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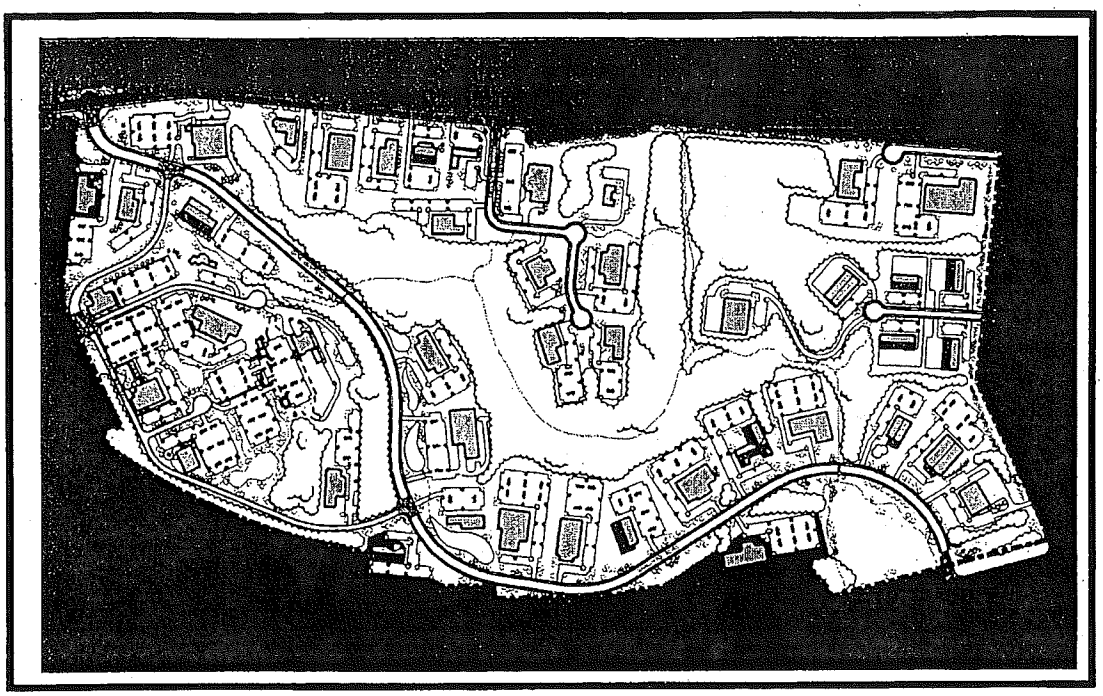
Comprehensive Reuse Plan Update

December 31, 2003



Prepared for: MIAMISBURG Mound COMMUNITY IMPROVEMENT CORP

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MATC

Mound Advanced Technology Center

776 0304

TABLE OF CONTENTS

SECTION

APPENDICES

LIST OF FIGURES

EXECUTIVE SUMMARY

INTRODUCTION

The Mound site comprises approximately 305 acres located in the City of Miamisburg, Ohio. In 1946, the Atomic Energy Commission acquired 182 acres of the site for use as a large-scale nuclear production facility. The balance of the site, consisting of 122 acres, was acquired by the U.S. Department of Energy (DOE) in 1981 for use as a buffer zone.

In the early 1990s, defense production at the Mound site was reduced as DOE operations began to consolidate their operations to the Kansas City and Savannah River facilities. Subsequently, DOE decided to decommission the Mound Site. The proposal included transfer of the site's technologies and facilities to private sector use, while DOE conducted an environmental restoration program at Mound, which was declared a Superfund site. The Miamisburg Mound Community Improvement Corporation (MMCIC) and the Mound Reuse Committee (MRC) were established to implement the redevelopment. These two organizations developed the following vision for the site: "to establish the Mound Advanced Technology Center (MATC) as an economically viable, privately owned industry and technology park".

In 1997, the community adopted the first Comprehensive Reuse Plan (CRP) for the Mound. Two addenda to the original CRP were issued in 1999 and 2001. The document identified $49.3 million in physical improvements that would be implemented in phases over time to make the site marketable. The first three phases of improvements have been completed. Phase I ($3.5 million) focused on the site's east boundary, including roadway, parking lot, infrastructure, utilities, street lighting improvements, and an attractive main entrance. Phase II ($1.46 million) provided similar improvements to an area of the site's interior on the Main Hill. Phase III ($3.6 million), the "smart park," represents the preparation of 48 acres of previously undeveloped property in the southwest portion of the site for new business growth. Improvements in Phase III included roadways and infrastructure, the addition of an attractive new southern entrance, and state-of-art communications and electrical infrastructure. Additional projects currently underway include the decentralization of utilities and facility improvements by business tenants.

In December 2002, Barge, Waggoner, Sumner and Cannon, Inc. (BWSC) was commissioned by MMCIC to prepare an update of the Comprehensive Reuse Plan. This update reflects current baseline information from the DOE contractor and incorporates current planning and market information. The updated plan will serve as a planning tool that will guide redevelopment efforts over the next few years as the Mound Advanced Technology Center strives to achieve its vision as an economically viable, privately owned industry and technology park. This plan will also provide MMCIC with an integrated schedule that coordinates activities among DOE site contractors and identifies cost efficiencies that will allow MMCIC and DOE to reduce costs as they work together to clean up and reuse the site.

The updated plan includes the following components: (1) a Vision Plan, which subdivides the site into high, medium, and low density campuses and provides proposed landscape and landscape restoration master plans and design guidelines for the entire site (Section 2); (2)

proposed improvements to the roadway system to access developable land and complete connections to existing City streets (Section 3); (3) evaluation of the site's utility infrastructure, which assesses the condition and capabilities of existing site utilities and proposes improvements that will facilitate decentralization from the existing Mound system and the transfer of utilities from DOE to the City and private utilities (Section 3); (4) assessments of existing buildings that are to remain which describes each building's condition and identifies needed improvements for reuse for the buildings to remain (Appendix A); (5) a cost opinion, which provides an opinion of probable costs for building and site-related improvements and includes assumptions made in developing the cost opinions (Appendix B); and (6) an Implementation Schedule, which provides a timeline for improvements that have been integrated into the work schedule of DOE's contractors (Appendix C).

VISION PLAN

The Mound site is characterized by distinct changes in topography, with elevations ranging from 710 feet to 880 feet. The original Mound buildings were constructed on the northern and eastern portions of the site, while the balance of the site has remained predominantly as forest and fields.

The City of Miamisburg Land Use Plan guides land utilization for the Mound Advanced Technology Center. The proposed future use of the Mound site is office, laboratory, and light industrial. These uses are consistent with historical and current zoning and the Department of Energy's stated goals of economic development for sites that have lost their defense program missions.

Creation of a Vision Plan for site development is based on consideration of existing infrastructure and previous uses, the natural characteristics of the site, the overall transportation circulation system, and market conditions. The overall concept guiding the plan is to link the central campus (high-density area) to the rest of the site through the use of architectural and landscape elements (such as facade treatments, signage, site lighting, vegetation, open space, and a trail system) in an overall park-like setting.

The Vision Plan is presented as a compilation of four elements: (1) the proposed campus designations and conservation areas, (2) the proposed lot layout, (3) the Landscape Master Plan, and (4) the Landscape Restoration Plan. In addition, Design Guidelines have been prepared that will ensure that development of the MATC is consistent with this Vision Plan. These guidelines have been published as a separate document by MMCIC. MMCIC has also established a review policy to evaluate development plans and ensure compliance with the Reuse Plan and these design standards.

The MATC site is divided into three campuses that allow for different building densities (high, medium, and low) and different but unifying site and architectural characters (see Figure 1 at the end of this summary). The High-Density Campus is currently the most developed area on the MATC site and is intended for Office/Laboratory uses. The vision for this campus portrays a highly developed crown of multi-story buildings located around the brow of the hill, taking advantage of views across the site, the river, and the Mound Park. Open spaces and a walkway system are proposed to give relief to pavement and masonry and provide an urban park-like feel to the entire campus.

The Medium-Density Campus contains five existing buildings on the eastern portion of the site and is recommended for Build-to-Suit, Mixed Use development (Light Industry/Light Manufacturing/Office/Research). The vision for this campus is a mixture of characteristics borrowed from the other two campuses, creating a more heterogeneous appearance with a balanced ratio of green surface to paved surface. A combination of moderate-density to low-density development is expected due to the variation in site characteristics.

The Low-Density Campus consists of an area that is mostly undeveloped and is recommended for Build-to-Suit, Light Industry/Office uses. A spacious, open, park-like setting is envisioned

for this suburban-type campus. Buildings and parking are proposed to be set back from the road, allowing for open lawns and trees to frame views of high-quality architecture as seen from the meandering, tree-lined street.

These designations were derived based on factors such as the existing development, adjacent uses, the desired character of the business park, natural features, and the open space system. A breakdown of the acreage on the site is provided below:

	Total Area (Ac.)	Buildable Area (Ac.)
High Density Campus	34	29
Medium Density Campus	112	76
Low Density Campus	118	89
Subtotals	**264**	**194**
Rights-of-way and Common Areas	41	--
Totals	**305**	**194**

The conceptual lot layout (Figure 1) is intended to: (1) make the best possible use of the site's natural and physical characteristics, (2) provide lot sizes and arrangements that can respond to market conditions and optimize the buildable area on each lot, (3) minimize common areas that require maintenance, and (4) protect and link open space areas. Lot sizes were reconfigured from previous arrangements in the original CRP to reflect recommendations from marketing analysis, existing topographic conditions, road realignments, changes in anticipated use of some existing buildings, and long-term flexibility allowing for changes in market demands. MMCIC's marketing consultant recommended an optimal lot size of 2.5 acres, and many lots were reconfigured accordingly. Several lots can be recombined for tenants requiring larger initial space or room for expansion. Existing topographic conditions provide site planning challenges for a few lots, but most have immediately buildable areas without excessive grading requirements.

Vanguard Boulevard was realigned from the original plan to a more northerly course instead of following a central route through the valley. This resulted in some adjacent lots having dual access from two streets and the road being "single-loaded" for several lots (*i.e.* providing access to lots on only one side of the roadway due to topography). The new alignment alternative was selected in part to avoid long narrow lots that would have required extensive site work to obtain adequate buildable space for a new building.

Although other opportunities were explored, existing conditions in the High Density Campus restricted the lot arrangement to a somewhat conventional road/lot grid pattern and lot coverages of up to 80%. Shared parking would have loosened the appearance considerably and provided for

a more campus-like layout, but concern over complicated use agreements and shared cost management guided the layout to self-contained parcels. Parcels in the Medium Density Campus follow existing building/driveway/utility and high density configurations except for Enterprise Court which provides four large parcels with extensive open space (conservation easement). The Low Density Campus allows for a lot coverage of approximately 40%. The Design Guidelines provide development recommendations for each campus.

Figure 2 is a Master Plan which shows conceptual building and parking area configurations on all of the lots throughout the site, the proposed open space system, and landscape development recommendations. This plan is a conceptual example of what total build-out of the site might look like in the future.

A Conceptual Landscape Plan (see Figure 2.3, Section 2) was prepared that shows the proposed locations for tree plantings, signage and landscape development, architectural site feature locations, the greenbelt, and the trail system. The proposed landscape developments are intended to (1) enhance visual continuity and curb appeal, (2) guide circulation throughout the site, (3) enhance the sense of place, and (4) provide thermal moderation for buildings and paved surfaces. Indigenous plant material is recommended for street trees, site shade trees, screening, ornamental accent areas, and site restoration.

A Landscape Restoration Plan (see Figure 2.4, Section 2) was prepared that shows areas targeted for landscape restoration and the appropriate vegetation to be planted. Landscape restoration activities are intended for steep slopes, areas left bare from construction/remediation activities, and areas to return to natural forest in conservation easement installation buffers. The species mixes will duplicate regional ecosystems and enhance wildlife habitat. In addition, the plan proposes using small seedling woody plants and hydro-seeded herbaceous plantings to save costs of revegetation for large areas. The remediation areas, also known as Potential Release Sites (PRS) that will likely be redeveloped are proposed to be planted with temporary grass, while PRS sites that will remain undeveloped are proposed to be planted with forest-type species to promote reforestation and reduce maintenance costs.

GENERAL SITE INFRASTRUCTURE

Site infrastructure evaluated for this updated plan consisted of roadways, sanitary sewer, water (raw, domestic, and fire), storm sewers, natural gas, electrical power, and telecommunications. Proposed improvements to the roadway system include: (1) the construction or extension of five secondary entrance roads with cul-de-sacs that will allow additional access to the proposed campuses, (2) completing the middle section of Vanguard Boulevard, and (3) reconstructing one roadway (Capstone Circle) from Building OSE to a new intersection with Vanguard Boulevard.

The focus of the utility investigation was on determining what systems should continue to provide service in their present state, which ones should be abandoned, and which ones should be integrated into the adjacent existing City systems. This evaluation also included consideration of site grading and a watershed study that analyzed pre-development and post-development drainage (to determine the need for retention/detention basins).

The updated plan goes a bit further in its planning scope than did the original CRP by including costs for off-site improvements deemed necessary for successful development of the site. These off-site improvements include water main extensions, upgrading of the City's water treatment plant, upgrading of the City's wastewater treatment facility (including one pump station), and roadway improvements for access. The roadway improvements identified range from City street widening to the planned new I-75 interchange at Miamisburg-Springboro Road/Austin Road. Costs for these off-site improvements were calculated as a percentage of the total construction cost based on an assumed benefit to the site.

A summary table in Appendix B compiles total site costs for building and infrastructure improvements.

FACILITIES

Originally, the Mound site contained over 100 buildings, 25 explosives-storage magazines, and numerous other structures comprising more than 1.3 million gross square feet of indoor space. Over the years, many of the buildings on the Mound site have been demolished as part of DOE's environmental restoration program, and others are planned for demolition. Currently a total of 18 buildings are planned to be transferred for reuse comprising an approximate total square footage of 534,200. Seven buildings will be demolished (55,941 sf) due to existing condition, location, etc. Eleven buildings were assessed as part of this project. The proposed use and square footage of these buildings are provided below:

Building Summary

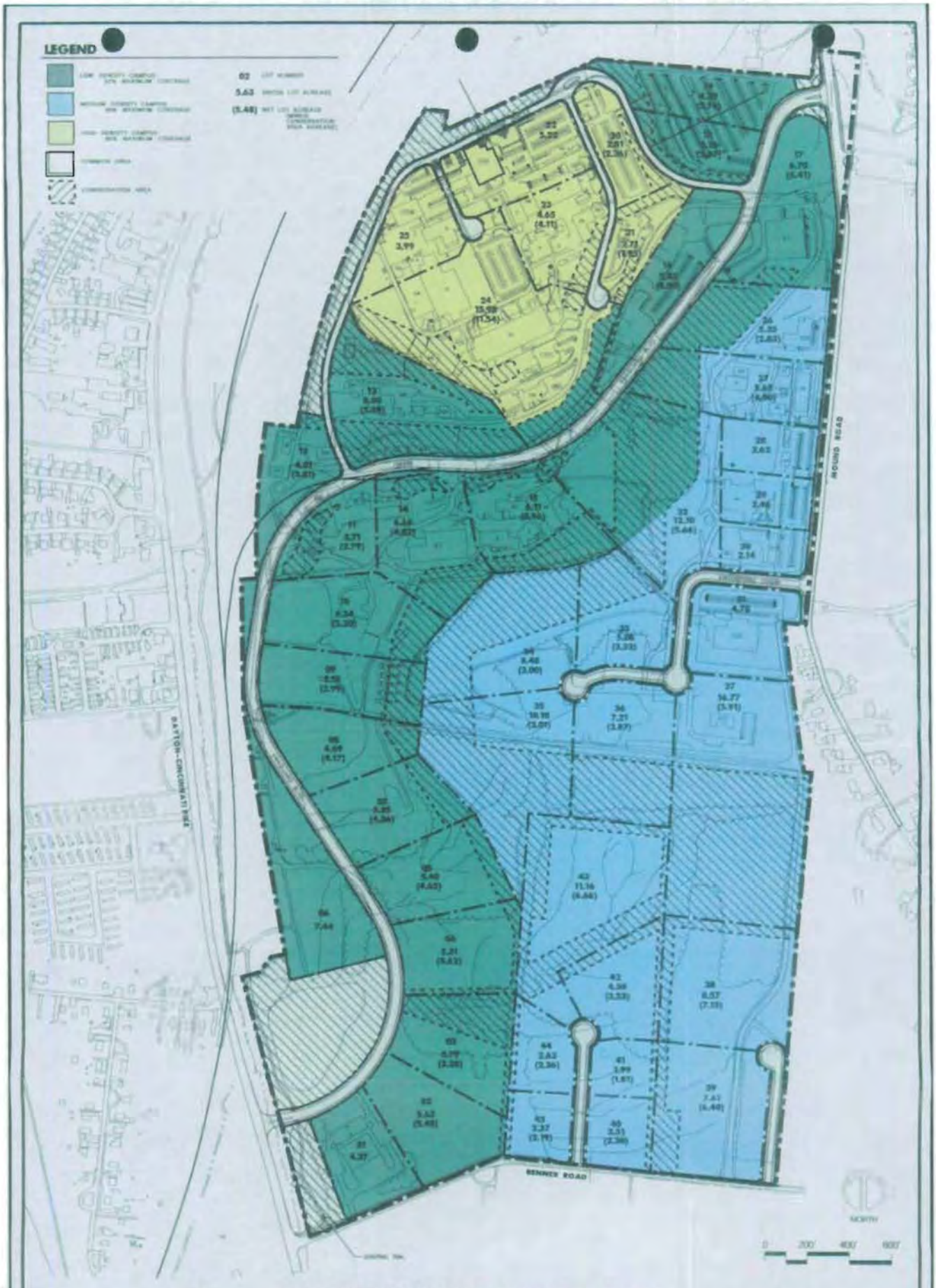
Building Identification	Proposed Use	Gross Area (s.f.)	Floor Rentable Area (s.f.)
Building OSW	Office	52,960	49,730
T Building	Office/Data Center	121,960	117,220
Building COS	Office/Laboratory	60,520	54,940
Building OSE	Office	89,290	84,320
Building 45	Office/Laboratory	10,260	8,960
Building 61	Office/Warehouse	44,540	43,440
Building 126	Office	11,570	11,570
Building 102	Office	10,320	9,520
Building 105 (Thaler Machine Shop)	Manufacturing	31,500	30,660
Building 100	Office	5,800	5,630
Building 87	Office/Manufacturing	39,530	39,070
TOTALS		**478,250**	**455,060**

The facilities assessment for eight of the buildings focused on determining the viability of reusing the buildings. (Buildings 87, 100, and 105 have already been turned over to MMCIC and are currently occupied. The assessment for these buildings entailed site utility needs and decentralization from the Mound systems only.) Assessments were made of the civil, structural, and architectural conditions of the building, as well as the fire suppression, plumbing, HVAC, electrical, telephone/information, and fire alarm systems. For each system, work tasks were identified that addressed building modifications and code issues, deferred maintenance, and demolitions. In addition, color renderings were prepared for the OSE Building, the OSW Building, Building 61, and the COS Building showing proposed improvements to the architectural facades that are consistent with the surrounding architecture (see Section 4).

A summary table from Appendix B is included on the next page that compiles total site costs for building and infrastructure improvements. The table also shows the costs from the original CRP for comparison. It should be noted while comparing the two plans that the update includes several cost items that the original plan did not (e.g. upgrade and reuse of T Building, fire suppression upgrades in the buildings to remain, and off-site improvements). The update also includes inflationary increases to the original plan costs.

TOTAL PROJECT COSTS SITE SUMMARY BY COST ACCOUNT

			Original CRP (Addendum 2)	CRP Update Costs
BUILDING/SITE RELATED WORK				
1	**BUILDING**			
	COST CODE STRUCTURE			
	200	Building Modifications & Code	$13,902,533	$16,667,417
	210	Plumbing/Mechanical/ Electrical Upgrades	$642,170	$4,361,556
	220	HVAC Improvements	$5,906,347	$7,184,139
	230	Deferred Maintenance	$4,485,400	$2,400,158
	240	Building Demolition	$3,042,937	$2,270,396
	BUILDING TOTALS		**$27,979,387**	**$32,883,666**
2	**SITE**			
	250	Water	$2,541,363	$2,043,762
	260	Waste Water	$234,375	$1,121,503
	270	Electric	$1,640,625	$1,368,191
	280	Gas	$468,750	$440,015
	290	Stormwater-Detention	$429,687	$1,119,056
	300	Stormwater-Sewer	$2,125,000	$2,805,774
	310	Road Improvements	$5,799,758	$6,972,667
	320	Road Lighting	$362,500	$875,259
	330	Parking	$1,415,625	$2,400,791
	340	Parking Lighting	$464,874	$345,975
	350	Site Lighting	$158,563	$16,475
	360	Demolition of Stanchions	$625,000	$26,810
	370	Formal Landscaped Areas	$1,981,250	$1,278,077
	380	Natural Landscaped Areas	$2,148,237	$679,501
	390	Telephone/Information Technology	$987,582	$739,360
	SITE TOTALS		**$21,383,189**	**$22,233,216**
LOT TOTALS			**$49,362,576**	**$55,116,882**
OFF-SITE IMPROVEMENTS				**$7,334,271**
TOTAL			**$49,362,576**	**$62,451,153**



CONCEPTUAL LOT LAYOUT PLAN

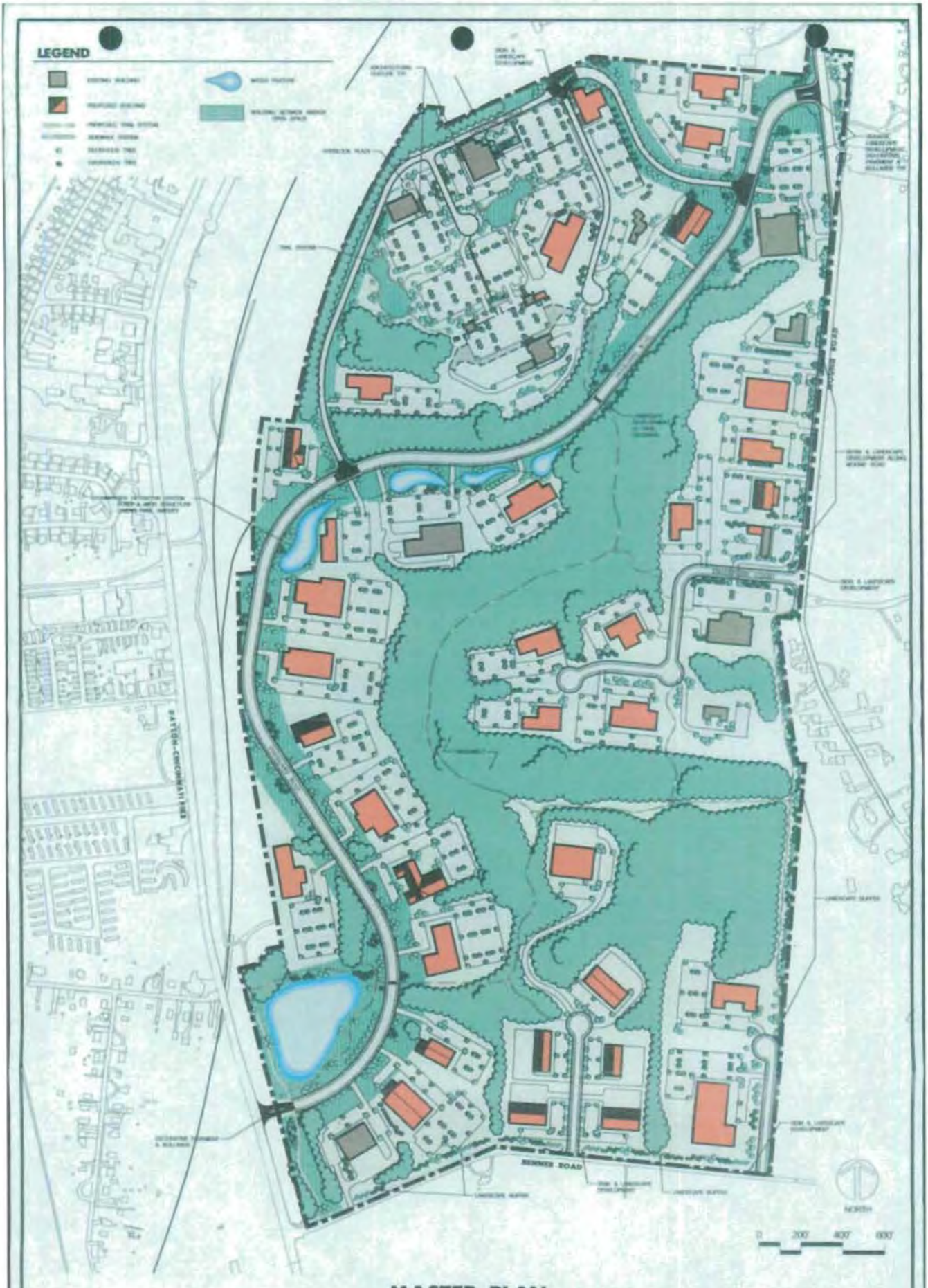
MOUND ADVANCED TECHNOLOGY CENTER

Mound

BWSC

FIGURE 1

DECEMBER 2003



MASTER PLAN

MOUND ADVANCED TECHNOLOGY CENTER

Mound

BWSC

FIGURE 2

DECEMBER 2000

1. INTRODUCTION

1.1 Site Description

The Mound site comprises approximately 305 acres located south of downtown Dayton in the city of Miamisburg in Montgomery County. The original site, comprising 182 acres, was acquired by the Atomic Energy Commission in 1946 for the first permanent nuclear production site. In 1981, the Department of Energy acquired an additional 123-acre tract adjacent to and south of the original property. While the original tract underwent substantial development during Mound's first 49 years of existence, the south 124 acres was used as a buffer zone. Recent improvements to this property include a new roadway, pond and infrastructure to prepare the property for development as a "smart park".

