of Probable Cost - 6/16/14
SWCID - Option #2
Big Spring, Texas
PSC Job Number: 03.9225.13

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COSTS	EXTENDED COSTS
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New Central Plant				
50 Ton Packaged Air Cooled Chiller w/ installation	1	LS	\$75,000.00	\$75,000.00
2 Boilers (200 MBH) w/ installation	1	LS	\$45,000.00	\$45,000.00
Piping from new Cental Plant to Dorm w/ installation	1	LS	\$60,000.00	\$60,000.00
4 Pumps (Primary/Secondary for Heating & Chilled Water)	1	LS	\$15,000.00	\$15,000.00
DDC Controls	1	LS	\$75,000.00	\$75,000.00
Electrical	1	LS	\$90,000.00	\$90,000.00
HVAC for Plant	1	LS	\$25,000.00	\$25,000.00
Fan Coil Replacement				
Fan Coil Units - 56	56	ea	\$4,500.00	\$252,000.00
Demolition of FCU's - 56	1	LS	\$10,000.00	\$10,000.00
Electrical - 56	56	ea	\$500.00	\$28,000.00
New Metal Building				
Pre-Eng. Metal Bldg for New Central Plant	1500	sf	\$68.00	\$102,000.00
Subtotal				\$777,000.00
<p>This Opinion of Probable Cost is based on 2014 construction industry costs for the Howard County region and is susceptible to market area fluctuation. The OPC will require escalation due to inflation contingent on planned actual completion of work.</p>				

SUBTOTALS	\$777,000.00			
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Area Multipliers	1.25	\$194,250.00
Tax		\$971,250.00
General Contractor Overhead	10%	\$97,125.00
General Contractor Profit	5.0%	\$53,418.75
Bond	2.00%	\$22,435.88
Estimating Contingency	10%	\$114,422.96
GRAND TOTAL		\$1,258,652.59



Opinion of Probable Cost - 6/16/14
SWCID - Option #3
Big Spring, Texas
PSC Job Number: 03.9225.13

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COSTS	EXTENDED COSTS
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Mini-Split Systems				
Mini-Split System Units w/ installation- 56	56	ea	\$8,750.00	\$490,000.00
Demolition of FCU's - 56	1	LS	\$10,000.00	\$10,000.00
Electrical per unit - 56	56	ea	\$1,000.00	\$56,000.00
Electrical Distribution	1	LS	\$49,500.00	\$49,500.00
Subtotal				\$605,500.00
<p>This Opinion of Probable Cost is based on 2014 construction industry costs for the Howard County region and is susceptible to market area fluctuation. The OPC will require escalation due to inflation contingent on planned actual completion of work.</p>				

SUBTOTALS				\$605,500.00
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Area Multipliers	1.25			\$151,375.00
Tax				\$756,875.00
General Contractor Overhead	10%			\$756,875.00
General Contractor Profit	5.0%			\$41,628.13
Bond	2.00%			\$17,483.81
Estimating Contingency	10%			\$89,167.44
GRAND TOTAL				\$980,841.88



Opinion of Probable Cost - 6/16/14
SWCID - Option #4
Big Spring, Texas
PSC Job Number: 03.9225.13

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COSTS	EXTENDED COSTS
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Variable Refrigerant Flow System (VRFS)				
50 Tons of Conditioning	50	ton	\$7,500.00	\$375,000.00
Demolition of FCU's - 56	1	LS	\$10,000.00	\$10,000.00
Electrical per Unit - 56	56	ea	\$1,500.00	\$84,000.00
Electrical Distribution	1	LS	\$24,000.00	\$24,000.00
Subtotal				\$493,000.00
<p>This Opinion of Probable Cost is based on 2014 construction industry costs for the Howard County region and is susceptible to market area fluctuation. The OPC will require escalation due to inflation contingent on planned actual completion of work.</p>				

SUBTOTALS				\$493,000.00
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Area Multipliers	1.25			\$123,250.00
Tax				\$616,250.00
General Contractor Overhead	10%			\$616,250.00
General Contractor Profit	5.0%			\$677,875.00
Bond	2.00%			\$711,768.75
Estimating Contingency	10%			\$14,235.38
GRAND TOTAL				\$798,604.54