Originally, the Mound site contained over 100 buildings, 25 explosives-storage magazines, and numerous other structures representing more than 1.3 million gross square feet of indoor space. A total of 18 buildings will be transferred for reuse with an approximate total square footage of 534,200. Seven buildings will be demolished due to several different reasons such as existing condition, cost to update, lack of marketability, etc.

The Mound site has two primary energy sources: electrical power and boiler fuel. Electrical needs are supplied by three 12,470 volt feeders from Dayton Power and Light. The site has two boilers, each with dual fuel capability: natural gas and No. 2 fuel oil. On-site water wells provide potable water, cooling water, and water for fire suppression. Mound operates its own sanitary wastewater treatment facility along with a separate radioactive waste treatment facility. Vehicular traffic to the site is via public roadways. The site is served by Conrail Railroad for freight.

The site features a topographically distinctive mount, valley, and ridge system with elevations varying between 710 feet to 880 feet. It is bordered on the west by the old Miami-Erie Canal bed and several stands of trees and fields.

The Mound site is zoned industrial and is adjacent to a residential district and two municipally owned and operated recreational facilities, the Mound Golf Course and Mound Park. The Route 725/I-75 interchange is located approximately three miles to the east of the site. This interchange brings together a large suburban retail area (including the Dayton regional mall), office and industrial space development. This section of I-75 is also a primary industrial corridor for the auto industry and related manufacturers.

The City of Miamisburg Land Use Plan guides land utilization for the Mound Advanced Technology Center. The proposed future use of the Mound site is office, laboratory, and light industrial. These uses are consistent with historical and current zoning and the Department of Energy's stated goals of economic development for sites that have lost their defense program missions.

1.2 Background

During its fifty-year history, Mound evolved as a prestigious and powerful federal laboratory within the nation's defense weapons complex. Originally, the laboratory was set up specifically for the production of radioisotopes; however, Mound evolved into an integrated research, development, testing and production site, performing work on nuclear weapons components and energy-related programs. At its peak, Mound employed 2,500 people.

In September 1991, the site's future came in serious doubt when the Department of Energy (DOE) announced its intent to consolidate operations, including those housed at Mound, into the Kansas City and Savannah River facilities. At the time, the federal government launched the reconfiguration of the DOE Nuclear Weapons Complex into a more cost-effective program in response to changing defense requirements in the post-Cold War period. As a result, defense production at Mound was reduced, and in 1993, DOE decided to decommission the site. The local community accepted the department's proposal to take responsibility for transferring the site's technologies and facilities to private sector use. DOE would conduct an environmental restoration program at Mound, which has been declared a Superfund site.

As the lead transition entity, the City of Miamisburg established two organizations to implement the redevelopment effort: the Mound Reuse Committee (MRC) and the Miamisburg Mound Community Improvement Corporation (MMCIC). MRC is a group of citizens who represent various interests region-wide, providing for broad public involvement in issues related to the reuse and redevelopment of the site. The MRC is responsible for providing community comments on the development of plans for the Mound site's reuse and for remediation remedies proposed by the DOE. Members are appointed by City Council. MMCIC is a not-for-profit development organization and is the lead economic development agency responsible for Mound's redevelopment as an industry and technology park.

Soon after being formed, the two organizations, working with the local community and the region at-large, undertook the effort to arrive at a vision for the site, which was renamed the Mound Advanced Technology Center (MATC). The vision is "to establish the Mound Advanced Technology Center as an economically viable, privately owned industry and technology park."

In 1996, the MMCIC contracted for the development of a Comprehensive Reuse Plan (CRP) to guide the redevelopment effort. The goal was to address financial realities as well as numerous physical, logistical and bureaucratic challenges to successful redevelopment.

In 1997, the community adopted the first comprehensive reuse plan for Mound. Two addenda to the original CRP were issued in 1999 and 2001. The document identified $49.3 million in physical improvements needed to make the site marketable. It identified the needs for roadway, lighting, parking, circulation, landscaping, infrastructure, utility and facility improvements to bring the site to commercial standards. Improvements would be implemented over time in phases.

The first three phases of improvements have been completed. Phase I ($3.5 million) focused on the site's east boundary, including roadway, parking lot, infrastructure, utilities, street lighting improvements, and an attractive main entrance. Phase II ($1.46 million) provided similar improvements to an area of the site's interior. Phase III ($3.6 million), the "smart park," represents the preparation of 48 acres of previously undeveloped property for new business growth. Improvements included roadways and infrastructure plus the addition of an attractive new southern entrance. The smart park development features highly reliable communications and electrical infrastructure required by businesses today. Additional projects currently underway include the decentralization of utilities and facility improvements by business tenants.

1.3 Purpose and Overview of Plan

In December 2002, Barge, Waggoner, Sumner and Cannon, Inc. (BWSC) was commissioned by MMCIC to prepare an update of the Comprehensive Reuse Plan. This update reflects current baseline information from the DOE contractor and incorporates current planning and market information.

The purpose of this updated plan is to serve as a planning tool that will guide redevelopment efforts over the next few years as the Mound Advanced Technology Center strives to achieve its vision as an economically viable, privately owned industry and technology park. This plan will also serve to give MMCIC an integrated schedule that coordinates activities among DOE site contractors and identifies cost efficiencies that will allow MMCIC and DOE to reduce costs as they work together to clean up and reuse the site.

This plan includes the following components: (1) a Vision Plan, which subdivides the site into high, medium, and low density campuses and provides proposed landscape and landscape master plans and design guidelines for the entire site; (2) General Site Infrastructure, which proposes improvements to the site's road network and assesses the condition and capabilities of utilities in order to facilitate the transfer of utilities from DOE to private utilities; (3) Facilities, which describes each building's condition and identifies needed improvements; (4) Cost Opinion, which provides an opinion of probable costs for building and site-related improvements; and (5) Implementation Schedule, which provides a timeline for improvements.

1.4 Applicable Criteria

The site and facilities are being transferred from federal jurisdiction to local jurisdiction. All improvements must conform to local building, planning and zoning regulations. Exceptions to local requirements must be granted by the City. Land utilization for the MATC redevelopment will be guided by the City of Miamisburg Land Use Plan.

1.5 Common Assumptions

To prepare the reuse plan, update assumptions were established to allow for planning decisions to be made. Common assumptions for the reuse plan are as follows.

- MMCIC will maintain ownership of the site for the immediate future. Parcels and facilities will not be transferred to private ownership. MMCIC will be responsible for common areas.

- The new site contractor will complete the environmental restoration and site exit plan by September 2006.

2. VISION PLAN

This section proposes a Vision Plan that is based on consideration of existing infrastructure and previous uses, the natural characteristics of the site, the overall transportation circulation system, and market conditions. The overall concept guiding the plan is to link the existing central campus (high-density area) to other developed areas through the use of landscape elements (signage, lighting, vegetation, and open space) in an overall park-like setting. This plan is consistent with the five guiding principles identified in the original Comprehensive Reuse Plan (CRP): major clearance, "greenage" of the site, a "spine" road, significant new building, and development districts. This update further refines these principles with additional engineering and cost studies.

Transportation improvements proposed in the plan include the extension of Vanguard Boulevard to serve as the central, north-south spine of the site, as well as the addition of five secondary site entrances. The five proposed secondary entrances are as follows:

- Crest of the hill on Capstone Circle
- Intersection of Capstone Circle and Vanguard Boulevard
- Intersection of Mound Road and Enterprise Court
- Intersections of Benner Road and two new cul-de-sacs

Additional information on the proposed transportation improvements is included in Section 3, General Site Infrastructure. It should be noted that the unnamed proposed streets have been arbitrarily assigned street names of A, B, C, and D within the text and on some of the maps. This is to provide a clearer vehicle to describe the proposed improvements. The streets will be properly named when they are accepted by the City.

The Vision Plan is presented as a compilation of four elements: (1) the proposed campus designations and conservation areas, (2) the proposed lot layout, (3) the Conceptual Landscape Plan, and (4) the Landscape Restoration Plan. In addition, Design Guidelines have been prepared that will ensure that development of the MATC is consistent with this Vision Plan. MMCIC will establish a "Design Review Committee" (DRC) to evaluate plans and ensure compliance with the Reuse Plan and these design standards. Compliance with City of Miamisburg zoning will be required for all development.

2.1 Campus Designations

Three campuses were delineated on the Mound site which allow for different building densities (high, medium, and low). This is a refinement of the concept of development districts listed in the original CRP. These designations were based on factors such as the existing development, adjacent uses, the desired character of the business park, natural features, and the open space system. The three campuses are shown on Figure 2.1 and described below.

High-Density Campus. This campus is currently the most developed area on the MATC site and is intended for Office/Laboratory uses. The vision for this campus portrays a highly developed crown of multi-story buildings located around the brow of the hill, taking advantage of views across the site, the river, and the Mound Park. Open spaces and a walkway system are proposed to give relief to pavement and masonry and provide an urban park-like feel to the entire campus. Figure 2.5 shows a conceptual layout of the Main Hill Area.

Medium-Density Campus. This campus contains five existing buildings on the eastern portion of the site and is recommended for Build-to-Suit, Mixed Use development (Light Industry/Light Manufacturing/Office/Research). The vision for this campus is a mixture of characteristics borrowed from the other two campuses, creating a more heterogenous appearance with a balanced ratio of green surface to paved surface. A combination of moderate-density to low-density development is expected due to the variation in site characteristics. Three distinctly different areas comprise this campus: (1) the urban strip along Mound Road (2) the large lots with views at the end of the cul-de-sac on Enterprise Court, and (3) the two access drives (C and D Streets) into the south end of the site off Benner Road.

Low-Density Campus. Most of this campus is currently undeveloped and is recommended for Build-to-Suit, Light Industry/Office uses. A spacious, open, park-like setting is envisioned for this suburban-type campus. Buildings and parking are proposed to be set back from the road, allowing for open lawns and trees to frame views of high-quality architecture as seen from the meandering, tree-lined street.

A breakdown of the acreage on the site, including acreage in each of the campuses, is provided below:

	Total Area (Ac.)	Buildable Area (Ac.)
High-Density Campus	34	29
Medium-Density Campus	112	76
Low-Density Campus	118	89
Subtotals	**264**	**194**
Rights-of-way and Common Areas	41	--
Totals	**305**	**194**

2.2 Lot Layout

The proposed lot layout, shown in Figure 2.1, is based on the following criteria:

- Make best possible use of existing topographic, road alignment, building and infrastructure, and open space conditions
- Provide lot sizes and arrangements that can best respond to changing market conditions
- Optimize proportion and scale of buildable areas on each lot
- Minimize common areas that will require ongoing maintenance by MMCIC
- Identify, link, and protect open space conservation areas that are least desirable for building

Lot sizes were reconfigured from previous arrangements in the original CRP to reflect recommendations from marketing analysis, existing topographic conditions, road realignments, changes in anticipated use of some existing buildings, and long-term flexibility allowing for changes in market demands. The marketing consultant recommended an optimal lot size of 2.5 acres, and many lots were reconfigured accordingly. Several of these lots are adjacent and can be recombined for tenants requiring larger initial space or room for expansion. Existing topographic conditions will continue to provide site planning challenges for a few lots, but most have immediately buildable areas without excessive grading requirements.

The realignment of Vanguard Boulevard to a more northerly course instead of following a central route through the valley resulted in some adjacent lots having dual access, and the road to be "single-loaded" for several lots. The new alignment alternative was selected in part to avoid long narrow lots that may have required extensive site work to obtain adequate space for building.

Although other opportunities were explored, existing conditions on the High-Density Campus restricted the lot arrangement to a somewhat conventional road/lot grid pattern and lot coverages of up to 80%. Shared parking would have loosened the appearance considerably and provided for a more campus-like layout, but concern over complicated use agreements and shared cost management guided the layout to self-contained parcels. Parcels in the Medium-Density Campus follow existing building/driveway/ utility and high density configurations except for Enterprise Court which provides four large parcels with extensive open space conservation easement portions. The Low-Density Campus in the southern portion of the site allows for a lot coverage of approximately 40%. See the Design Guidelines for a full description of each campus.

Figure 2.2 is a Master Plan which shows potential building configurations and parking areas on the lots throughout the site.

2.3 Conceptual Landscape Plan

The proposed Conceptual Landscape Plan is a further refinement of the original CRP and is based on the following criteria:

- Provide visual continuity and curb appeal for the site
- Identify and enhance places and features, and generally guide circulation through the site
- Provide erosion control for steep slopes and areas left bare by construction activities
- Provide thermal moderation for buildings and paved surfaces
- Enhance the sense of place and general well being of property owners
- Enhance curb appeal and property values

All streets should be planted with large canopy shade trees. Different tree species should be selected for each road and court/drive to provide variety, interest, and unique identification for each campus. Trees are shown widely spaced (100 ft. O.C.), which is considered maximum spacing. A 50 ft. O.C. spacing would be considered optimum and provide a more finished appearance in less time. Individual plants should be no less than 2 in. caliper size. Larger sizes are preferable, but will result in significant cost differences. See the Design Standards for recommended species list.

Evergreen trees provide seasonal structure and interest, screening of undesirable views, and are used in mass on slopes to eventually decrease the need for ground maintenance/mowing. 30 ft. O.C. spacings are used to provide optimal survival, coverage and visual impact.

Groupings of medium to small flowering/accent trees is also advisable but are omitted here for cost purposes. Requirements could be added to landscape standards for individual lots.

Existing primary entrance signage and landscape development should be enhanced and blended to roadway plantings with the use of large tree groupings. Entry treatment for the proposed secondary site entrances should include signage to match primary entrance signs, plantings to backdrop signage structures and identify secondary entrances, and lighting.

Figure 2.3, Conceptual Landscape Plan, shows the proposed locations for tree plantings, signage and landscape development, architectural features, the greenbelt, and the trail system.

2.4 Landscape Restoration Plan

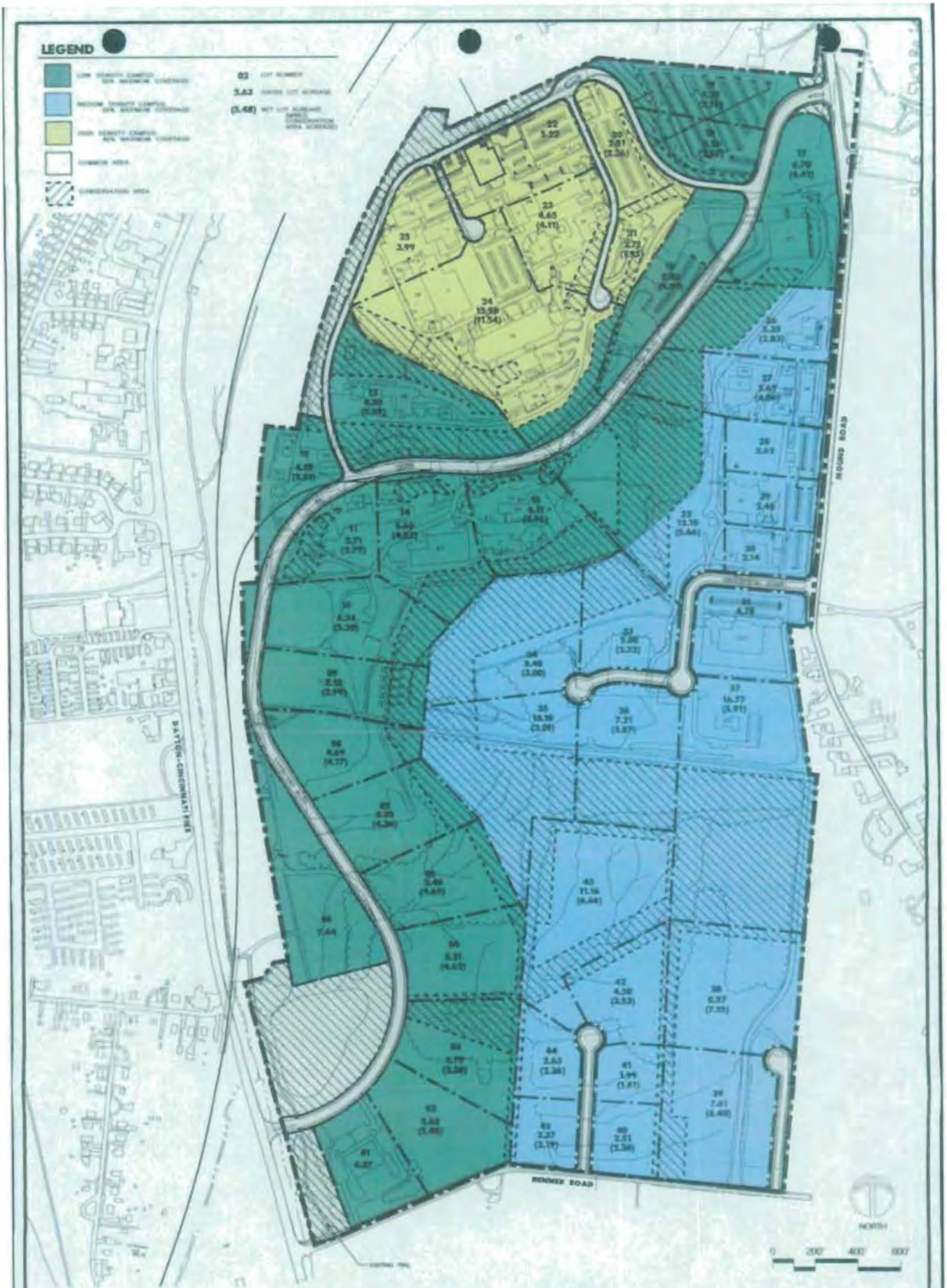
The proposed Landscape Restoration Plan is a further refinement of the original CRP and is based on the following criteria:

- Reduce the need for new plantings by preserving as much of the existing succession vegetation as possible
- Enhance natural succession on areas left bare by construction activities

- Enhance wildlife habitat by using species mixes that duplicate regional ecosystems
- Use small seedling woody plants and hydro-seeded herbaceous plantings to save costs of revegetation for large areas

Landscape restoration activities are intended for steep slopes, areas left bare from construction/remediation activities, and areas to return to natural forest in conservation easement installation buffers. Installation should be with hydro-seed/mulch for seeded areas, and reforestation planters for woody species. In some cases, woody plantings will be preceded by hydro-seed/mulch.

Figure 2.4, Landscape Restoration Plan, shows areas that are targeted for landscape restoration and the appropriate vegetation to be planted, including native grass mix, succession edge planting, oak-hickory forest, maple-beech forest, and wetland species. The plan also shows appropriate plantings for Potential Release Site (PRS) clean-up sites. PRS sites that are indicated as ground plane are intended to be planted with temporary grass since it is likely that they will be redeveloped. Refer to the Design Guidelines for additional information on vegetation types and planting standards.



CONCEPTUAL LOT LAYOUT PLAN

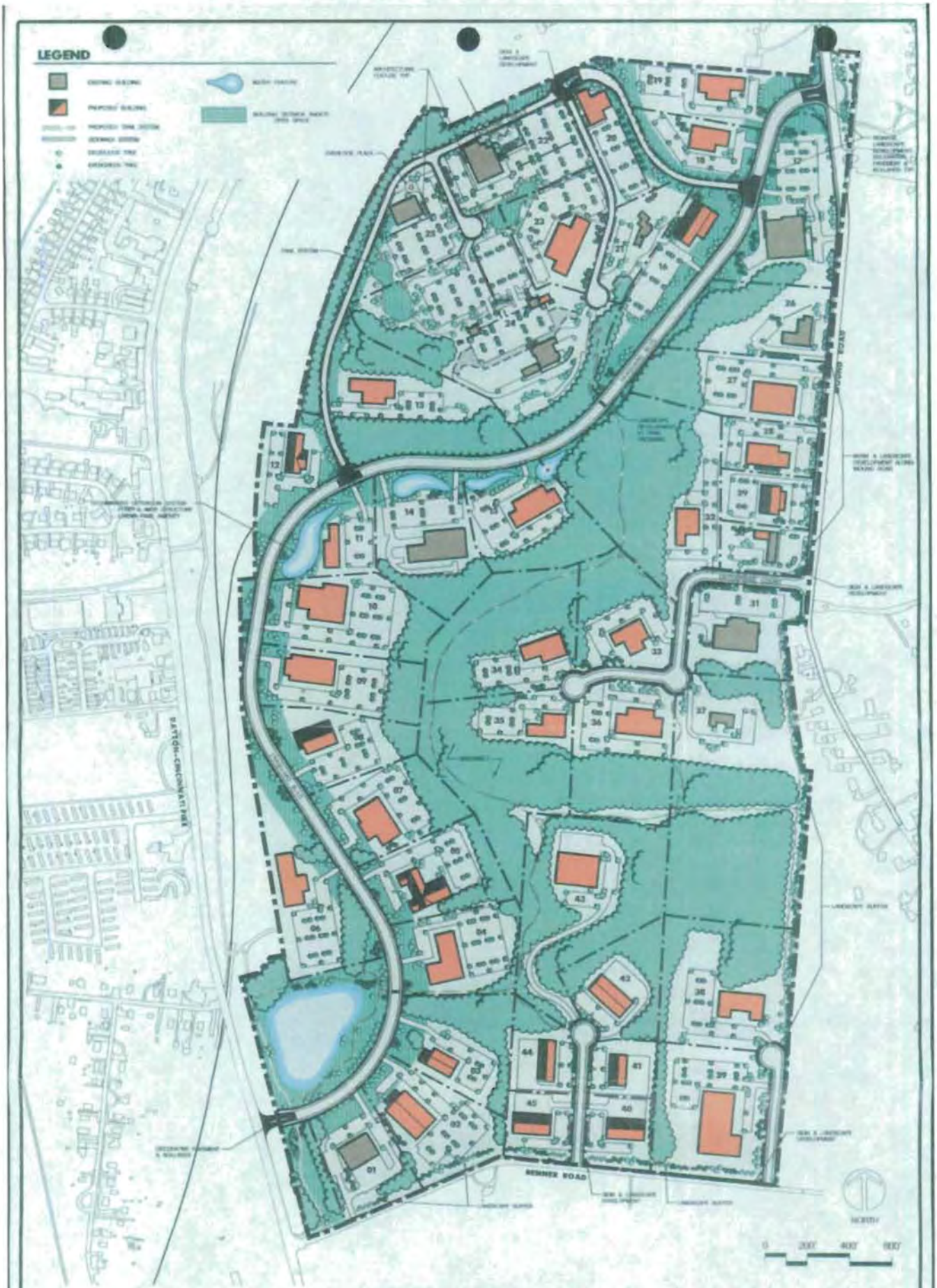
MOUND ADVANCED TECHNOLOGY CENTER

Mound

BWSC

FIGURE 2.1

DECEMBER 2003



MASTER PLAN

MOUND ADVANCED TECHNOLOGY CENTER

Mound

BWSC

FIGURE 2.2

DECEMBER 2000

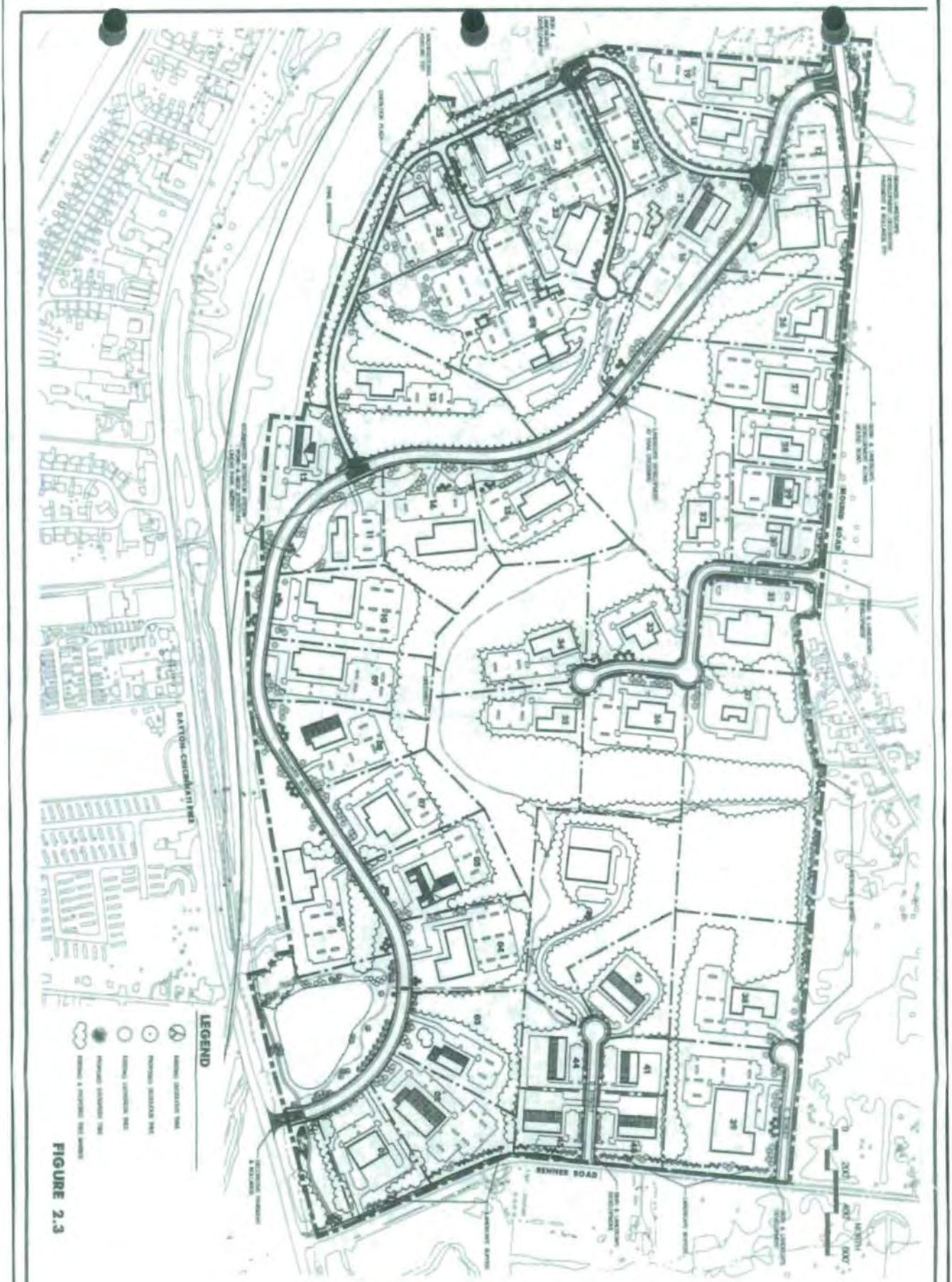


FIGURE 2.3

CONCEPTUAL LANDSCAPE PLAN

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2003

FIGURE 2.4

LANDSCAPE RESTORATION PLAN

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2003

MAIN HILL AREA

MOUND ADVANCED TECHNOLOGY CENTER

Mound

BWSC

FIGURE 2.5

DECEMBER 2000

3. GENERAL SITE INFRASTRUCTURE

3.1 Overall Site – Roadway

Roadway Access to the MATC Site. The MATC site is surrounded by three public roadways: Mound Road to the east, Benner Road to the south and Dayton-Cincinnati Pike to the west. Portions of these roadways bordering the site have been recently improved.

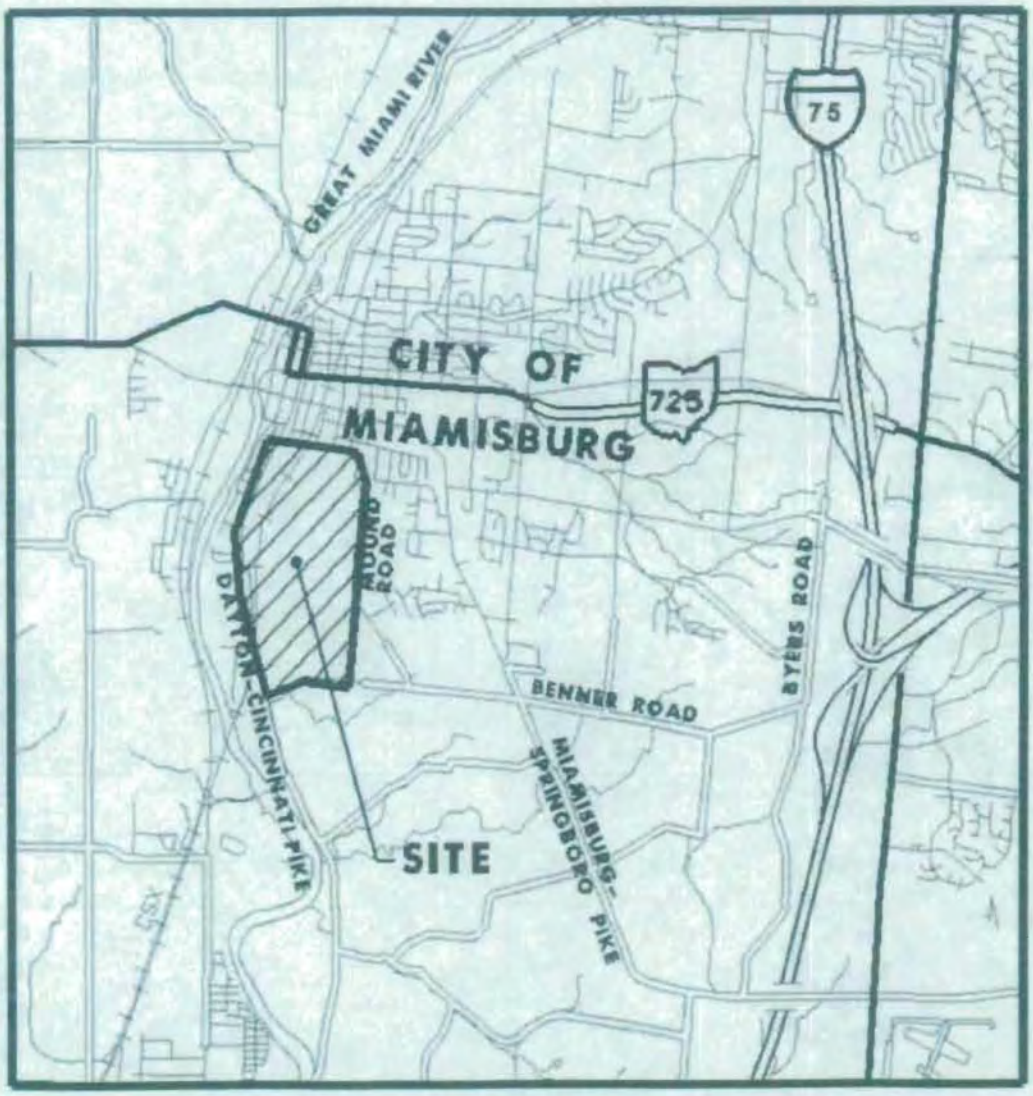


Figure 3.1.1: Vicinity Map

Mound Road was improved from south of Enterprise Court to Sixth Street in 1999. These improvements included establishment of a 70-foot right-of-way, creation of a center turn lane, curb and gutter, and sidewalks. Mound Road from Enterprise Court to Benner Road is a two-lane road with graded shoulders. Mound Road from Sixth Street to Main Street is a two-lane road with curb and gutter. These two portions of roadway are through residential neighborhoods.

Benner Road is a two-lane road which widens to include three lanes at the intersection with Dayton-Cincinnati Pike. The northern side of Benner Road, from the intersection of Dayton-Cincinnati Pike to approximately 1300-feet east, was improved in 2001. This work included pavement widening, sidewalk, storm sewer, and curb and gutter improvements. Benner Road, east of this section, remains a two-lane road with minimal shoulder width and side drainage ditches. The cost for Benner Road improvements will be associated with both MATC and the City. The cost to improve Benner Road along the north side is associated with MATC. The remainder are considered offsite costs.

Dayton-Cincinnati Pike is mostly a two-lane roadway, but has been widened to three lanes in the vicinity of MATC. This allows the southbound traffic on Dayton-Cincinnati Pike to use left turn lanes onto Vanguard Boulevard and Benner Road. Dayton-Cincinnati Pike (also known as Dixie Highway in other areas) runs along the east side of the Great Miami River and facilitates traffic traveling north and south between Franklin and Miamisburg.

As the MATC property is developed and as the adjacent roadways are improved, a study should be performed to see if traffic signals are warranted. Depending on development of the site and other regional changes expected, there may be a need for traffic signals at the intersections of Mound and Vanguard, Benner and Dayton-Cincinnati, or Vanguard and Dayton-Cincinnati. These costs would be borne by the City as the need arises.

The Miami Valley Regional Planning Commission (MVRPC) has sponsored The Austin Pike Area Transportation Study to investigate possible roadway improvements which may improve access to the MATC site. At the current time, MVRPC has just finished and endorsed a Draft Major Investment Study (MIS) and is performing an Interchange Justification Study (IJS) for the Austin Pike Study. The MIS has recommended the following as it relates to access to the MATC property:

- Improve East-West access to and from I-75 by constructing an additional local interchange on I-75 in the vicinity of Miamisburg-Springboro Pike/Austin Pike.

- Improve access to the Mound Advanced Technology Center by improving Miamisburg-Springboro Pike from SR-741 to Benner Road to a five-lane cross-section and improve Benner Road from Miamisburg-Springboro Road to Dayton-Cincinnati Pike to a five-lane cross-section.

Traffic will be analyzed with the IJS to determine whether traffic issues can be resolved without an interchange, the effect an additional interchange will have on I-75, and whether or not improvements to I-75 are needed for the interchange. The 2030 Average Daily Traffic (ADT) on Miamisburg-Springboro Pike and Benner Roads if the improvements are completed is expected to be 10,300 and 5,800, respectively.

In an effort to improve access and traffic flow within this area of the City of Miamisburg, the City is planning to extend and improve Range Avenue between Linden Avenue and Mound Road. Range Avenue is planned to be designed to City of Miamisburg standards. An added benefit of this improvement is better access to MATC. The costs for this improvement are included in off-site costs.

Roadways within the MATC Site. Creating a roadway system on the MATC property will involve construction or extension of five cul-de-sacs, completing the middle section of Vanguard Boulevard, and reconstruction of one roadway. Vanguard Boulevard is the "spine" road referenced in the original CRP. All will be within public right-of-way once the right-of-way has been dedicated. These roadways will be constructed to City of Miamisburg standards and will allow access to the entire site. Preliminary plans and profiles of these roadways were submitted separately from this document. It should be noted that the unnamed proposed cul-de-sacs have been arbitrarily assigned street names of A, B, C, and D within the text and on some of the maps. This is to provide a clearer vehicle to describe the proposed improvements. The streets will be properly named when they are accepted by the City.

The remaining section of Vanguard Boulevard is proposed to have the same typical section as the existing portions already constructed (see Figure 3.1.2). The typical section includes two 12.75-foot lanes and one 12-foot center turn lane, curb and gutter along both sides of the roadway, 9.5-foot wide tree lawn and a 5-foot wide sidewalk paralleling each side of the roadway, within a 70-foot right of way.

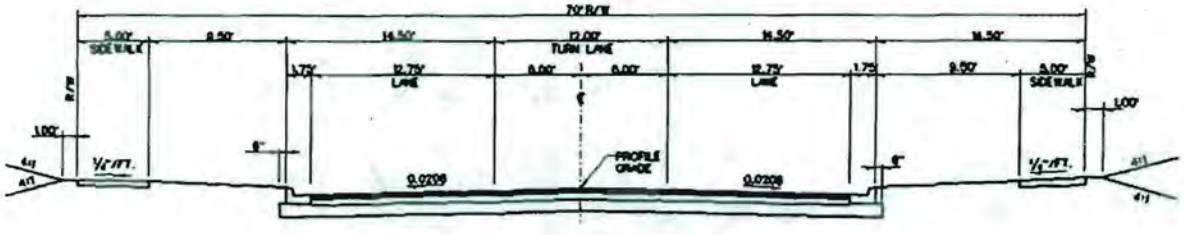


Figure 3.1.2: 70' R/W

The extension of Enterprise Court is proposed to be the same typical section as the existing Enterprise Court. This includes two 12.75-foot lanes, curb and gutter along both sides of the roadway, a 10.5-foot wide tree lawn and a 5-foot wide sidewalk paralleling each side of the roadway, within a 60-foot right of way (see Figure 3.1.3).

C and D Streets are proposed to be the same typical section as Enterprise Court. This includes two 12.75-foot lanes, curb and gutter along both sides of the roadway, a 10.5-foot wide tree lawn and a 5-foot wide sidewalk paralleling each side of the roadway, within a 60-foot right of way (see Figure 3.1.3).

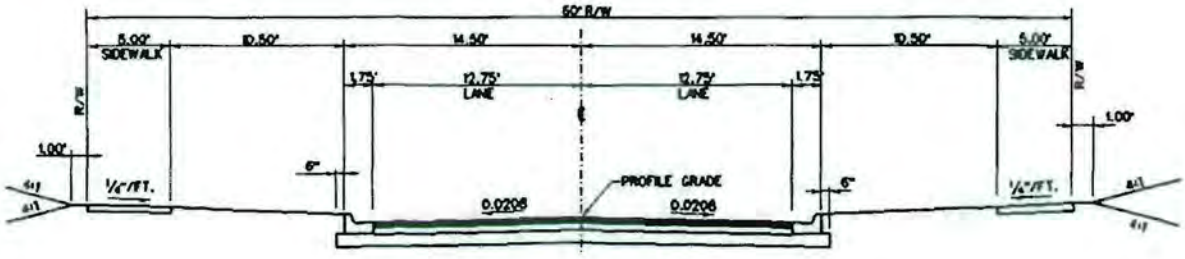


Figure 3.1.3: 60' R/W

Capstone Circle, A Street and B Street are proposed to have the same typical section as the existing Capstone Circle. This includes two 10.75-foot lanes, curb and gutter along both sides of the roadway, and a 5-foot wide sidewalk immediately adjacent to each side of the roadway, within a 40-foot right of way (see Figure 3.1.4).

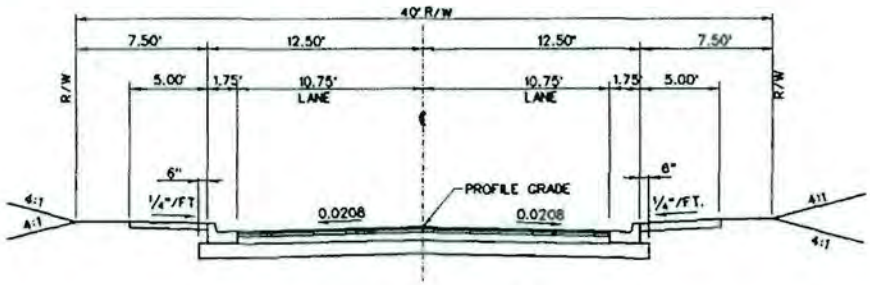


Figure 3.1.4: 40' R/W

The pavement section buildup for all proposed roadways matches the existing pavement section on Vanguard Boulevard. The 3-inch asphalt pavement is designed with a 1 1/4-inch surface course and 1 3/4-inch base course, with tack coat between layers. The asphalt pavement is supported by 5-inches of bituminous aggregate base and 9-inches of crushed aggregate base. The aggregate base is to be sealed with prime coat and the subgrade is to be compacted.

Sections of the existing roadways constructed with recent improvement projects will be saved whenever possible. These sections of roadways were constructed between 1999 and 2001, and meet the City of Miamisburg's standards.

Parking Lots. Conceptual parking lot layouts have been shown on the Master Plan (Figure 2.2, Section 2). They are sized to accommodate the assumed building on each lot. Locations and layout are dependent on topography and access. The parking lot pavement section assumed for estimating purposes in the construction cost opinion will be the same one used for the OSE Building parking lot on a recent project. The section is 1 1/2-inch asphalt surface course, over 4-inches bituminous aggregate base, and 6-inches crushed aggregate base. As individual lots are developed, this typical section will need to be evaluated with lot specific traffic loads.

3.2 Overall Site – Sanitary

Offsite Sanitary. As discussed below, Mound sanitary wastewater is currently treated on site and discharged to the Great Miami River. This onsite Wastewater Treatment Plant (WWTP) will be removed, and sanitary flows from the site will be sent to the City of Miamisburg for treatment. As part of the City's sanitary system upgrade, the City will upgrade their East Side Pump Station and WWTP. The City has estimated the total build-out flow from the MATC site to be 200,000 gpd. This will account for 5 percent of the City's design flow for these two projects. The costs for this improvement are associated with offsite costs at 5 percent of the City's expected costs. It should be noted that the original CRP assumed that the existing on-site plant would remain to serve the site. This is no longer feasible due to changes within the site and anticipated issues with conformance to EPA regulations.

Sanitary within the MATC Site (Figure 3.1). The sanitary system on the MATC site is served primarily by 8-inch ductile iron and vitrified clay gravity sewers. There are three buildings with pump stations associated with them. The sewers associated with these pump stations are the only force mains on site.

Areas where aging vitrified clay pipe (VCP) is known to exist and is required for the overall system should be removed and replaced (or slip-lined) in order to ensure integrity within the sewer system. Four areas were identified with this condition: a small portion of 6-inch VCP exiting Building 105 to the north, the connection of mains within Enterprise Court (where Building 126 is combined with Buildings 102 and 105), the line exiting OSE, and the line collecting the flow from the proposed main down Vanguard Boulevard. These last two lines are to be replaced with 10-inch PVC due to the proposed changes within the site system.

Since the number of buildings on the site will be dramatically reduced and the overall use of the remaining buildings will be about the same, the sanitary sewer flows after the DOE Exit Plan is completed will be less than is currently flowing from the site. Therefore, much of the site's sanitary system can be maintained and reused for existing buildings. There are, however, three buildings that are proposed to have their sanitary flows diverted in different directions. In an effort to eliminate the pump station at OSW, the sanitary flow will be connected to the 8-inch main flowing south near B Street. This main runs to the east, accepting the flow from OSE along the way. The main continues east eventually connecting into the existing 8-inch main on the east side of Main Hill, west of A Street. The flow from Building 45 is combined with the OSE and OSW flows through a proposed 8-inch main and continues south down the existing main towards the valley. The additional flow requires upgrading pipe downstream of this point from 6-inch to 8-inch. In addition, the flow from COS will be sent by gravity to the south of the building and connected into the existing 8-inch main flowing west. Likewise, the flow from T-Building will be sent to the south and combine with the flow from COS in an existing manhole. This combined flow will then travel south and connect into the proposed main that flows down Vanguard Boulevard. This will effectively result in having all the sanitary flows for remaining buildings being run through the valley. The 8-inch sanitary above T Building, but below DS Building, will need to be replaced in the vicinity of DS Building since it will be disturbed during the demolition and cleanup of DS Building. The flow generated from Lots 18 and 19 combine in an 8-inch main and travel north to an existing main placed in May 1999 at the northern entrance of Vanguard Boulevard. This 8-inch main continues north on Mound Road. The flows from Lots 33, 34, 35, 36 and 37 located at the south end of Enterprise Court are collected in a proposed 8-inch main and travel northwest along property lines until connecting into the main in the valley, north of Building 87. Building 87 utilizes an existing 6-inch main that will connect to a proposed 8-inch main to the valley line. The flow from the western boundary of Main Hill is collected in an 8-inch main flowing south down Capstone Circle and combines with the valley main.

Sanitary laterals from Buildings 102 and 105 combine in a 6-inch sewer just north of Enterprise Court which continues west and north to a location on Enterprise Court where it meets up with an existing 8-inch sewer that serves the area around Building 126. This sewer continues north until it meets with the 8-inch sanitary sewers serving the areas around Buildings 61 and 45. From here, the 8-inch sanitary continues west down Vanguard Boulevard until it reaches the present Mound WWTP.

Areas located off the southern section of Vanguard Boulevard are served by an existing 8-inch sanitary sewer that was recently installed as part of the roadway project. This section of main flows west to the City of Miamisburg's Saxony Road pump station. This line is to be extended to the east as well as the south. The line to the east is an 8-inch main that would service the lots west of C Street. Likewise, the 8-inch main extension to the north collects the future flows from the southern portion of the valley not included in the main flowing to the existing Mound WWTP. At this time, there are no current buildings connected to this system.

Since the Mound WWTP will be taken offline, the sanitary sewers for the site will need to be

connected into the Miamisburg sanitary sewer system. There is already a 12-inch main to within 20 feet of a manhole in the Old Miami-Erie Canal property (east of the site). This manhole is connected to the Bell Park Pump Station. All that needs to be done after the Mound WWTP is taken offline is to add the 20 foot section to the manhole and divert the flow into this line.

3.3 Overall Site – Water

Offsite Water. The City's medium pressure zone water main, which serves the MATC site, is inadequate in size to provide the necessary projected water demand for the site. There is a 6-inch water main along Range Avenue from Linden Avenue to the site (with a short 8-inch section near Mound Avenue). This main has to be upgraded to a 12-inch main to provide enough flow for the projected needs of the site (total build-out).

Future planning of the City's medium system is to provide a loop on Mound Avenue to the MATC site. The existing water main on Mound Avenue will be extended to Benner Road. The main will continue on Benner and connect into the proposed main along C Street.

The City is currently upgrading their Water Treatment Plant (WTP) to provide water to the MATC site. The City has estimated the total build-out flow from the MATC site to be 200,000 gallons per day (gpd). This will account for 3.5% of the City's design flow for the WTP upgrade. The costs for this improvement are associated with offsite costs at 3.5% of the City's expected costs.

Water within the MATC Site (Figure 3.2). The site is currently served by three separate internal water systems: raw, domestic and fire. The raw water system brings water from on-site underground wells. Water is stored in two water tanks. The original CRP assumed use of these water tanks. Previous studies have determined that the water tanks cannot be used as part of the City's system. A goal of this Reuse Plan is to discontinue the use of the separate internal water systems and connect to the City of Miamisburg's low and medium pressure water systems to feed the entire site. According to Mound personnel, the static operating pressure on the existing domestic water system is approximately 50 psi, as measured at the base of the water tower on the Main Hill. The operating static fire pressure is approximately 80 psi without the system's fire pump. In Building 56, the fire pump boosts the pressure to greater than 80 psi on the Main Hill and SMPP Hill. Therefore, the pressures on the fire services to buildings in the valley are approximately 100-125 psi.

At the current time, the City has water serving the site from both its low and medium pressure zones. The water main on the City's low system is connected near the intersection of Mound Road and Vanguard Boulevard. This 12-inch ductile iron water main was installed in 1999 as part of the East Boundary project. The low main serves fire hydrants along Vanguard Boulevard and dead-ends where the street currently ends. There are no on-site buildings currently served from the City's low water system. There is another connection to the City's low-pressure system at the intersection of Dayton-Cincinnati Pike and Vanguard Boulevard. This main feeds the fire hydrants along the southern portion of Vanguard Boulevard. These two low-pressure mains will

be connected as the remaining portion of Vanguard Boulevard is built, thus creating a loop of the City's low-pressure main in this area. This loop will help serve the proposed buildings in the valley.

MATC has two connections to the City's medium water pressure zone. One connection is at the intersection of Mound Road and Enterprise Court. This 8-inch main connection was installed in 1999 as part of the East Boundary project. This main serves the fire hydrants along Enterprise Court, as well as the domestic water services to Buildings 100 and 105. This main was extended south from the cul-de-sac in Enterprise Court to the service road which runs east and west on the site in 2001.

The second connection, a 12-inch main, is just south of the intersection of Mound Road and Vanguard Boulevard. The main crosses Vanguard Boulevard, near its intersection with Capstone Circle, and continues west to A Street. The main dead-ends near the proposed cul-de-sac on A Street. It also continues north on A Street, then west on Capstone Circle where it dead-ends near OSE. There are fire hydrants served by this main; however, no on-site buildings are connected to this main.

In the past, there were two additional connections to the City's water system. The first connection was to the Main Hill area from the City's Mound Road water tower. According to DOE personnel, this service was disconnected by the Mound in the late 1960s, and the pipe was abandoned in place. This interconnection was vital to the T Building during its mission to be a stand-alone building. The second connection was along Mound Road to the SMPP Hill. According to DOE personnel, this connection was installed in the 1950s and disconnected in the 1960s. The meter pit was abandoned in place in 1999 as part of the East Boundary project. There is a 12-inch tee stubbed out south of Building 50, which is available for future connection if necessary.

The existing internal fire and domestic systems are currently separate systems. The separation of systems will be eliminated as the MATC property is connected to the City's water pressure system (low and medium pressure zones). The City system is a combined system (domestic and fire). In general, the low-pressure zone will be along Vanguard Boulevard and will feed buildings in the valley and in the lots on the south side. The medium pressure zone will service the Main Hill and SMPP Hill and the two lots on C Street. Some of the existing pipes that meet City standards will be reused as part of the new system.

The 2001 Miamisburg Water Study recommended that the two hills be connected with a 10-inch loop to provide adequate flow to the Main Hill via the City's medium-pressure system. However, since two 8-inch connections already exist, they can be utilized to bring adequate flow to the Main Hill.

Special attention will be paid to transferring the services for existing buildings from the internal system to the City's system, since static pressures are lower in the City's systems compared to the existing internal systems (especially on the fire water systems). The fire suppression (sprinkler) systems in most, if not all, of the existing buildings to remain will have to be retrofitted for the lower static pressures. (See discussions in Appendix A, Facilities Assessments).

Any new water mains, fire hydrants, or service lines to be installed on the MATC site shall meet the City of Miamisburg's standards. This includes spacing fire hydrants a maximum of 300 feet apart and placing service valves a maximum of 1000 feet apart on mains. This spacing is also consistent with the Southwest Ohio Fire Safety Council Standards. All existing fire hydrants shall be replaced. There shall be a service valve on each fire hydrant to allow for future maintenance. All domestic water services shall have service valves, water meters and containment backflow preventers. Water meters are preferred inside of buildings with remote reads placed on buildings. Backflow preventers will be reduced pressure principle backflow preventers and meet OEPA requirements. Dual installation of backflow preventers is not required. All new fire services shall have a post indicator valve (PIV) located not closer than 40 feet to the building. A fire hydrant is required within 75 feet of the building's fire department connection. Fire services shall be protected with a double check backflow preventer. Water meters are not required on fire services. Existing fire services which are protected with a single check valve are grandfathered and will not be required to be upgraded to current backflow standards. According to the Southwest Ohio Fire Safety Council Standards, a fire hydrant is required within 400 feet of all building entrances.

Any new water mains and fire hydrants shall be installed in public right-of way whenever possible. The City prefers to have right-of-way over utility easements. Any new roadway or parking lot work should include new ductile iron water main as called for by the master planning for the site.

Existing water mains on the MATC site can be utilized as long as the history of maintenance is documented. Asbestos concrete (ACP), cast iron (CI) and ductile iron (DI) pipe material will all be accepted by the City. The existing Mound fire system is mostly ACP; the domestic system is mostly CI and DI iron pipes.

There are three different colors of PIVs at the site. The green PIVs are sectional valves on the DOE domestic water system. The red valves are fire service shut-off valves for buildings. The red PIVs with yellow tops are sectional valves on the DOE fire water system. The green PIVs on the domestic water system and the red with yellow top PIVs on the fire water system should be removed for aesthetic reasons and replaced with at-grade valve box covers; this should not require replacement of the entire valve. The red fire service shut-off valves for the building will remain.

New mains are proposed in several locations on the site. As mentioned previously, a 12-inch main is proposed along Vanguard Boulevard to loop the City's low pressure system through the

site. An 8-inch main is proposed south of OSW to loop with the existing water main south of OSE; the existing services to these two buildings are on the south. A new main is proposed along Enterprise Court as it is extended. The dead end main near Enterprise Court is proposed to continue across Lot 37 (Building 100) and along the property line to Benner Road. MMCIC has previously agreed to the City's providing water main to this southeast corner of their property.

As the MATC transfers to City water and existing mains are utilized, several taps will need to be made to connect the pipes together. The City has requested that documentation on the history of the mains which will be transferred to them be provided in advance of the transfer. Fire hydrants should meet City standards and gate valves should be proven to be operational.

3.4 Overall Site – Storm (Pre-developed Conditions)

The MATC existing or pre-developed storm water catchment area is divided into two watersheds, north and south. The divide between these two watersheds generally runs in an east-west direction. These north and south watersheds have been divided into smaller sub-areas.

The ground cover can generally be described as paved impervious, wooded, buildings, grass or barren earth. Soils in the area can generally be described as predominantly having large clay contents.

The North Watershed Detention Basins. There are a total of three (3) existing detention basins in the north watershed. For discussion, we have called them Reservoirs A, B and C. Reservoir A is located at the northwest corner of the north watershed (west of Building 61). Reservoirs B and C are located at the southwest corner of the same watershed (in the middle of the site on the west property line). The following is a brief description of each of these reservoirs.

Reservoir A: Reservoir A is lined with asphalt. Storm water enters the reservoir through a twenty-four (24) inch culvert with an outlet elevation of 806.00. The purpose of this reservoir is to detain storm run-off by shutting the outlet structure should contamination be detected. Storm waters can outlet the reservoir through a culvert or an overtopping weir. The intake of the outlet structure is at elevation 804.20, which is the normal water elevation of the reservoir. The overflow structure is a twenty-four (24) foot wide broad-crested trapezoidal weir. The bottom width of the weir is 5.5 feet wide. The weir is at elevation 807.55. The reservoir side slopes are 2:1 and the elevation of the ground at the top of the reservoir is 809.50. The approximate normal depth of water is 5.2 feet. Reservoir A has a maximum storage capacity of approximately 79,300 cubic feet and under normal circumstances will detain storm water run-off. The removal of this reservoir will impact storm waters downstream.

Reservoir B: Reservoir B is relatively small and is comprised of several compartments, each serving a different function. One of the purposes of this reservoir is to act as an intake structure for Reservoir C. Storm waters entering this reservoir will either flow

through a weir structure to adjacent compartments and eventually outlet into the Miami-Erie Canal, or overflow on top of a broad-crested weir to outlet into Reservoir C. The normal water elevation of this reservoir is at 709.90 which is the outlet weir elevation of the first compartment. The overflow weir elevation is at 710.60 which is equal to the normal water elevation of Reservoir C. Reservoir B is relatively small and does not have considerable detention and its storage capacity is negligible. The first compartment of this reservoir will divert some of the storm waters through Reservoir C before it outlets to the Miami-Erie Canal. Other compartments function as sampling and decontamination chambers.

Reservoir C: Storm waters enter this reservoir directly and through a weir structure located in Reservoir B. The elevation of the outlet structure from Reservoir B is 710.60, which is the normal water level elevation of this reservoir. The normal depth of the water is approximately 5.3 feet deep. Storm waters outlet the reservoir through a twenty-four (24) inch culvert to the Miami-Erie Canal. The approximate low ground elevations around the reservoir are 712. Reservoir C was designed to function as a sediment basin. It does, however, detain storm water run-off as well. The maximum storage capacity of this reservoir is approximately 114,200 cubic feet.

The South Watershed Detention Basin. Reservoir D is the only detention basin in the south watershed. This reservoir is located at the southwest corner of the south watershed (at the intersection of Vanguard Boulevard and Dayton-Cincinnati Pike) and was constructed in 2001. The following is a brief description of this reservoir.

Reservoir D: Storm water run-off enters this reservoir either directly by overland flow or through culvert structures crossing Vanguard Boulevard. The outlet structure is a thirty-six (36) inch culvert which outlets into the Old Miami-Erie Canal. The intake elevation of the outlet structure is at 696.00, which is the normal water elevation of the reservoir. The normal depth of water is eight (8) feet. The low ground elevations in the vicinity of the reservoir are approximately at 698. Reservoir D was designed as a storm water run-off detention basin. The maximum storage capacity of this reservoir is approximately 365,860 cubic feet.

North Watershed. The north watershed is divided into a total of six (6) smaller sub-areas. All but one drain into Reservoir C. The sub-areas drain into Reservoir C, either directly or via open channels, storm sewers, or other holding basins (Reservoirs A and B). Sub-area 6N, can either drain into the detention basin or be diverted partially through a sluice gate and diversion valve to

drain off-site into the Old Miami-Erie Canal. Watersheds 1N and 4N drain directly into Reservoir C, whereas watersheds 2N, 3N, 5N and 6N drain into Reservoir B first before they drain into Reservoir C. Reservoir B does not have significant detention capacity. Watershed 3N drains into Reservoir A before it drains into Reservoirs B and C. The paths of the watersheds are generally steep and hence do not have noticeable peak discharge delays.

Sub-area 1N: Drains directly into Reservoir C.

Sub-area 2N (Thaler Machine Shop): Drains into Reservoir B and then C through a storm sewer which outlets into a ditch. The ditch empties into the main drainage channel which runs in an east-west direction. Because of the relatively steep grades of this path, there is no significant delay for the peak discharge when waters reach Reservoir B. Reservoir B does not have a large detention capacity. Weir structures in Reservoir B will either direct storm waters off-site into the Old Miami-Erie Canal or into Reservoir C depending on flow conditions and/or a contamination event.

Sub-area 3N (SMPP Hill): Drains into a storm sewer system which outlets into Reservoir A. Storm waters outlet the reservoir through a culvert or overflow into a channel through a weir structure. Reservoir A is designed to detain run-off by shutting the culvert outlet. Severe storms will cause waters to overflow through the weir. Discharges from this reservoir are routed through a storm sewer which empties into the main drainage channel which in turn outlets into Reservoir B and then C. Because of the relatively steep grades of this path, there is no significant delay for the peak discharge when it reaches the reservoir.

Sub-area 4N: Drains directly into Reservoir C.

Sub-area 5N (Part of Main Hill and most of the valley): Drains into Reservoir C through Reservoir B and is the largest single sub-area within the north watershed. The main drainage channel is located within this sub-area.

Sub-area 6N: A sluice gate and a diversion valve at the end of this sub-area allow the run-off to be partially diverted through storm sewers and culverts to drain into either Reservoirs B and then C or directly into the Old Miami-Erie Canal depending on flow conditions and/or a contamination event. The storm sewer system through which the waters are diverted does not have enough capacity to allow complete diversion. Because of the relatively steep grades of this path, there is no significant delay for the peak discharge when waters reach Reservoir B.

South Watershed. The south watershed is divided into a total of five (5) smaller sub-areas. Only three of the five sub-areas drain into Reservoir D. Sub-area 3S drains into a fifteen (15) inch storm sewer which crosses Vanguard Boulevard and outlets into a ninety (90) inch culvert which in turn outlets into the Old Miami-Erie Canal. Sub-area 5S drains into the Old Miami-Erie Canal directly. The remainder of the sub-areas within this watershed drains into the detention basin either directly via overland flow or through culverts.

Sub-area 1S: Drains into Reservoir D through a culvert crossing Vanguard Boulevard and is the largest of the four sub-areas within the south watershed.

Sub-area 2S: Drains into Reservoir D through a culvert crossing Vanguard Boulevard.

Sub-area 3S: Drains into the Old Miami-Erie Canal through a fifteen (15) inch storm sewer which crosses Vanguard Boulevard and connects to a ninety (90) inch culvert which outlets into the Old Canal.

Sub-area 4S: Drains directly into Reservoir D. Reservoir D is part of this watershed.

Sub-area 5S: Drains off-site into the Old Miami-Erie Canal.

Detention Facility Adequacy Under Existing Conditions. For a detention facility to be considered adequate under current Montgomery County requirements, it should provide the needed storage volume and outlet structure(s) to control post development run-off. In addition to the storage volume requirement, the sum of discharges from outlet structures for the post-developed critical storm, at the maximum reservoir storage capacity, should not exceed the peak discharge for the pre-developed 24-hour, 1-year storm. The critical storm frequency for each watershed was determined by the percent increase in storm run-off volumes for the 24-hour, 1-year storm as described in the Montgomery County regulations.

North Watershed Detention Facilities: The adequacy of the existing storm water detention facilities for the north watershed was examined by comparing the combined discharges for Reservoirs B and C at their maximum storage capacities for the critical design storm with the peak discharge of the watershed at pre-developed conditions for the 24-hour, 1-year storm. The north watershed pre-developed conditions assume that the impervious areas were grass cover before development.

The run-off volume percent increase between the post and pre-developed conditions for the 24-hour, 1-year storm was found to between 100% and 250%. This corresponds to a 25-year frequency storm.

The peak discharge for the 24-hour, 1-year pre-developed conditions is 171 cfs. The combined discharges from Reservoirs B and C for the 24-hour, 25-year storm exceeds this value with most of the run-off being discharged to the Old Miami-Erie Canal through Reservoir B. For the existing maximum storage and outlet structure elevations of Reservoir C, the needed maximum storage capacity to meet current Montgomery County regulations is approximately 538,200 cubic feet, less the available value of 114,200. Based on this observation, it can be concluded that Reservoir C is not adequate for existing conditions.

South Watershed Detention Facility: Reservoir D is adequate for the south watershed existing conditions. Because the south watershed does not have a large percentage of already developed areas, there are no significant differences between pre-developed and post-developed discharges. Reservoir D was designed to accommodate future development in this watershed as well as accept discharges from Reservoir C.

3.5 Overall Site – Storm (Post-Developed Conditions)

The post-developed watersheds are, in general, similar to the pre-developed conditions. Site drainage will still be divided into the north and south watersheds.

In addition to the proposed roads, each lot will have an impervious area comprised of buildings and parking lots. The impervious areas per lot are a percentage of the total lot acreage. The percent impervious area for each lot will depend on its location (low, medium or high density campus) and the occupancy factor.

Figure 2.1, "Conceptual Lot Layout Plan", shows the entire site divided into low, medium and high density campuses. The maximum coverage percentages for each campus is shown in the same figure under the Legend heading.

A 43% occupancy factor is used for all undeveloped lots.

Impervious areas for undeveloped lots for post-developed conditions were calculated as:

Impervious Area = Net Lot Acreage x Maximum Coverage Percentage x Occupancy Factor.

For developed lots with existing buildings to remain, actual impervious areas of the buildings and parking lots were used.

Figure 3.3 shows the general proposed storm sewer layout for the site with detention basins under the assumed conditions of site development.

South Watershed. The existing detention facility located at the southwest corner of this watershed (Reservoir D) was designed to accommodate future development of this watershed.

Investigation of post-developed drainage conditions indicate that for the assumed low-density development of these lots, the percent increase in runoff volumes of the 1-year, 24-hour storm is marginal (between 10% and 20%). This indicates that the critical storm for which the reservoir should function adequately is for higher frequency storms (low magnitude).

Under these circumstances (i.e. marginal increase in runoff volumes for post-developed conditions), the existing detention facility is adequate. Lots 1, 2, 3, 4, 5, 6, 7, 8, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, and 45 will not need provisions for additional detention for post-developed conditions.

North Watershed. Four different alternatives for storm water detention were investigated for the North watershed. These alternatives are presented and discussed briefly below.

1. **Individual or small group detention:** This option involves storm water runoff detention on individual lots or a small group of lots. Due to the predominantly steep terrain of the site, this option is viable for only a small number of lots. Lots 12, 17, 18 and 19 will need individual detention.

2. **Using the existing detention facility and/or improving it:** This option entails utilizing the existing detention facility located at the southwest corner of the north watershed (Reservoir C). Lots located in the north watershed are assumed to be high-density development.

   Investigation of post-development drainage conditions indicate that the percent increase in runoff volume for the 1-year, 24-hour storm is 51 percent which corresponds to a critical storm frequency of 10 years. Analysis of the existing detention facility for the critical storm (10-year) shows that the existing reservoir (Reservoir C) is not adequate for post-developed conditions.

   For a detention facility to be adequate, it should provide the needed storage volume and outlet structure(s) to control post-development runoff. In addition to storage, the sum of discharges from its outlet structures for the post-developed critical storm at the maximum reservoir storage capacity should not exceed the peak discharge for the pre-developed 1-year storm. For the north watershed, the peak discharge for a 1-year frequency storm is 262 cfs. In addition to the storage/discharge requirements outlined above, the detention basin will have to meet the Montgomery County requirements for a wet reservoir.

Computations indicate that in order to meet hydraulic requirements and the Montgomery County regulations, the post-developed detention facility capacity has to be three times the capacity of the existing Reservoir C (approximately 720,000 cfs). Although Lot 10, located in the north watershed, can provide the acreage needed, the costs of excavating the hilly embankment to the east may prove to be prohibitive. A detention basin covering portions of both Lots 10 and 11 will be needed. The approximate size of this basin is 600 feet by 300 feet with a nominal depth of water of 4 feet and a freeboard of 1 foot. The approximate bottom elevation of this reservoir will be at elevation 703.50 feet. Additional depth desired for support of aquatic life will not decrease the area required for overall detention. This alternative is not recommended.

3. **Using the Existing 90-inch Storm Sewer Parallel to Dayton-Cincinnati Pike:** The existing 90-inch storm sewer is located just to the west of both the north and south watersheds and is parallel to Dayton-Cincinnati Pike. The inlet of the storm sewer is at elevation 705.40 and is located just to the west of existing Reservoir B. The outlet is at elevation 699.40 and is located just to the west of Reservoir D. The approximate length of the storm sewer is 2,325 feet.

   The feasibility of using the existing 90-inch storm sewer as a possible means of detention for the post-developed north watershed was investigated. By placing an outlet control structure (weir or smaller culvert), the outlet discharge of the 90-inch pipe can be controlled to be limited to the 1-year frequency pre-developed peak discharge. However, under these conditions (i.e., outlet control), the storage capacity requirement for the post-developed conditions will not be met with this underground detention alone.

4. **Using the Main (East-West) Drainage Channel for Detention:** The main (east-west) drainage channel is located to the south of proposed Vanguard Boulevard. The feasibility of using the main channel (or a new channel in this proximity) for storm water detention for the north watershed was investigated further.

   Due to the relatively steep grades of the channel, low earth dams will be constructed to retain the storm runoff. The locations and sizes of these detention basins are dictated by existing topography, the location of existing facilities (parking, buildings, utilities), the proposed profile of Vanguard Boulevard and access to the individual lots.

The four proposed reservoirs (shown on the proposed storm sewer system drawing) will detain water at a depth of four feet. These reservoirs are intended to be an amenity for this area along Vanguard Boulevard (like the pond is at the intersection of Vanguard Boulevard and Dayton-Cincinnati Pike). The maximum surface water elevation at peak conditions for the design storm will be 3 feet below the edge of pavement (Vanguard Boulevard). The reservoirs will be connected in series by culvert outlet structures. The last reservoir outlet will be connected to the existing 90-inch storm sewer paralleling Dayton-Cincinnati Pike. The proposed outlet control structure placed at the outlet of the existing 90-inch storm sewer will satisfy the outlet discharge requirement for the post-developed peak conditions.

The additional storage volume needed for the post-developed conditions, which could not be met by using the existing 90-inch storm sewer alone, can be met by including the additional storage provided by the four reservoirs along Vanguard Boulevard.

The following describes the proposed reservoirs (in order from east to west):

Reservoir	Depth	Maximum Water Elevation	Outlet Structure Elevation
1	8 feet	752.00	748.00
2	9 feet	737.00	732.00
3	9 feet	735.00	730.00
4	9 feet	716.00	711.00

The proposed reservoirs are sized to provide maximum storage capacity for the given restrictions described above. Intermediate reservoir outlet structures should be sized to control maximum surface water elevations for peak design storms. The pipe or weir placed at the end of the existing 90-inch storm sewer will control final outlet peak discharges for the site.

All of the lots in the north watershed, with the exception of Lots 12, 17, 18 and 19 will have provisions for detention in the reservoirs along Vanguard Boulevard and the existing 90-inch storm sewer pipe. The above listed lots will require individual on-site detention.

3.6 Overall Site – Gas

The proposed gas system is shown on Figure 3.4.

High Density Campus. There is an existing 6-inch underground gas main from the intersection of Mound Road and Vanguard Boulevard to A Street (passing near Building 45). The gas main in A Street goes from Capstone Circle to the proposed cul-de-sac, at the end of A Street (4-inch from Capstone Circle to the tee near Building 28 and 6-inch to the end of A Street). At this location, the main goes up the hillside to serve the COS Building.

There is a 4-inch gas main that comes off the main in A Street which serves the OSW Building. This main is partially underground and partially on stanchions. DOE will replace the overhead main with an underground main in 2003 as part of Exit Plan construction.

A gas main is proposed down B Street to serve Lot 25. The dead end main in A Street will be connected to the dead end main near Building 87 to provide a loop through the site. This will give the site redundancy in gas service.

Medium Density Campus. There is a 6-inch underground gas main in Enterprise Court. This currently dead-ends at the cul-de-sac on Enterprise Court. There is a service from this main for Building 105. This gas main will be extended down the extension of Enterprise Court. This main extension will make gas available to Lot 37 (Building 100), along with Lots 33, 34, 35, and 36.

Low Density Campus. There is an existing 6-inch plastic underground gas main at the intersection of Dayton-Cincinnati Pike and Vanguard Boulevard. There is a regulator near this intersection which maintains the pressure in the main to be approximately 35 pounds per square inch (psi). This main is installed in a 10-foot easement along the east side of Vanguard Boulevard. This main continues in the utility easement through the site to Test Fire Valley, near Building 87.

The main in Vanguard Boulevard will be tapped, and a new main installed to serve the lots along C Street. This main is proposed to follow the alignment of the existing sanitary sewer which currently goes cross-country, and will be extended to serve the lots along C Street.

A new gas main is proposed to serve Lots 12 and 13. The existing main near Building 87 will be tapped, and the new main will run along the property line to Vanguard Boulevard. The main will continue along Capstone Circle.

3.7 Overall Site – Soil Management

After the completion of the DOE Exit Plan and associated cleanup of the site, the deed restriction regarding soil leaving the site imposed on MMCIC by the government will remain in effect for all transferred property. The DOE cleanup itself is expected to require fill due to the amount of contaminated soil being removed. Likewise, the preliminary roadway calculations for all of the new roadways show an overall requirement of fill. In this case, soil management during build-out of the site will include filling in "low" areas on-site. A preliminary site grading plan was submitted separately from this document.

3.8 Overall Site – Electric

Three high voltage circuits supply electrical power from DP&L to the MATC site. Two circuits come from the Manning Substation and one from the Benner Substation (see Figure 3.5). T Building will maintain redundant high voltage feeds. Whenever practical, redundant feeds will be made available to many of the other buildings or lots. The actual implementation of redundant feeds internal to buildings will be left to "Leasehold Build-out" since significant changes to the service entrance electrical equipment is required. DP&L is installing high voltage lines to the buildings as required for decentralization. The DP&L purchase price of the transformer and the high voltage run from the existing loop to the building transformer are included in the cost estimates.

3.9 Overall Site – Telephone Data Information

Site telephone is supplied by SBC via a Light Span Box at the Capstone Circle/Vanguard Boulevard intersection (see Figure 3.6). The copper telephone cables proceed (or will proceed as required) up Mound Road and Vanguard Boulevard. Another Light Span Box is located at the entrance to Vanguard Boulevard at Dayton-Cincinnati Pike and will be used to support a redundant loop for some buildings and a primary source of telephone and data lines for others. MMCIC will provide the structure from the telephone line to the central distribution panel within each building. SBC will then provide the transmission media. Facilities for fiber-optic have been provided for as the site improvements have been made to date.

3.10 Overall Site – Site Lighting

Parking lot and roadway lighting will match the existing culture both in lamp type and style of fixture and pole to create a seamless transition between areas (see Design Guidelines). The fixtures will be of the high cut-off type to reduce light pollution. Roadway lighting will be connected to the City street light circuit. Parking lot lighting will be fed from circuits from the building being serviced by the parking lot. When multiple buildings are served from a common parking lot, the closest building will provide the lighting circuits.

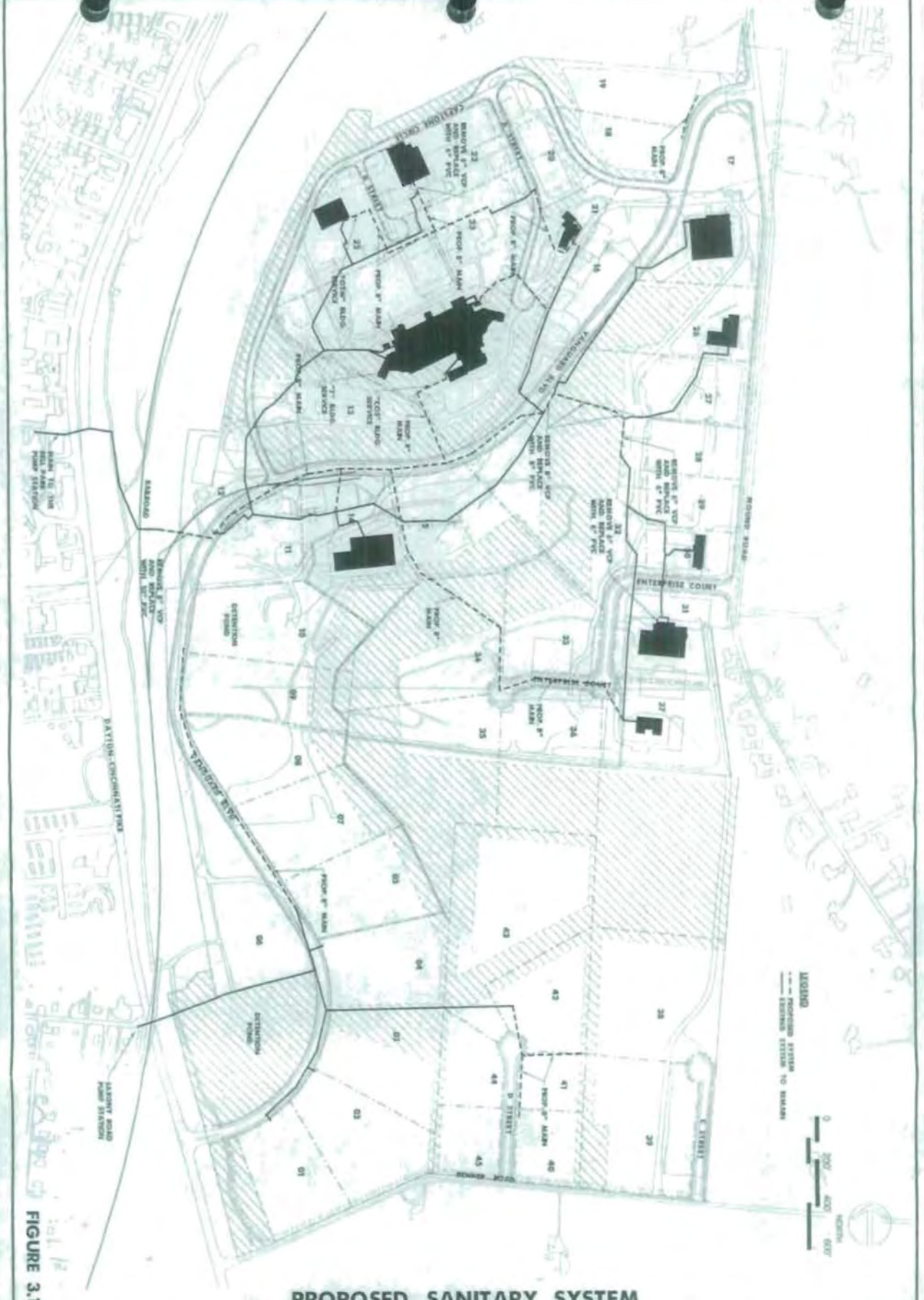

PROPOSED SANITARY SYSTEM
COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER
MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION
BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2003

FIGURE 3.1

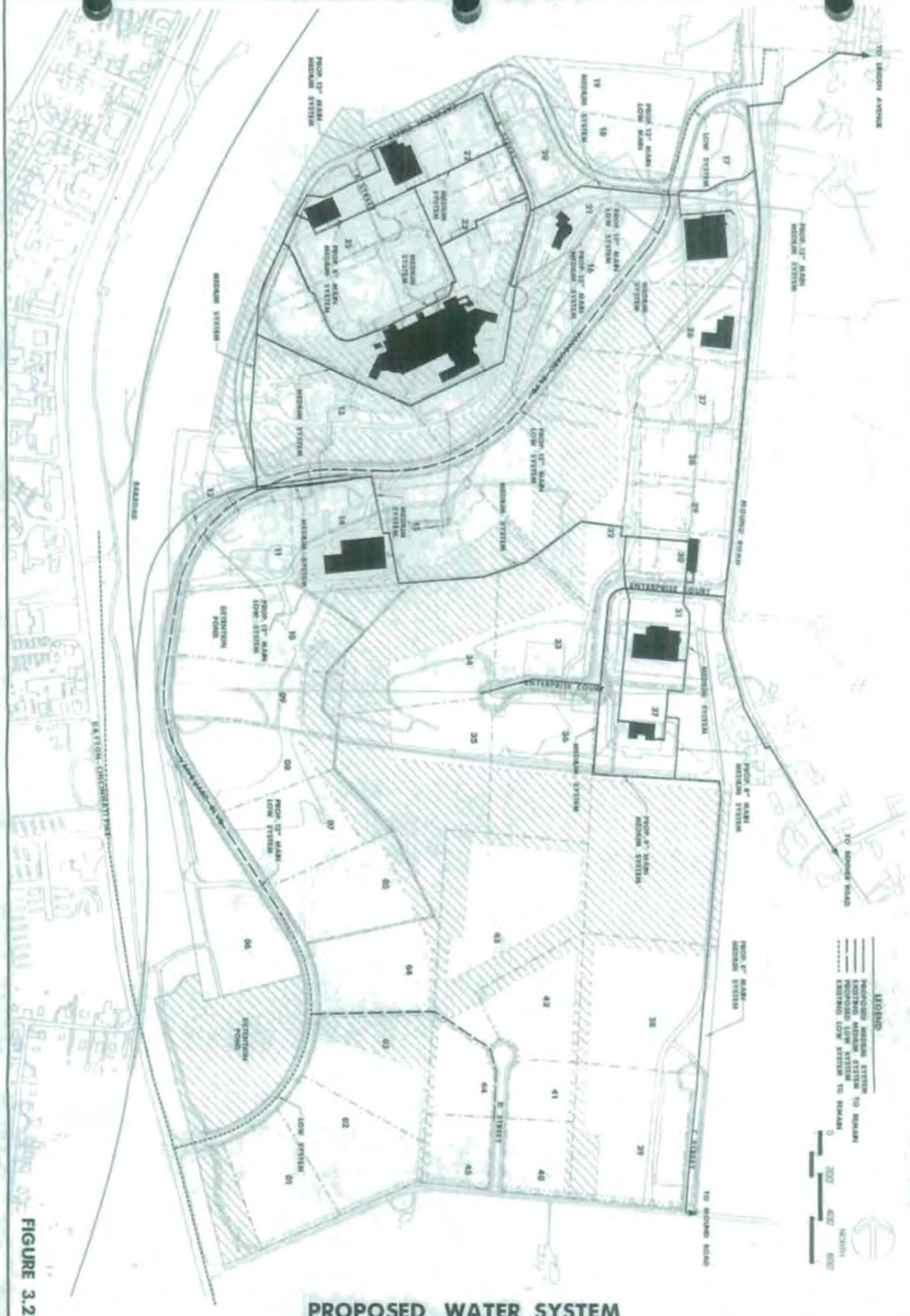


FIGURE 3.2

PROPOSED WATER SYSTEM

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2003

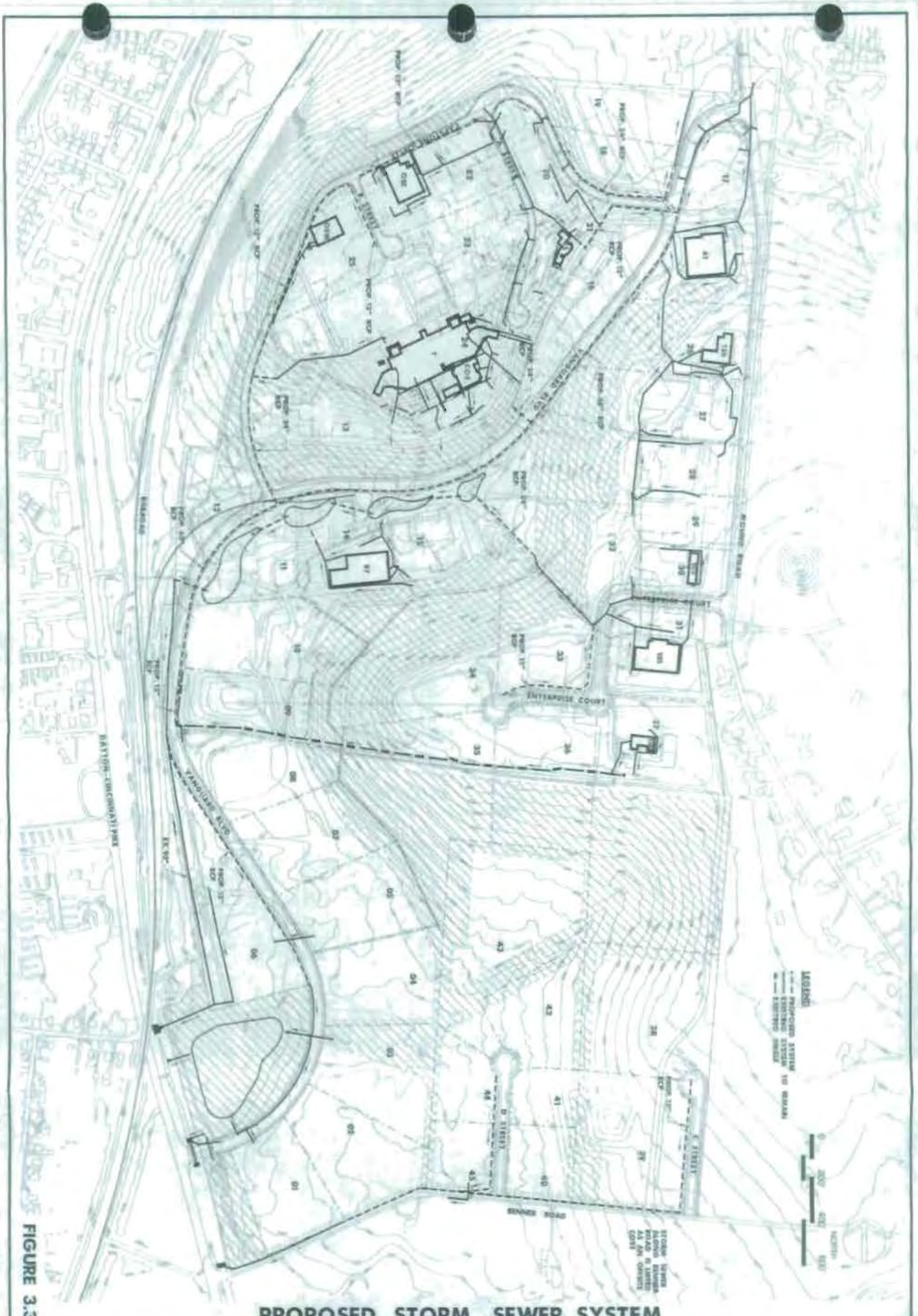


FIGURE 3.3

PROPOSED STORM SEWER SYSTEM

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2000

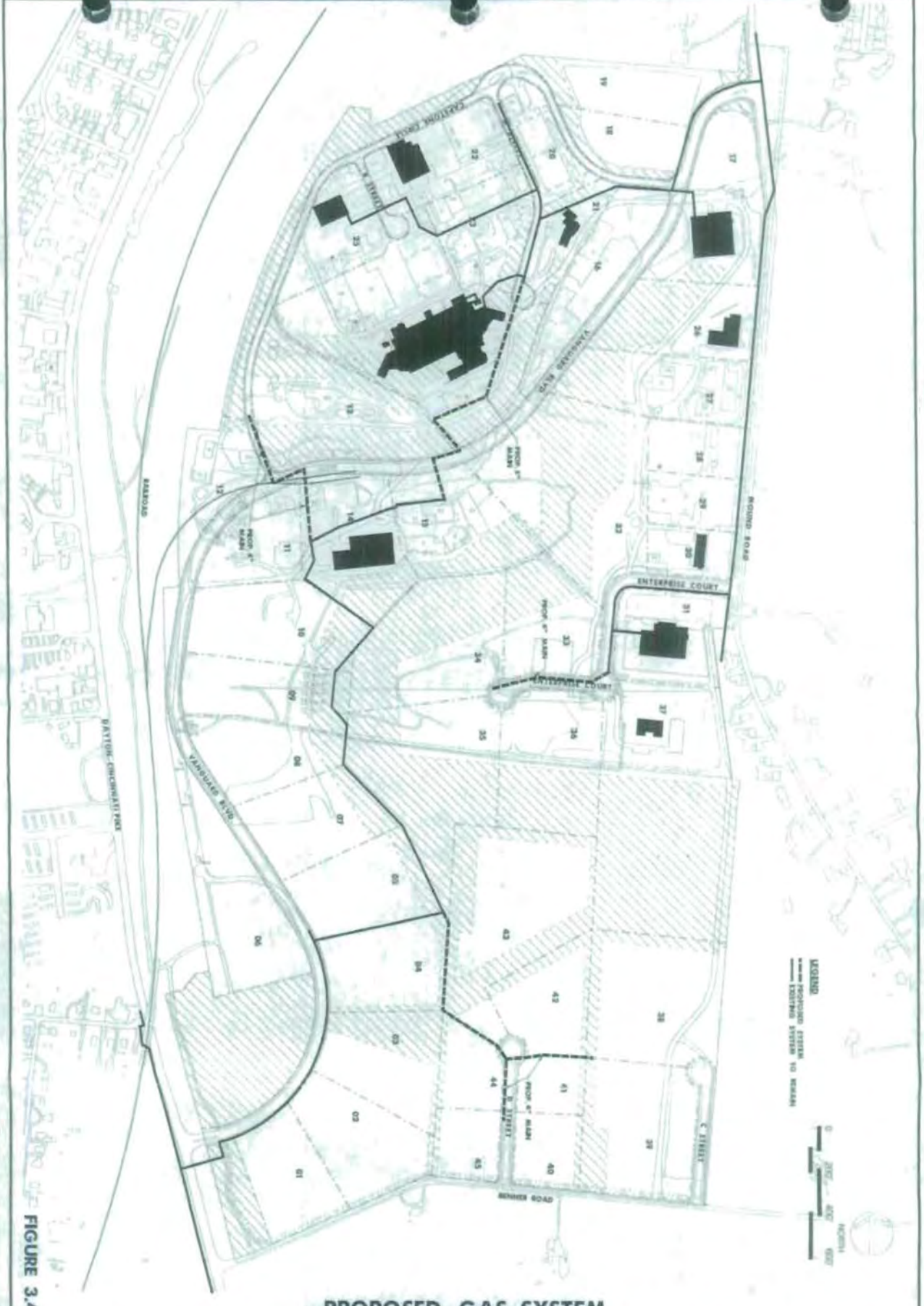


FIGURE 3.4

PROPOSED GAS SYSTEM

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2003

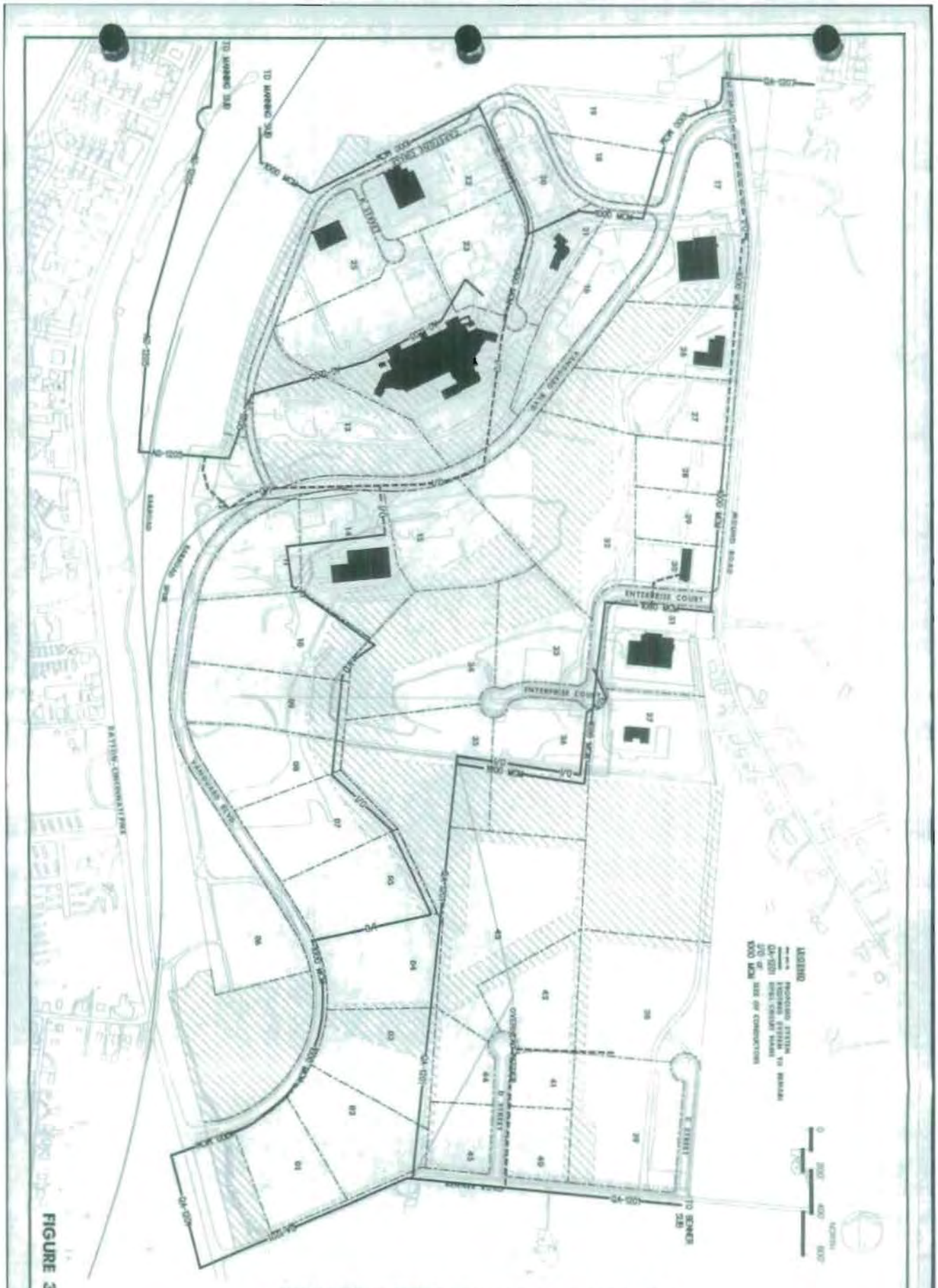


FIGURE 3.5

PROPOSED HIGH VOLTAGE SYSTEM

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

RANGE, WAGGONER, SUMNER AND CANNON, INC.
MAY 2005

FIGURE 3.6

PROPOSED TELEPHONE/DATA SYSTEM

COMPREHENSIVE REUSE PLAN
MOUND ADVANCED TECHNOLOGY CENTER

MIAMISBURG MOUND COMMUNITY IMPROVEMENT CORPORATION

BARGE, WAGGONER SUMNER AND CANNON, INC.
MAY 2003

4. CONCEPTUAL RENDERINGS

Four of the buildings that are to remain will require extensive facade renovation due to demolition of adjacent buildings and/or for aesthetic reasons. OSW and OSE are currently connected by A Building that is scheduled for demolition. OSE will require a new facade on the west side of the building. OSW will require a new facade on the east side of the building and, due to the way A Building and OSW are currently connected, this new facade will also be the new entrance for OSW. COS will require a new facade on the north side when DS Building is demolished. This north side will also become the new main entrance to COS. Building 61 has been upgraded for aesthetic and marketing reasons.

This section includes artistic renderings of these four buildings to show proposed improvements to the architectural facades that are intended to show consistency with surrounding architecture. Additional information on these and the rest of the buildings to remain can be found in Appendix A: Facility Assessments. Costs for these improvements can be found in Appendix B: Cost Opinion Tables.

OSW Building - Revised Exterior

OSE Building - Revised Entry

COS Building - New North Entry

Building 61 - Revised Exterior

5. COST OPINION ASSUMPTIONS

This section contains a list of assumptions made for estimating the work for this Comprehensive Reuse Plan Update. For the buildings to remain, additional information can be found in the Facilities Evaluation in Appendix A. The cost opinion also took into account the guidelines defined in the Design Guidelines.

5.1 General Site Assumptions

5.1.1 Civil

1. Lengths of service lines for water, sanitary and gas on undeveloped lots are assumed to be one-half of the right-of-way width.
2. Fire hydrants will be constructed at the rate of 1 per 300 feet of water main.
3. Gate valves will be constructed at the rate of 1 per 1000 feet of water main.
4. All existing fire hydrants are to be replaced.
5. All existing PIV are to be replaced at an estimated rate of 1 PIV every 800 feet.
6. Sanitary manholes will be constructed at the rate of 1 per 300 feet of sanitary main.
7. Roadway improvements are attributed to the lots based on the frontage of the lot.
8. Sidewalk will be constructed along both sides of roadway.
9. Curb and gutter will be constructed along both sides of roadway.
10. Roadway cost for clearing and grubbing is calculated at $2 per foot of road. Filter fabric fence (for erosion control during construction) will be installed on both sides the entire length of roadway. Signs will be installed 1 per 100 feet of roadway. Construction staking is calculated at $1.50 per foot of roadway. Mobilization is calculated at $0.75 per foot of roadway. Centerline striping is calculated to be required for half the length of roadway.
11. Pavement removal is calculated at 6 inches deep, replaced with 2 inches embankment and 4 inches topsoil. Seeding and mulching is calculated by taking the pavement width and adding 10 feet (5 feet each side).
12. Parking is calculated at 400 square feet per car. (One car per employee).
13. Gas main trench is calculated at 1 foot wide and 3.5 feet deep. Rock is assumed the entire length of gas trench. Gas credit for 75 feet, where appropriate.
14. Storm sewer laterals are calculated at 1 every 250 feet. The cost of storm sewer laterals is included in the unit cost of storm sewer pipe.
15. Storm sewer catch basins and manholes are calculated at 1 every 250 feet. The cost of catch basins and manholes are included in the unit cost of storm sewer pipe.
16. Parking lot drainage was calculated at 3 catch basins per 100 spaces and 75 feet of 12-inch storm sewer per catch basin.
17. The cost for the north watershed detention basins along Vanguard Boulevard is distributed proportionally among the lots they are located on.

18. The cost of storm sewers per lot is calculated by using the unit cost of pipe (including catch basins, manholes and laterals) multiplied by the length of storm sewer pipe. Lots sharing the same storm pipe share the cost for construction.
19. Undeveloped lots are not attributed with the costs of parking, parking lighting and landscaping.
20. Development of site/civil costs is based on 2003 Ohio Department of Transportation numbers.
21. Cost of filling in existing detention pond near Bldg. 61 is included in the earthwork costs for Vanguard Boulevard.
22. The cost opinion does not include any environmental cleanup or remediation costs.
23. Natural landscaping is defined by the replanting/reforestation shown on the Landscape Restoration Plan. Formal landscaping is defined as the plantings shown on the Conceptual Landscape Plan.

5.1.2 Electrical Power Distribution

1. DP&L charges an "aid to construction" for the installation of direct buried, high voltage, 12470 VAC conductors. DP&L stated that a budget estimate of $50.00 per linear foot should be used.

5.1.3 Roadway Site Lighting

1. To match existing lighting assemblies already on site, the KIM AR, metal halide, 400 watt fixture, round steel pole, and concrete foundation will be used every 150 feet along the new roads. The use of this lighting assembly will allow a seamless transition between existing and new roadway lighting. The lighting assembly is calculated at $3000.00 each, which includes photocell and wiring.

   Parking Lot:
   To match existing lighting assemblies already on site, the KIM AR, metal halide, 400 watt fixture, round steel pole, and concrete foundation will be used in either single or dual fixture configurations. A fixture is anticipated every 3,500 square feet of parking lot. The light assembly is calculated at $3000.00 each, which includes the cost for contactor control and wiring.

5.1.4 Telephone/Data Transmission

1. This will require an underground structure which consists of at least one 4" PVC non-concrete-encased Schedule 90 conduit direct buried. This structure requires trenching 24" below grade, adding sand fill for the base, installing the conduit, backfilling, compacting, and seeding or providing pavement. A budget number of $30.00 per unit foot was used. SBC will provide all wiring, pedestals and splicing.

5.2 Individual Lot Assumptions

Lot 1 – Undeveloped

Sitework

1. Water service and stub exists
2. Sanitary service and stub exists
3. Electric
   - Telephone/data distribution
   - High voltage electrical power exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system exists on Vanguard Boulevard
7. No new roadway improvements are needed.

Lot 2 – Undeveloped

Sitework

1. Water service and stub exists
2. Sanitary service and stub exists
3. Electric
   - Telephone/data distribution
   - High voltage electrical power exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system exists on Vanguard Boulevard
7. No new roadway improvements are needed.

Lot 3 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary service exists
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system exists on Vanguard Boulevard
7. No new roadway improvements are needed.

Lot 4 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary service exists
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm sewer system
   - 12" RCP
   - Catch basins/manholes
7. No new roadway improvements are needed.

Lot 5 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - 12" DIP water main
   - Fire Hydrants
   - 12" gate valves
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard

Lot 6 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main
   - 2" Gas service
5. Drains into existing south detention basin
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 7 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard

Lot 8 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into existing south detention basin
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 9 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into existing south detention basin and into the detention basins along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 10 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into detention basins along Vanguard Boulevard. Fill in existing detention basin.
6. Storm sewer system
   - 12" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 11 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
   - Telephone exists
4. Gas
   - 4" Gas main
5. Detention basin
   - Detention basin
   - 24" RCP/Detention basin
   - Outlet structure
6. Storm sewer system
   - 60" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 12 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - 10" Sanitary main removed/replaced
   - Sanitary manholes
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
   - Telephone/data distribution
4. Gas
   - 4" Gas main
5. Individual detention/developer cost
6. Storm sewer system
   - 24" RCP/Capstone Circle
   - 60" RCP/Vanguard Boulevard
   - 12" RCP laterals/Capstone Circle & Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Capstone Circle
   - Pavement removal

Lot 13 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
   - Telephone/data distribution
4. Gas
   - 4" Gas main
5. Drains into detention ponds along Vanguard Boulevard
6. Storm sewer system
   - 24" RCP/Capstone Circle
   - 60" RCP/Vanguard Boulevard
   - 12" RCP laterals/Capstone Circle & Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Capstone Circle

Lot 14 – Building 87

Sitework

1. Water
   - Tapping sleeve, valve and valve box
   - 3" DIP service
   - 3" Water meter setting
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
   - Parking lot lighting
   - Telephone exists
4. Gas
   - Gas meter
   - 4" Gas main
5. Detention basin
   - Detention basin
   - 24" RCP/Detention basin
   - Outlet structure
6. Storm sewer system
   - 24" RCP lateral
   - 60" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal
   - Parking

Lot 15 – Undeveloped (Demolish Bldgs. 2,3 & 63)

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
   - Connect Buildings 3 and 63 water services
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
   - Roadway lighting
4. Gas
   - 4" Gas main
5. Detention basin
   - Detention basin
   - 24" RCP/Detention basin
   - Outlet structure
6. Storm sewer system
   - 24" RCP lateral
   - 12" RCP laterals/Vanguard Boulevard
   - 60" RCP/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 16 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Drains into detention ponds along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP lateral
   - 12" RCP/Capstone Circle
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - 24" RCP lateral
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Capstone Circle
   - Pavement removal

Lot 17 - Building 61

Sitework

1. Water
   - Tapping sleeve, valve and valve box
   - DIP service
   - Fire Hydrants
   - 12" DIP water main
   - 12" Gate valves
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary service exists
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
   - Roadway lighting
   - Parking lot lighting
4. Gas main and service exists
5. Drains into detention ponds along Vanguard Boulevard and will have individual detention/developer cost
6. Storm sewer system
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal
   - Parking

Architectural/Structural

1. Upgrade restrooms to ADA requirements
   - Replace fixtures
   - Replace partitions
   - Repair finishes
2. Upgrade building exterior
   - Wrap exterior with EIFS
   - Infill unused overhead doors
   - Add windows to match existing
   - Replace entrance canopy
3. Replace door knobs with ADA compliant

- Using lever type

4. Recaulk windows in office area
   - 1 man-hour per window
5. Repaint roof
   - Surface prep
   - Primer
   - Finish coat

Mechanical

1. Renovate fire protection systems (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add backflow preventer
3. Add water meter
4. Insulate restroom piping
5. Replace HVAC units (AHU-1, HV-1, -2, -3, -4):
   - AHU-1 multi-zone (4) (12,000 cfm, 30 ton DX, 1200 MBH heat)
   - HV-1 (4200 cfm, 450 MBH heat)
   - HV-2, 3, 4 (6,000 cfm, 468 MBH)
   - ACCU-1 (40 ton CU)
   - Replace fans
   - Steam/DX pipe systems
   - Structural
   - Electrical
   - New DDC controls

Electrical

1. 500 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. All conduit, conductors and terminations
4. Fire alarm control panel replacement
5. Telephone structure from telephone main pedestal to building

Lot 18 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - Fire Hydrants
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Individual onsite detention/developer cost
6. Storm sewer system
   - 24" RCP/Capstone Circle
   - 24" RCP/Vanguard Boulevard
   - 12" RCP laterals/Capstone and Vanguard
   - Catch basins/manholes
7. Roadway Improvements
   - Pavement removal

Lot 19 – Undeveloped

Sitework

1. Water
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main exists
5. Individual onsite detention/developer cost
6. Storm sewer system
   - 24" RCP/Capstone Circle
   - Catch basins/manholes
7. Roadway Improvements
   - Capstone Circle
   - Pavement removal

Lot 20 – Undeveloped (Demolish Bldg. GH)

Sitework

1. Water
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas main and service exists
5. Drains into detention ponds along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP/Capstone Circle
   - 12" RCP laterals/Capstone Circle
   - Catch basins/manholes
7. Roadway Improvements
   - Capstone Circle
   - A Street/sidewalk, curb and gutter
   - Pavement removal

Lot 21 - Building 45

Sitework

1. Water
   - 3" DIP service
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
   - 12" DIP water main
2. Sanitary sewer system
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - Parking lot lighting
   - High voltage electrical power exists
4. Gas
   - Gas meter
   - 2" Gas service
5. Drains into detention ponds along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP lateral
   - 12" RCP/Capstone Circle
   - 12" RCP laterals/Capstone Circle
   - Catch basins/manholes
7. Roadway Improvements
   - A Street
   - Pavement removal

Architectural/Structural

1. New wall at elevator equipment room
   - CMU wall
   - Door, frame and hardware
2. New mechanical room
   - Foundations
   - CMU walls
   - Steel joist roof w/ metal deck
   - Insulation and EPDM roof
   - Doors, frames and hardware

- Electrical

3. Repaint roof access stairs
   - Surface prep
   - Primer
   - Finish coat

Mechanical

1. Renovate fire protection system (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add backflow preventer
3. Insulate ADA plumbing
4. Replace AHU-1/AC system:
   - AHU-1, 4800 cfm, 15+ tons AC
   - Accessories
   - Structural
   - Electrical
5. AHU-2, calibrate outside air
6. New/revise DDC controls:
   - AHU-1 system (new)
   - AHU-2 system (revise)
7. New mechanical building addition:
   - Connection to existing building (mechanical systems)
   - Room ventilation
   - Fire protection sprinklers
   - Plumbing (sanitary, water, and gas)
8. New heat plant:
   - Boilers, each 250-MBH output
   - Hot water pump systems
   - Pipe systems (mechanical room)
   - Controls
   - Demo existing steam, heat exchanger, etc.
   - New hot water piping to penthouses (2)
   - Controls revisions

Electrical

1. 500 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer

3. All conduit, conductors and terminations
4. Motor Control Center for boiler
5. Fire alarm control panel replacement
6. Telephone structure from telephone main pedestal to building

Lot 22 – Building OSE (Demolish Bldg. GP-1)

Sitework

1. Water
   - 6" DIP service
   - 8" DIP water main
   - 8" Gate valves
   - Fire Hydrants
   - 12" DIP water main
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - Roadway lighting
   - Parking lot lighting
   - High voltage electrical power & telephone exists
4. Gas
   - Gas meter
   - 2" Gas service
5. Drains into detention ponds along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP/Capstone Circle
   - 12" RCP laterals/Capstone Circle
   - Catch basins/manholes
7. Roadway Improvements
   - Capstone Circle
   - B Street
   - Parking

Architectural/Structural

1. Upgrade restrooms to ADA requirements
   - Replace fixtures
   - Replace partitions
   - Repair finishes
   - Rework doors
2. Replace door knobs with ADA compliant

- Using lever type

3. Modify west elevation
   - Add windows to match existing
   - Add storefront entrance
4. Remove existing guardpost in lobby
   - Demolition
   - Repair finishes
5. Remove entrance vestibule
   - Demolition
   - Repair finishes

Mechanical

1. Renovate fire protection system (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add backflow preventer and water meter
3. Insulate ADA fixtures
4. Replace water heaters (including demolition)
5. Extend natural gas to mechanical room
6. New mechanical space for central plant equipment:
   - Existing building modifications
   - Room ventilation system
   - Fire protection sprinklers
   - Plumbing (sanitary and water)
   - Natural gas
7. New boiler plant:
   - Hot water boilers (2)
   - Hot water pump systems
   - Pipe systems
   - Demo existing
   - Controls
   - Tie-in to existing systems
   - Structural
   - Electrical
8. New chiller plant:
   - 300-ton cooling tower system
   - Pumping system
   - Piping system
   - Accessories
   - Demo existing

- Controls
- Structural

9. New controls compressed air system
10. Replace AHU-3:
    - Replace AHU-3, 6000 cfm
    - Structural
    - Architectural
    - Electrical
11. Renovate DDC controls
12. Calibrate existing AHU outside air

Electrical

1. 1000 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. Switchgear with 800 amp and 400 amp breakers with concrete pad
4. All conduit, conductors and terminations
5. Motor Control Centers for boiler and chiller
6. Fire alarm control panel replacement
7. Telephone structure from telephone main pedestal to building

Lot 23 – Undeveloped (Demolish Bldg. 28)

Sitework

1. Water
   - 6" DIP service
   - 12" DIP water main
   - Existing gate valve modifications
   - Existing fire hydrant modifications
   - Connect Building 23 service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
4. Gas main exists
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system exists
7. Roadway Improvements
   - A Street

Lot 24 - COS Building

Sitework

1. Water
   - 4" DIP water service
   - 12" DIP water main
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
   - Roadway lighting
   - Parking lot lighting
4. Gas
   - 4" Gas main
   - 2" Gas service
   - 6" Gas main
5. Detention basin
   - Drains into detention basins along Vanguard Boulevard
6. Storm sewer system
   - 24" RCP lateral
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - A Street
   - B Street
   - Vanguard Boulevard
   - Capstone Circle
   - Parking
   - Pavement removal

Architectural/Structural

1. New building entrance
   - Foundations
   - Structure
   - Glass storefront
   - Canopy
   - Demolition
   - Replace brick at existing entrance
2. Repair window caulking
   - Labor and materials
   - Rent hydraulic lift
3. Replace door knobs with ADA compliant
   - Using lever type
4. Tuckpoint masonry
   - Rent hydraulic lift
   - Assume 2000 square feet needs repair

Mechanical

1. Renovate fire protection systems (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Relocate fire protection main for T Building
3. Install new potable water main with backflow preventer and water main
4. Insulate for ADA plumbing
5. Replace domestic water heaters (including demolition)
6. Provide additional process compressed air systems
7. Extend natural gas to mechanical room
8. Renovate clean room AHU system:
   - Add humidifier system
   - Clean unit
   - Control device renovations
   - Recommission, adjust, etc.
   - Electrical
   - Structural
9. Replace AHU-1, -2, -3
10. New controls compressed air system
11. Renovate/replace DDL controls
12. New mechanical system for central plant equipment:
   - Existing building modifications

- Room ventilation
- Fire protection sprinklers
- Plumbing (sanitary, water and natural gas)

13. New boiler plant:
    - Hot water boilers
        - Boiler accessories
        - Hot water pump systems
        - Pipe systems
        - Demo existing
        - Controls
        - Tie into existing system
    - Structural
    - Electrical
14. New chiller plant:
    - Keep existing chiller system/renovate
    - 200-ton chiller system
    - 200-ton cooling tower
    - Pumping system
    - Piping system
    - Accessories
    - Demo existing (site cold water) system
    - Controls
    - Structural

Electrical

1. 1500 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. Switchgear with 1200 amp, 800 amp and 400 amp breakers with concrete pad
4. All conduit, conductors and terminations
5. Motor Control Centers for boiler and chiller
6. Fire alarm control panel replacement
7. Telephone structure from telephone main pedestal to building

Lot 24 -T Building

Sitework

1. Water
   - 6" DIP service
   - Tapping sleeve, valve and valve box
2. Sanitary sewer system
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
   - Roadway lighting
   - Parking lot lighting
4. Gas
   - Gas meter
   - 2" Gas service
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system included with Building COS
7. Roadway Improvements
   - Dumpster screening

Architectural/Structural

1. Upgrade restrooms to ADA requirements
   - Replace fixtures
   - Replace partitions
   - Repair finishes
2. Replace wall and ceiling finishes
   - Gypsum board walls on furring
   - Tape and finish walls
   - Paint walls
   - Acoustical tile ceiling
3. Remove guard posts at both towers
   - Demolition
   - Replace brick
   - Repair finishes

4. Renovate elevator lobbies
   - Replace floor, wall and ceiling finishes
5. Clad retaining wall/tunnel entrances
   - Foundations
   - Brick cladding (including ties, etc.)
   - Coping
6. New mechanical building
   - Foundations
   - CMU walls
   - Brick cladding
   - Steel joist roof with metal deck
   - Insulation and EPDM roof
   - Doors, frames and hardware
   - Electrical
7. Replace roof membrane
   - Demo DS building slab/foundations
   - Excavate
   - Install new membrane
   - Backfill and compact
8. Repair drainage behind tunnel entrances
   - Regrade
   - Resod

Mechanical

1. Renovate fire protection systems (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. New fire main
3. Add backflow preventer and water main
4. New plumbing systems (including demolition)
5. New building mechanical systems:
   - Natural gas to building systems
   - Plumbing (sanitary and water)
   - Fire protection
   - HVAC ventilation
6. New central heating plant:
   - Relocate 100 horsepower boiler Enterprise Ridge Campus (SM/PP Hill)
   - Accessories to 100 horsepower boiler
   - Add new boiler, 100± horsepower
   - Reused SM/PP accessories, install

- Add pump, accessories
- Controls
- Extend site hot water lines to T Building
- Structural

7. New central cooling plant:
   - New 300 ton chiller system
   - New 300 ton cooling tower system
   - Pumping systems, piping systems, accessories and controls
   - Extend lines to T Building
   - Structural
8. New T Building HVAC system (including demolition)

Electrical

1. High voltage, 12470 vac, service to existing transformers for feeding existing double ended substation
2. Primary metering for the existing double ended substation
3. All conduit, conductors and terminations
4. Fire alarm control panel replacement
5. Telephone structure from telephone main pedestal to building
6. 300 kva pad mounted, liquid filled transformer with concrete pad for Boiler/Chiller
7. High voltage, 12470 vac, service to 300 kva transformer
8. Motor Control Centers for boiler and chiller

Lot 25 - OSW Building

Sitework

1. Water
   - 8" DIP water main
   - 3" DIP service
   - Tapping sleeve, and valve box
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 8" Sanitary main
   - Sanitary manholes
   - Remove pump station
3. Electric
   - Telephone/data distribution
   - Roadway lighting
   - Parking lot lighting
   - High voltage electrical power exists
4. Gas main and service exists
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system
   - 12" RCP/Capstone Circle
   - 12" RCP/B Street
   - 12" RCP laterals/Capstone Circle & B Street
   - Catch basins/manholes
7. Roadway Improvements
   - Capstone Circle
   - B Street
   - Parking
   - Pavement removal

Architectural/Structural

1. Replace door knobs with ADA compliant
   - Using lever type
2. Replace metal siding at former B Building
   - Demo siding
   - Infill wall with block and brick
3. Modify east elevation
   - New windows to match existing
   - Glass storefront

- Entrance canopies

4. Modify south elevation
   - New windows to match existing
   - Glass storefront
   - Entrance canopies
5. Remove ramp at 1st floor
   - Demo concrete
   - Excavate
   - New slab
   - Repair wall finish
   - New floor tile
6. Replace window caulk and glazing gaskets
   - Labor and materials
   - Rent hydraulic lift

Mechanical

1. Backflow preventer/meter
2. Relocate toilet rooms ADA
3. Renovate fire protection systems (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
4. Add HVAC – windows load:
   - AHU system (20 tons ±)
   - Structural
5. Replace AHU-1:
   - Replace AHU-1 (43,000 cfm)
   - Structural
   - Architectural
   - Electrical
6. Renovate DDC controls
7. Renovate controls compressed air system

Electrical

1. 1000 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. Fused power circuit device at 1600 amp with concrete pad and fuses
4. All conduit, conductors and terminations
5. Fire alarm control panel replacement
6. Telephone structure from telephone main pedestal to building

Lot 26 - Building 126 (Demolish Bldg. 128)

Sitework

1. Water
   - 2" Water service connection
   - 6" DIP service
   - Tapping sleeve, valve and valve box
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
2. Sanitary sewer system exists
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
   - Parking lot lighting
4. Gas main and service exists
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal
   - Parking

Architectural/Structural

1. Construct new mechanical room
   - Foundations
   - CMU walls
   - Brick cladding
   - Wood roof trusses and sheathing
   - Standing seam metal roof
   - Doors and frames
   - Electrical

Mechanical

1. Add 2-inch water meter assembly (renovate existing pipes)
2. Mechanical room addition:
   - Renovate existing mechanical room
   - Mechanical addition ventilation
   - Sprinkler coverage
   - Plumbing (sanitary, water, and natural gas)
3. Boiler system:
   - Hot water boiler, 200 MBH output
   - Hot water pump systems
   - Piping systems
   - Controls

Electrical

1. 500 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. All conduit, conductors and terminations
4. Telephone structure from telephone main pedestal to building
5. Motor Control Center for boiler

Lot 27 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - Tapping sleeve, valve and valve box
   - 12" DIP water main
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power distribution
   - Roadway lighting
4. Gas
   - 2" Gas service
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 28 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - Tapping sleeve, valve and valve box
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system exists
7. Roadway Improvements are not needed

Lot 29 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - Tapping sleeve, valve and valve box
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system exists
7. Roadway Improvements are not needed

Lot 30 – Building 102

Sitework

1. Water
   - 2" Water meter setting
   - 2" Water service connection extended
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system exists
3. Electric
   - Telephone/data distribution
   - High voltage electrical power distribution
   - Parking lot lighting
4. Gas main and service exists
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer system exists
7. Roadway Improvements
   - Parking

Architectural/Structural

1. Remove security booth
   - Demolition
   - Repair finishes
2. Renovate main entrance
   - Canopy and storefront
   - Repair finishes
3. Replace door knobs with ADA compliant
   - Using lever type

Mechanical

1. Renovate fire protection system (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add plumbing (second floor)
3. Add backflow preventer
4. Insulate ADA fixtures
5. Calibrate AHU-1 outside air
6. Chilled water plant

7. Update controls

Electrical

1. 750 kva pad mounted, liquid filled transformer with concrete pad
2. High voltage, 12470 vac, service to transformer
3. All conduit, conductors and terminations
4. Fire alarm control panel replacement
5. Telephone structure from telephone main pedestal to building

Lot 31 – Building 105

Sitework

1. Water
   - Fire Hydrants
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system exists
3. Electric
   - High voltage electrical power & telephone exists
4. Gas main and service exist
5. Drains into detention basins along Vanguard Boulevard
6. Storm Sewer System
   - 12" RCP/*Enterprise court*
   - 12" RCP laterals/Enterprise Court
   - Catch basins/manholes
7. Roadway Improvements
   - Enterprise Court Improvements

Mechanical

1. Renovate building sprinkler system (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add backflow preventer and water main

Lot 32 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - Gate valves
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High Voltage Electrical Power Distribution
   - Roadway Lighting
4. Gas
   - 2" Gas service
5. Drains into detention basins along Vanguard Boulevard
6. Storm Sewer System
   - 24" RCP lateral
   - 48" RCP/Vanguard Boulevard
   - 12" RCP laterals/Vanguard Boulevard
   - Catch basins/manholes
7. Roadway Improvements
   - Vanguard Boulevard
   - Pavement removal

Lot 33 – Undeveloped

Sitework

1. Water
   - 8" DIP water main
   - Fire Hydrants
   - 8" gate valves
   - 6" DIP service
   - Tapping sleeve, valve and valve box
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
   - 4" Gas main
5. Drains into detention basins along Vanguard Boulevard
6. Storm Sewer System
   - 12" RCP/Enterprise Court
   - 12" RCP laterals/Enterprise Court
   - Catch basins/manholes
7. Roadway Improvements
   - Enterprise Court
   - Pavement removal

Lot 34 – Undeveloped

Sitework

1. Water
   - 8" DIP service
   - Fire Hydrants
   - Gate valves
   - 6" DIP service
   - Existing gate valve modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
   - 4" Gas main
5. Drains into detention basins along Vanguard Boulevard
6. Storm sewer improvements are not needed
7. Roadway Improvements
   - Enterprise Court
   - Pavement removal

Lot 35 – Undeveloped

Sitework

1. Water
   - 8" DIP water main
   - Fire Hydrants
   - 8" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - Storm in Enterprise ends before property line
7. Roadway Improvements
   - Enterprise Court
   - Pavement removal

Lot 36 – Undeveloped

Sitework

1. Water
   - 8" DIP water main
   - Fire Hydrants
   - 8" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP Enterprise Court
   - 12" RCP laterals/Enterprise Court
   - Catch basins/manholes
7. Roadway Improvements
   - Enterprise Court
   - Pavement removal

Lot 37 – Building 100

Sitework

1. Water
   - 8" DIP water main
   - Fire Hydrants
   - 8" Gate valves
   - Existing gate valve box modifications
   - Existing fire hydrant modifications
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - High voltage electrical power & telephone exists
4. Gas
   - 2" Gas service
   - 4" Gas main
   - Gas meter
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP Enterprise Court
   - 12" RCP laterals/Enterprise Court
   - Catch basins/manholes
7. Roadway Improvements
   - Enterprise Court
   - Pavement removal

Mechanical

1. Renovate building sprinkler system (includes fire protection, architectural, electrical):
   - Sprinkler systems
   - Replace architectural ceiling systems
   - Reinstall electrical ceiling devices
2. Add backflow preventer and water main

Lot 38 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - 8" DIP service
   - Fire Hydrants
   - 8" Gate valves
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - Telephone/data distribution
   - Roadway lighting
   - High voltage electrical power distribution
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - Storm ends in "C" Street before property line
7. Roadway Improvements
   - C Street
   - Pavement removal

Lot 39 – Undeveloped

Sitework

1. Water
   - 6" DIP service
   - 8" DIP water main
   - Fire Hydrants
   - 8" Gate valves
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - Telephone/data distribution
   - Roadway lighting
   - High voltage electrical power exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP/C Street
   - 12" RCP laterals/C Street
   - Catch basins/manholes
7. Roadway Improvements
   - C Street
   - Benner Road
   - Pavement removal

Lot 40 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - Roadway lighting
   - High voltage electrical power distribution
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP/D Street
   - 12" RCP laterals/D Street
   - Catch basins/manholes
7. Roadway Improvements
   - D Street
   - Benner Road

Lot 41 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power distribution & telephone exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP/D Street
   - 12" RCP laterals/D Street
   - Catch basins/manholes
7. Roadway Improvements
   - D Street

Lot 42 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Roadway lighting
   - High voltage electrical power & telephone exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - Infrastructure in "D" Street ends before property line
7. Roadway Improvements
   - D Street

Lot 43 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
3. Electric
   - Telephone/data distribution
   - High voltage electrical power exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - Infrastructure in "D" Street ends before property line
7. Roadway Improvements
   - D Street

Lot 44 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP/D Street
   - 12" RCP laterals/D Street
   - Catch basins/manholes
7. Roadway Improvements
   - D Street

Lot 45 – Undeveloped

Sitework

1. Water
   - 12" DIP water main
   - Fire Hydrants
   - 12" Gate valves
   - 6" DIP service
2. Sanitary sewer system
   - 6" Sanitary lateral
   - 8" Sanitary main
   - Sanitary manholes
3. Electric
   - Telephone/data distribution
   - High voltage electrical power exists
4. Gas
   - 4" Gas main
5. Drains into existing south detention basin
6. Storm Sewer System
   - 12" RCP/D Street
   - 12" RCP laterals/D Street
   - Catch basins/manholes
7. Roadway Improvements
   - D Street
   - Benner Road

5.3 Offsite Improvements

1. Water
   Range Avenue
   - 3-lane section
   - 12" DIP main
   - Fire Hydrants
   - 12" Gate valves

   City WTP
   - Upgrade to 5.76 MGD – MATC's share = 3.5% of $2 million
2. Waste Water
   City WWTP
   - Upgrade to 4.0 MGD – MATC's share = 5% of $6.5 million

   City East Side Pump Station
   - Upgrade to 4.0 MGD – MATC's share = 5% of $0.5 million
3. Electric infrastructure exists
4. Gas infrastructure exists
5. Roadway improvements
   Range Avenue
   - Asphalt with curb, gutter, sidewalk
   - Widened at intersection with Linden Avenue and Mound Road

   Benner Road
   - Improve between Miamisburg-Springboro and Cincinnati-Dayton Pike (curb, gutter, sidewalk, and storm sewer) including intersections
   - Install signing and pavement markings
   - Install/upgrade traffic signals (1 estimated)

   Miamisburg-Springboro Road
   - Improve between Benner and the new interchange (curb, gutter, sidewalk and storm sewer) including intersections
   - Install signing and pavement markings
   - Install/upgrade traffic signals (2 estimated)

   I-75 Interchange at Miamisburg-Springboro Pike/Austin Road
6. The roadway improvement costs for Benner Road, Miamisburg-Springboro Road, and the I-75 interchange are multiplied by a factor of 13% derived from projected build-out occupancy of the site, projected 2030 traffic on these roads (assuming the interchange is built), and an assumed load of 20% traffic from MATC.

6. IMPLEMENTATION SCHEDULE

An Implementation Schedule has been developed for the Reuse Plan Update which provides a timeline for improvements that have been integrated into the work schedule of DOE's contractors. The schedule was developed in cooperation with the DOE contractors facilitated by MMCIC.

The schedule was prepared using Primavera Systems software with the intention that updates by MMCIC or the DOE contractor can be easily transferred between the two entities.

The final schedule (as of the date of this document) is presented in Appendix C.

FACILITY ASSESSMENT INDEX

CORRIDOR #1 (SOUTH) 970 ft²
Corridor 765
1735
PENTHOUSE

B-87 Main 1ST FLOOR 33940 ~~Based on PRE Dwg~~ ~~33,000~~ SQ FT
PENTHOUSE 5200
39140
} BASE 39,070 RSF

CORRIDORS 1735

33940 (Based on Measured Dwg)
5200
39190

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A.1 LOT 25 BUILDING OSW

1. General

a. Overview

Building OSW is an office building that was part of the DOE complex. This building is located on the High-Density Campus and its gross measured area is 52,960 square feet. This building will remain as an MMCIC building.

b. Building Use Code Information

i. Ohio Building Code – Use Group B – Office Use.

BUILDING OSW

2. Civil

a. General Description

At the current time, this building is still occupied by DOE. It has a 3-inch cast iron domestic water service from the Mound water system. There is an existing pit on the water service. The domestic service is not protected with a backflow preventer. It does have an 8-inch cast iron fire line service, with a single check valve. It does not have a fire booster pump. There is a pump station located outside the building that pumps the wastewater from Building OSW through a 4-inch force main to an 8-inch gravity sewer near the center of Main Hill Road. There is an existing 2-inch gas main for this building.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is expected to be adequate for this building. The water will be connected to the City's medium pressure water system. This domestic service will be protected with a reduced pressure backflow preventer and will have a separate water meter.

This building also has a 4-inch cast iron main routed through the building. This main will be abandoned in place.

ii. Waste Water
The sanitary usage for this building is estimated to be 18.98 (gpm) gallons per minute. For utility planning purposes, this building was considered 80% office and 20% laboratory. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. A peaking factor of 4 from Ten State Standards is also used in the calculations. The pump station and existing service line can be abandoned and the new gravity flow lateral can be diverted down the east side of the High-Density Campus.

iii. Electric
DP&L will supply a 750-1500 KVA pad mounted liquid filled transformer as service to the building. The secondary conductors will feed underground to a pad mounted 480 VAC – 1600 amp fused power circuit device fused at 1500 amps. The secondary of this switch will be terminated in the low voltage section of existing high voltage substation located in the penthouse. The substation transformer to low voltage section bus will be removed to prevent back feeding into the transformer. High voltage will no longer run without overcurrent protection within the building.

The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors.

iv. Gas
It is anticipated that the existing gas service is adequate for the building.

v. Storm Water Detention
This building drains toward the modified detention pond at the existing location.

vi. Storm Water Sewer
This building drains to the west and south along Capstone Circle.

vii. Roadway Improvements
Roadway improvements include Capstone Circle and Prosperity Court.

viii. Parking
Parking is planned for 175 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas.

The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Formal Landscaped Areas
The new entrances to the building will receive landscaping.

xii. Telephone/Information Technology
SBC will route new cable from the 600 pair near the Capital Court to both OSE and OSW. MMCIC will supply the structure and SBC will supply and route the cable to the Demarc within the building.

3. Structural

a. General Description

Building OSW is a four-story building with a mechanical penthouse at the roof level. It has overall plan dimensions of approximately 92 feet by 136 feet. The building is constructed of a conventionally reinforced concrete frame.

The elevated floors typically have live load capacities of 125 PSF. Lateral stability is provided by rigid frame action in the concrete frame.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
A new opening will be required for use as the new entrance on the southeast corner of the building.

ii. Demolitions
Demolition of existing building walls to accommodate the new entrances and restroom modifications.

4. Architectural

a. General Description

The OSW Facility was constructed in 1974 as an Operations Support Facility with 52,280 square feet on four floors housing administrative offices and computer center. The building structure consists of a reinforced concrete frame and concrete waffle floor construction. The exterior skin consists of concrete masonry units and face brick veneer. The windows are ribbon type extruded aluminum with a duranodic finish. The interior finishes are typically gypsum board painted walls, commercial carpeting and suspended lay-in acoustic tile ceilings with recessed fluorescent lighting. The third floor has a section of raised computer floor and the fourth has a raised computer floor over the whole area. It is assumed that the raised computer flooring will remain as well as the hard wall partitions. This building has already been equipped with its own boiler and chiller.

b. Listing of basic work tasks

i. Building Modifications & Code

There are no apparent Building Code Violations other than the restrooms not meeting current ADA criteria.

With the proposed demolition of the "A" Building and site development of the area between OSE and OSW for parking and vehicle circulation, a new entrance will be developed on the east side of the building. The new entrance will be located at the connection of the former "A" Building due to the location of the elevator lobby, stairs, and existing circulation corridors in the building. The new entry will be defined by a four-story high curtain wall opening with entrance doors and canopy at the first floor and enhanced larger lobbies on all floors. The existing ramp in the first floor lobby will be made level with the first floor. The existing restrooms will be relocated to the southeast corner of the building in order to make them ADA accessible.

Additional windows will be installed on the east façade where the former restrooms were located.

The south façade is windowless on all floors and since there are offices against this wall, windows will be installed to improve the interior office ambiance and enhance the building exterior. This south façade renovation will also include the area where the former "B" Building was removed and the abutting surface covered with metal siding. The existing exit door on this side of the building will be made larger and enhanced with a canopy. This will serve as an employee entrance from the new parking lot on the south side.

The existing door from the roof into the west side stairs needs to swing into the stairs in order to be code compliant.

The configuration of the interior partitions on all floors will remain until a future tenant is committed to lease the space.

ii. Deferred Maintenance
Replace window caulk and glazing gaskets where required on the west elevation.

Repair coping flashing on the west parapet.

Door hardware knob type not ADA compliant, replace with lever handles.

Remove carpet tiles where installed on walls on third and fourth floors and repair wall surface.

iii. Demolitions
Demolition of existing building walls for new entrances and toilet room modifications.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the west side of the building in the southwest corner stairwell. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. There are fire zone control valves for each floor of the facility. The system is in good condition.

b. List of basic work tasks

i. Building Modifications & Code
The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure, and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure, and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure, and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Potable water enters the building on the south side of the building and is believed to rise up in the first floor at the plumbing chase between toilet rooms on the east side of the building. There is no backflow prevention device or meter present. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. The building utilizes an electric water heater. These systems are in good condition.

A new natural gas main enters the building in the south side of the building. The gas main rises up on the exterior of the south side of the building to the roof and into the mechanical penthouse. The natural gas serves the new central hot water boiler system located in the penthouse mechanical room.

b. List of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a reduced pressure principle backflow preventer assembly for protection of site water. Adding a water meter assembly inside the building is also required. The installation of these two items at the service entrance will require additional space inside the building, and possibly relocating the service main location inside the building.

Toilet rooms shall be relocated and shall be ADA accessible.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for backflow prevention and metering will require additional building space or relocating the assembly to another location within the building.

7. HVAC

a. General Description

The building is currently disconnected from site steam and brine systems. The facility has been equipped with a central hot water boiler system and a central chilled water system. These systems are installed on the roof and in the penthouse mechanical room.

The HVAC system includes 2 main central station AHU's (AHU-1, 3), 2 hot water boilers with 2 hot water circulating pumps, an indoor chiller, two outdoor air cooled condensers, DDC controls by Andover Controls, pneumatic controls compressor system, and supply and return air duct distribution systems.

AHU-1 and AHU-3 are central station single zone units with hot water and chilled water coils. AHU-1 is older but has been well maintained. It appears to be at least 15 years old. AHU-3 is newer, is in good condition, and has been well maintained. Controls to AHU-1&3 are DDC with pneumatic devices.

The central heating plant is new and in good condition. There are two hot water boilers and two inline circulating pumps. The boiler flue extends up through the roof of the penthouse. Hot water piping serves the AHU systems and secondary building heating systems.

The central chilled water plant is new and in good condition. There is an indoor chiller, chilled water pumps, two outdoor condenser units, refrigerant piping systems from the condensers to the chiller, and chilled water piping systems serving AHU-1 & 3.

General exhaust is provided for toilet rooms and general building exhaust requirements. These units appear to be older but in good condition.

The existing temperature control systems include DDC controls by Andover controls, and pneumatic devices from site compressed air, and electric/electronic control devices. This system may not be up to date to current technology for DDC control systems or replacement part availability.

b. List of basic work tasks

i. Building Modifications & Code
The HVAC AHU systems have been well maintained. AHU-3 is newer, and should have an expected life of approximately 20-25 years. AHU-1 is older but is well maintained, and should have an expected useful life of 5 years. Replacement of the central station AHU-1 should include upgrading outdoor air for current ventilation code requirements.

Additional HVAC air distribution systems are required to serve the new exterior windows in order to properly heat and cool the building. Both the heating and cooling systems are new and in good condition. The temperature control systems should be upgraded to current DDC technology. A new building compressed air system needs to be provided when site compressed air is eliminated. Control end devices need upgraded and replaced where deficiencies exist.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained.

iii. Demolitions
Replace main AHU systems to extend useful expected life of system.

Replace or upgrade building temperature control systems.

Renovate building system ductwork and zone controls for new occupancy.

c. Lot/Building specific assumptions

The building occupancy will be similar to how the building is currently occupied. The new hot water heating system and chilled water cooling system has enough capacity for the new occupancy.

8. Electrical

a. General Description

The electrical service entrance to the building is at 12,470 VAC, 3-phase, 3-wire and terminates into a unit substation located in the penthouse consisting of two High Voltage fused switches, 1000-KVA transformer and 1200 amp at 480 VAC, 3-phase, 4-wire low voltage drawout switchgear with additional space capacity. The low-voltage switchgear then feeds numerous switchboards. The source of the service is from the DOE substation. Low power is obtained from two 300 KVA transformers, 480 VAC to 208Y/120 VAC, which feeds two 800 amp at 208Y/120 VAC busducts which traverses vertically from the penthouse to the basement. One busduct is on the west side of the building and the other on the east side. At each floor, the busducts are tapped using a fused disconnect. The outputs of these switches are circuited to panelboards. Only the fourth floor has a 480 VAC panelboard located in the electrical closet.

The high voltage lines from the DOE substation will be removed. DP&L will provide a 1000 KVA pad mounted, oil filled transformer. The 480 VAC, 3-phase, 4-wire secondary will be routed underground to an overcurrent protective device and from there to the existing Low Voltage Drawout Switchgear located in the penthouse. The secondary bus connecting the existing penthouse located transformers to the Low Voltage Drawout Switchgear will be removed to prevent backfeeding into the secondary of the transformers. The high voltage switches and transformers will be abandoned in place. The building's electrical service entrance equipment is already configured for redundant electrical service by adding an additional transformer with secondary overcurrent protection.

The available watts per square foot density is 9.4 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. which includes local HVAC systems.

9. Telephone/Information Technology

a. General Description

The telephone service size is adequate for the building. Presently the service is part of DOE's switched system. Isolation from DOE's system will require new lines from SBC.

10. Fire Alarm System

a. The existing fire alarm control panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.

OSW – BUILDING 1ST FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

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COMPREHENSIVE REUSE PLAN UPDATE

Miamisburg, Ohio

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Project no: 19480-00

Date: 01/20/03

OSW – BUILDING 2ND FLOOR

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MIAMISBURG, OHIO

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OSW – BUILDING 3RD FLOOR

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OSW – BUILDING 4TH FLOOR

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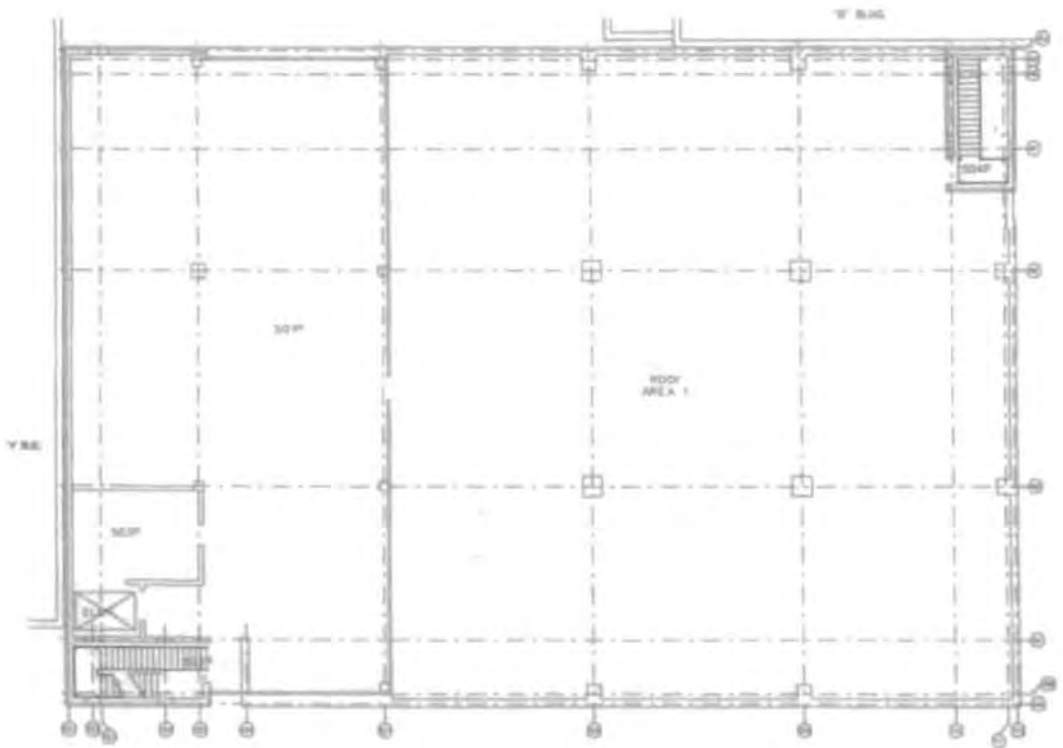


OSW – BUILDING PENTHOUSE

BWSC Barge Waggoner Sumner & Cannon, Inc. Engineers Architects Planners and Surveyors	MATC COMPREHENSIVE REUSE PLAN UPDATE MIAMISBURG, OHIO	Drawn By: Checked By: Drawing No: OSW-P.pdf Project No: 19480-00 Date: 01/20/03

A.2 LOT 24 T BUILDING

1. General

a. Overview

T Building is an office/data center that was part of the DOE complex. This building is located on the High-Density Campus and its gross measured area is 121,960 square feet. This building will remain as an MMCIC building.

T BUILDING

2. Civil

a. General Description

At the current time, this building is still occupied by DOE. It has two 6-inch cast iron domestic water services from the Mound water system. The domestic services are not protected with a backflow preventer. It does have one 6-inch cast iron fire line service and one 8-inch fire line, whose pipe material is unknown. It has a third fire line which is fed through the COS building; it is 8-inch ductile iron. All three fire line services have single check valves. It does not have a fire booster pump. Internal pump stations send the wastewater to two 8-inch sanitary mains above the building. There is no gas service to this building.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. One of the existing domestic water services is adequate for this building. The water service will be connected to the City's medium pressure water system.

ii. Waste Water

The sanitary usage for this building is estimated to be 70.47 gallons per minute (gpm). For utility planning purposes, this building was considered 40% office, 30% light industrial (process), 10% light industrial (potable), and 20% laboratory. Usage rates for office is estimated to be 0.17 gallon/square foot/day, light industrial (process) is estimated to be 0.40 gallon/square foot/day, light industrial (potable) is estimated to be 0.10

gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. A peaking factor of 4 from Ten State Standards is also used in the calculations.

Three options were explored to evaluate if the pump stations within the building could be eliminated. The first option was to evaluate installing a gravity sewer from the first floor of the building. The lowest finished floor elevation of the building is approximately 817.75 feet. The existing ground elevation on the south and west sides of the building is approximately 860 feet. Therefore, a gravity sewer from the lowest floor of the building would be approximately 42 feet deep. Because of this depth, it is not a feasible option to eliminate the first floor pump stations.

The second option explored was to evaluate installing a gravity sewer from the second operating floor. This option could eliminate the pump stations on the second floor. The finished floor elevation is approximately 834.75 feet. Therefore, under this scenario the gravity sewer would be approximately 25 feet deep. Because of this depth, it is not a feasible option to eliminate the first floor pump stations.

The third option considered was to route the sanitary sewer services to the south side of the building toward COS; two separate scenarios were explored. The first scenario explored was to install a new main from the southern sanitary service to an existing manhole directly south of the western edge of the T Building. This manhole is on the main that currently serves the COS Building. Under these circumstances this new main would have a slope of approximately 35%.

The second scenario was to install a new main from the same location as described in the first scenario, but to connect into an existing manhole on the northwest corner of the COS mechanical room. This main would have a slope of approximately 22%. Both of these scenarios have steep slopes according to the Ten State Standards, and require concrete anchors spaced appropriately along the main. Excessive velocity in the main would be experienced and the steep hillside on the south side of T would be difficult to work in under both options. Routing the sanitary sewer to the south of the building is not a recommended option because the pipe would be on a steep slope, have excessive velocity, and be difficult to install.

A fourth option considered was to route the sanitary sewer north toward the proposed sanitary sewer which serves OSW and is in B Street. The potential tie-in point is approximately 8 feet higher that the sanitary laterals from T. Therefore, this option will not work, unless another pump station is designed on top of T Building. This option is not recommended.

A fifth option considered was to route the sanitary through an existing pipe chase in the T Building and continues down the hill toward the COS Building. There is a pipe through the basement of the COS building; however, it does not have a slope and because it is constructed in the basement floor it would not be able to be maintained.

A sixth option considered was to route the sanitary laterals to the east toward A Street and Vanguard Boulevard. Since the sanitary laterals will most likely be disturbed as part of the DS building demolition and hot-waste line PRS removal, it may be possible to direct these to the east and build a sanitary sewer along the existing utility route to Capital Court. Preliminary calculations indicate that this sanitary main would have a slope of approximately 8%. A new sanitary main would need to be installed to connect A Street to an existing manhole in Vanguard Boulevard. Preliminary calculations indicate this sanitary main would have a slope of approximately 11%. This is the recommended option.

iii. Electric

The present 480 VAC, 3-phase, 4-wire electrical power is produced by a double-ended substation located within an electrical vault at the lowest level of the building. The double-ended substation consists of two high voltage switches, each feeding a 1500 KVA transformer. Both transformers feed a main 480V, 3-phase circuit breaker which then feeds a common bus through a tie circuit breaker.

DP&L will supply high-voltage lines to this existing double-ended substation. Two feeds from different DP&L substations will feed the T Building substation through separate high voltage overcurrent protection devices.

DP&L will supply a 300-KVA pad-mounted liquid filled transformer as service to the new Boiler/Chiller building supplying HVAC to the building. The service entrance to this new building will be a main breaker equipped Motor Control Center.

The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors.

iv. Gas
A new gas service is proposed for this building. This service will split off from the COS gas service at the meter. This service will have a separate meter.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

Storm Water Sewer
This building drains to the east and then south.

vi. Roadway Improvements
Roadway improvements include Vanguard Boulevard, A Street, and B Street.

vii. Parking
Parking is planned for a total of 347 spaces.

viii. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

ix. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

x. Telephone/Information Technology
SBC will route new 400 pair cable from the 600 pair near A Street. This cable will enter the building at the same location as the present telephone cable enters. MMCIC will supply the trench and conduit, which exists on this building, and SBC will supply and route the cable to the Demarc within the building.

3. Structural

a. General Description

T Building is an underground, two-story building with overall plan dimensions of approximately 150 feet by 350 feet. It is accessed through two, five-story elevator/stair towers and by a tunnel with heavy steel blast doors at each end. It is constructed of massive reinforced concrete exterior walls with an interior structure of conventional reinforced concrete beams.

The second floor has an estimated live load capacity varying from approximately 50 PSF in the north bay to approximately 140 PSF in the center bay. Lateral stability is provided through shear wall action in the external concrete walls.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
It is anticipated that a new mechanical building will be needed to house new boilers and chiller equipment which are required to separate the building from the existing site utilities.

Provide structure for the proposed new mechanical room.

Provide foundation modifications to support proposed brick facing on existing tunnel entrances and retaining wall between east tunnel entrance and COS Building.

ii. Deferred Maintenance
Repair drainage behind tunnel entrances. Currently, the site grading funnels water over the top of the tunnel entrances. This has caused severe deterioration of the concrete at the top of these walls.

Remove deteriorated concrete from tunnel entrances and patch concrete. The concrete at the tunnel entrances is heavily deteriorated. This concrete should be repaired prior to installation of the proposed brick cladding.

4. Architectural

a. General Description

T Building is a heavily reinforced underground structure located below the Development and Standards (DS) Building. There is a service tunnel at the lower level which runs the length of the facility with exposed entrances at each end on the east and west sides of the hill. The east entrance abuts the Central Operations Support (COS) building. Construction was completed in 1948. The facility has two floors with a total area of 104,400 square feet. The facility perimeter walls are 16-feet thick reinforced concrete. Each floor is compartmentalized into three areas by two 30-inch thick concrete firewalls. The building was constructed by excavating the side of the hill, building the reinforced concrete shell, and then backfilling the excavated area to the original slope and height. The interior dimensions of the building footprint are 345 feet long by 150 feet wide. There are towers at each end of the facility, which penetrate above the grade, and serve as access to the lower levels. They contain stairs, elevators and airshafts. There is an additional airshaft intake in between the two towers. The roof to the facility is 15 feet thick. There are a number of stairs throughout the building that serve as access between the two floors.

b. Listing of basic work tasks

i. Building Modifications & Code

The facility will require new boilers and chillers once the central steam supply is cut off. A facility to house this equipment could be built at grade or space made available within the existing facility. The latter approach would take area away from the usable building area, and a large boiler flue would have to be constructed up to and above grade.

Since the DS Building, which is located at grade above the T Facility is scheduled to be demolished, it would be expedient to remove the remaining earth under the DS Building and replace the roof membrane of the T Building. The drainage behind the tunnel head wall at the east entrance should also be replaced at the same time.

Upgrade existing restrooms to be ADA compatible.

Add additional restrooms on both floors if required by the number of new occupants.

Replace all floor, wall and ceiling finishes.

Remove security facilities attached to the facility towers at grade.

Renovate elevator lobbies in the towers.

The surface appearance of the concrete head wall at the east tunnel entrance needs to be resurfaced. A brick veneer with drainage cavity would relate to the appearance of the adjacent COS Facility. A less costly alternative would be to refinish the surface with an Exterior Insulation Finish System (EIFS). The existing drainage system behind the wall should be inspected and replaced as required.

ii. Deferred Maintenance
Replace roof membranes and flashing on the two T Building Towers and air takes.

Replace caulking at the coping stone joints on the tower's parapet walls.

Seal masonry cracks in face brick exterior of the towers.

Tuck point exterior brick on the towers

Remove rust and paint on roof ladders.

Paint window frames on the tower windows.

5. Fire Suppression Systems

a. General Description

There are three fire water mains that enter the T Building. Two lines enter the north side of the building, and one line enters on the southeast end of the building through COS Building. The southwest line passes through the COS Building from the site to T Building. There are six fire zone fire risers that serve the building's wet pipe sprinkler system. The building sprinkler system provides coverage to the entire facility. The system is older and in fair condition.

b. List of basic work tasks

i. Building Modifications & Code
Some main pipe risers show some signs of deterioration. The sprinkler system is older. Repair and/or replacement of the damaged piping and accessories is required. Alarm check valves were not observed at the three water mains. Alarm check valves and fire department connections need to be added to each of the three main risers.

The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

The fire protection main from COS Building must be relocated.

Adding fire protection sprinkler coverage to a new mechanical boiler room building will be required.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Site inspections in the building were limited access due to contamination issues. There are two 6" potable water mains that enter the north side of T Building. There are no backflow prevention devices or meters present. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

The building manager indicates there are many sump pumps installed in the T Building basement. Most of these pumps were observed on building drawings on file in T Building. Several of these sump pump systems are process waste type systems that are either disconnected and sealed, or in use. These process waste sump pump systems will be removed prior to releasing the building. The remainder of the sump pumps includes 5 sanitary sewer sumps, 3 storm sewer pumps, and 2 HVAC steam condensate return sumps.

Plumbing fixtures may or may not be ADA accessible, including water closets, urinals, lavatories and water coolers.

Site compressed air serves the T Building. This serves all the pneumatic requirements of the building.

b. List of basic work tasks

i. Building Modifications & Code
The two potable water mains will require backflow prevention and metering inside the building. Refer to the Civil narrative for more discussion.

Toilet room lavatories pipes are exposed and need to be insulated for ADA accessibility compliance. All toilet rooms that do not have ADA compliant fixtures need to be renovated for ADA requirements. Fixtures may require replacement due to the condition, age, and non-ADA compliance.

The potable hot water heater is believed to be electric. There were no steam-fired water heaters observed, but they may be present in areas not accessible for site inspections. When decentralization is accomplished, if steam fired potable water heaters exist, they should be replaced so that it is compatible with the building's new heating system media (hot water, steam, etc.).

The existing compressed air system is served off the site compressed air line. A stand-alone building compressed air system is required to serve building user compressed air demands.

Depending upon the specific needs of any present or future user in the building, process gas systems may need to be added or renovated.

Add plumbing service to a mechanical boiler room addition. This includes natural gas service, potable water with backflow preventions, sanitary, and possibly storm.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The two potable water mains require the addition of a reduced pressure principle backflow preventer assembly for protection of site water, and a water meter assembly.

Plumbing fixtures throughout the facility shall be removed. New systems shall be provided for new occupancy requirements.

If steam fired potable water heaters exist, they should be replaced with a new potable water heater that is compatible with the building's new heating system media (hot water, steam, etc.).

There is a potential need for additional compressed air and process gas systems to be added to the plumbing systems. This depends upon building user requirements.

c. Lot/Building specific assumptions

i. New plumbing systems are required for new occupancy.

ii. The site compressed air system will be disconnected from the building.

7. HVAC

a. General Description

The building is currently connected to the site steam, site brine, and site compressed air systems. The site steam and brine pipes enter T Building in the mechanical room in the northeast corner.

The HVAC central equipment is located in the lowest or basement level of T Building in the north section. There is a large outdoor air plenum on the north end of the building that is served by three outdoor intake shafts. There are two exhaust shafts that are located on the east and west ends of the building.
The HVAC systems are older and have been in operation for many years. The HVAC systems include six main air handling units (S-11, S-12, S-21, S-22, S-23A and S-31), 11 exhaust fan systems, steam PRV assemblies, DDC controls by Andover Controls, pneumatic control devices and electric control devices, hot water reheat coils, supply air and exhaust air duct distribution systems.
The six main air handling units are all 100% outside air. Units S-11, S-21 and S-22 were installed in the mid 1980's. Units S-12, S-23A and S-31 are the original units installed in the late 1940's. They are equipped with heating coils and cooling coils. They have been well maintained. The older units have had parts replaced and repaired. Some units have deteriorated.

The 11 exhaust fan systems remove all supply air from the building. The fans vary in age and condition but generally are older but well maintained.

Site steam serves building steam PRV assemblies to produce low-pressure steam. Condensate return lift stations are system powered units that return condensate to site.

The existing temperature control systems include DDC controls by Andover Controls, and pneumatic devices from site compressed air, and electric/electronic control devices. This system may not be up-to-date to current technology for DDC control systems or replacement part availability.

b. List of basic work tasks

i. Building Modifications & Code
The HVAC systems are old and have reached the end of their useful life. Some air handlers are over 50 years old, while others are approaching 20 years in age. Exhaust fans are older and may have radioactive contamination. Temperature controls are in good shape, but may be out-of-date or in need of upgrades. The building air distribution system is 100% outdoor air supply by AHU's and exhausted out of the building. The age, condition, and type of existing systems do not offer reliable or compatible service for new tenants.

A complete removal of the building's HVAC system should be done. Replace the entire system with new central air handling systems, ventilation and exhaust systems, duct distribution systems, temperature control systems, and all secondary systems.

Provide a new facility heating plant and cooling plant for decentralization from site utilities. This includes a boiler plant and chilled water plant. It is proposed to provide a new mechanical building on grade above T Building that will house the new central boiler system and chiller system. Heating and cooling piping can be extended to the basement mechanical room for service to the HVAC system equipment. Extend piping throughout building as required for the type of HVAC system used.

The existing hot water plant located on the Medium-Density Campus includes a 100 horsepower central hot water heating system. The main hot water boiler and related accessories can be reused in T Building's new heating plant.

Install new central station AHU's in the existing mechanical room for service to T Building spaces. Utilize some or all of the outdoor airshafts for outdoor air to HVAC systems. The extent of outdoor air depends upon new building tenant occupancy and system type. Minimize the number of vertical shaft towers required for service to T Building systems. Reuse one or both exhaust shafts for new exhaust air systems.

Provide new supply air, return air, exhaust air, outside air, and relief air distribution systems specific to building user requirements. Systems will be limited to the building architectural limitations for ceiling plenum space, horizontal and vertical shaft space, etc.

ii. Deferred Maintenance
With a complete removal of existing HVAC systems, maintenance history and requirements are not applicable.

iii. Demolitions
Complete removal of HVAC systems as described above.

c. Lot/Building specific assumptions

The building occupancy will be similar to how the building is currently occupied. The entire existing HVAC system will be removed and new systems provided.

The central shafts that provide outside air intake and exhaust air relief can be reused for the new building HVAC systems.

The Medium-Density Campus hot water boiler can be used in T Building's new central heating plant.

8. Electrical

a. General Description

The electrical service entrance to the building is at 12,470 VAC, 3-phase, 3-wire and terminates into a double-ended substation located at the lowest level. Each end of the double-ended substation consists of two high-voltage fused switches, 1500-KVA transformer and 1800 amp at 480 VAC, 3-phase, 4-wire low-voltage drawout switchgear with additional space capacity. The two ends are tied together using a 2000 amp tie circuit breaker. The standard arrangement is for the two mains to feed loads with the Tie breaker open. Upon loss of one end, the tie may be closed manually after the lost main is opened, thereby feeding all loads using one of the two transformers. Each end of the double-ended substation has two separate High Voltage entrances presently feed from the east and west high-voltage DOE loop. The low-voltage switchgear then feeds numerous switchboards and motor control centers. The source of the service is from the DOE substation. Low power is obtained from numerous transformers, 480 VAC to 208Y/120 VAC, which feed panelboards.

The available watts per square foot density is 24.5 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. which includes local HVAC systems.

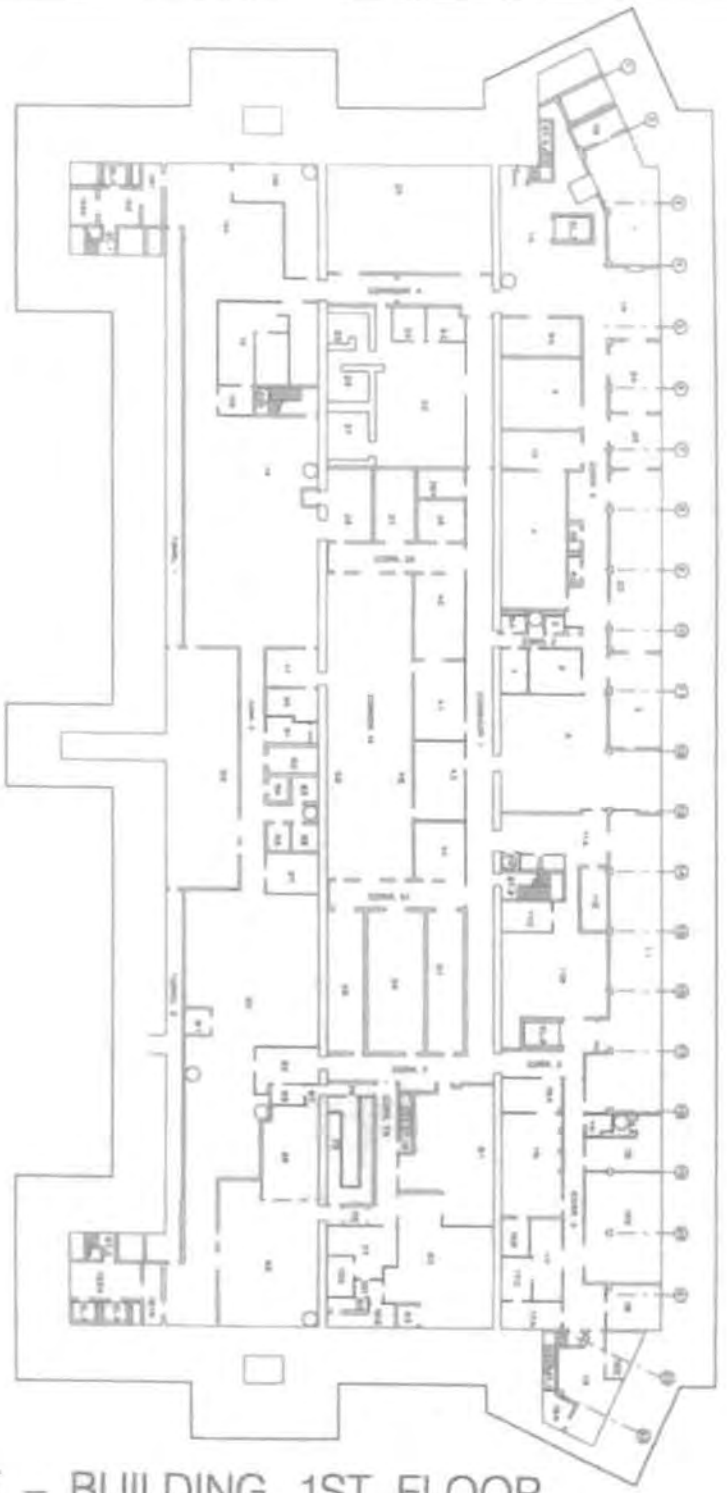
9. Telephone/Information Technology

a. General Description

The telephone service size is adequate for the building. Presently the service is part of DOE's switched system. Isolation from DOE's system will require new lines from SBC.

10. Fire Alarm System

a. The existing Fire Alarm Control Panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



T – BUILDING 1ST FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

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MIAMISBURG, OHIO

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T - BUILDING 2ND FLOOR

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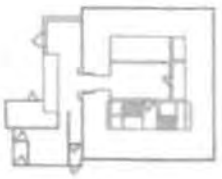

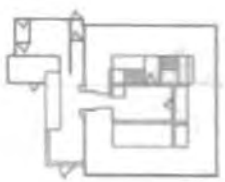

T – BUILDING GROUND

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MIAMISBURG, OHIO

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A.3 LOT 24 BUILDING COS

1. General

a. Overview

Building COS is an office/laboratory building that was part of the DOE complex. This building is located on the High-Density Campus and its gross measured area is 60,520 square feet. This building will remain as an MMCIC building.

BUILDING COS

2. Civil

a. General Description

At the current time, this building is occupied by MMCIC. It receives its domestic water from T Building. It does have two fire lines. One fire line is a 6-inch ductile iron service. The second fire line is an 8-inch service; its pipe material is unknown. It does not have a fire booster pump. The sanitary lateral drains by gravity to an 8-inch sanitary main. There is a gas service to this building, but there is not gas service to the adjacent mechanical room.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. A new 4-inch domestic water service is proposed for this building. The water will be served by the City's medium pressure water system.

ii. Waste Water

The sanitary usage for this building is estimated to be 34.97 gallons per minute (gpm). For utility planning purposes, this building was considered 40% office, 30% light industrial (process), 10% light industrial (potable), and 20% laboratory. Usage rates for office is estimated to be 0.17 gallon/square foot/day, light industrial (process) is estimated to be 0.40 gallon/square foot/day, light industrial (potable) is estimated to be 0.10 gallon/square foot/day, and laboratory is estimated to be 0.27

gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

The main that serves COS will be rerouted toward Vanguard Boulevard in order to abandon the existing main, which is in a very contaminated area.

iii. Electric
DP&L will supply a 1500-KVA pad-mounted liquid-filled transformer as service to the building. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductor will feed underground to pad-mounted switchgear with a 2000-amp main breaker with 1200-amp, 800-amp and 400-amp feeder breakers. The 1200-amp breaker will feed the existing service entrance equipment of the building located in the Penthouse. The 800-amp breaker will feed the service entrance to the Fan House building servicing COS. The 400 amp breaker will feed the service to the boiler/chiller plant located on the roof of COS.

iv. Gas
COS already has a service. Another service is proposed for the mechanical room. This service will split off from the existing gas service at the meter. This service will have a separate meter.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains to the south.

vii. Roadway Improvements
Roadway improvements include Vanguard Boulevard, A Street, and B Street.

viii. Parking
Parking is planned for a total of 216 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Formal Landscaped Areas
The areas adjacent to the new north entrance will require landscaping.

xii. Telephone/Information Technology
The new telephone line has been installed by SBC from their main line. No further telephone work is anticipated at this time.

3. Structural

a. General Description

COS Building is a four-story building with a mechanical penthouse at the roof level. It has overall plan dimensions of approximately 96 feet by 104 feet. The building has a structural steel frame. Concrete floor slabs act compositely with the steel framing.

The elevated floors typically have live load capacities of 100 PSF with the exception of the mechanical penthouse which has a live load capacity of 175 PSF. Lateral stability is provided by vertical bracing.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
Provide structure for new entrance from the High-Density Campus after the demolition of D.S. Building.

4. Architectural

a. General Description

The COS (Central Operational Support) building was completed in 1988 as an office/lab facility. It consists of 64,654 square feet on four floors. The building structure consists of a structural steel frame and exterior walls of concrete masonry units and face brick veneer. One side of the building is built into a hillside and is virtually windowless on that side. The remaining three facades have horizontal ribbon type bands of extruded aluminum windows with a duranodic finish. The facility has two elevators in its building core. The restrooms are ADA compliant. When the central steam supply is cut off from the building a new boiler and chiller will have to be installed. The interior finishes on the fourth floor have been upgraded and the remaining floors have the original finishes, which consist of carpet in offices and VCT in the corridors and labs.

The walls are painted gypsum board and the ceilings are suspended lay-in acoustic tile with recessed fluorescent lighting. Existing laboratory spaces have a metal ceiling system with integrated light fixtures.

b. Listing of basic work tasks

i. Building Modifications & Code
There are no apparent building code violations.

Once the facility is cut off from the central steam source, a new boiler and chiller will have to be installed. This will not require any building addition for the new boiler and chiller, since there is sufficient space in the existing mechanical penthouse to accommodate a new chiller and a new boiler can be installed on the roof adjacent to the mechanical penthouse.

The north elevation on the fourth floor will require modifications due to the removal of the corridor and steps down from the DS Building. A new entrance will be developed on the north side at the 4th floor level. A new parking lot will also be developed on the north side adjacent to this entrance. With the DS Building removed, the grades for the new parking lot will be modified to allow for an on-grade access to the COS Building on the north side. The design of the new entrance will make a strong statement indicating the new main entrance into the building.

Since the new entrance will be located to the east of the existing entrance, some modifications will have to be made to the interior to allow for this entrance.

ii. Deferred Maintenance
A small section of roof counter flashing at the parapet on the west side requires repair.

Window caulking will require maintenance in the future.

Some masonry joints will need tuck pointing in some areas where there are a few signs of minor spalling of the mortar.

Door hardware knob type is not ADA compliant and needs to be replaced with lever handles.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the south side of the building in the basement in the southeast stairwell. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

There is a second sprinkler main that enters the building adjacent to the COS Building sprinkler main. This line serves T Building which is located next to COS Building.

b. List of basic work tasks

i. Building Modifications & Code
The building fire water main has some rust and deterioration. Repair and/or replacement of the damaged piping and accessories is required. The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure, and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure, and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

The T Building sprinkler main that passes through COS Building may require relocation to a site location outside the building.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure, and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure and flow from the Mound site fire water system.

iii. The fire protection main located in COS Building that serves T Building will be relocated.

6. Plumbing

a. General Description

A 4-inch potable water enters the building from the T Building. It is assumed there is no backflow prevention device or meter present. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. The building utilizes a large steam-fired water heater located in the penthouse. These systems are in good condition.

Compressed air enters the penthouse mechanical room. This serves all the pneumatic requirements of the building. There is a large compressed air system which includes an air compressor and a large compressed air tank which is in good condition.

There are also other process gas piping systems present in the building. Documentation and information on these systems are not available at this time.

b. List of basic work tasks

i. Building Modifications & Code

The building needs an independent potable water service main that comes from the site water loop, while eliminating the connection to T Building potable water systems. Refer to the Civil narrative for more discussion. A new potable water service main will require a reduced-pressure principle backflow preventer assembly for protection of site water, and a water meter assembly inside the building. The new main building entrance and assembly location will need to be coordinated with the architectural layout of the building.

Toilet room lavatory pipes are exposed and need to be insulated for ADA accessibility compliance.

The potable hot water heater is fired from site steam at this time. When decentralization is accomplished, the steam-fired potable water heater should be replaced so that it is compatible with the building's new heating system media (hot water, steam, natural gas).

Natural gas needs extended from site gas systems to the mechanical penthouse where a new building central heating plant is required for decentralization from site utilities.

The existing compressed air system in the penthouse mechanical room is in good condition. Depending upon the systems installed in COS Building, an additional process system compressed air system may be required. Depending upon the specific needs of any present or future user in the building, process gas systems may need to be added or renovated.

ii. Deferred Maintenance

The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
A new potable water service main is required. The main will include a reduced pressure principle backflow preventer assembly for protection of site water, and a water meter assembly.

The steam-fired potable water heater should be replaced with a new potable water heater that is compatible with the building's new heating system media (hot water, steam, natural gas).

There is a potential need for additional compressed air and process gas systems to be added to the plumbing systems. This depends upon building user requirements.

c. Lot/Building specific assumptions

i. Toilet room locations will remain. New building occupancy will utilize the toilet rooms at their present location.

ii. The site compressed air system will be disconnected from the building.

iii. A new site potable water main needs to replace the existing potable water service from T Building.

7. HVAC

a. General Description

The building is currently connected to the site steam and brine line systems. The site steam and brine pipes rise up on the north side of COS Building and enter the mechanical penthouse from the north side.

The building HVAC systems central equipment is installed in two main locations: Building 170 adjacent to COS Building and the penthouse mechanical room and roof area.

Building 170 houses the clean room AHU which serves COS Building basement systems. This unit is very large and is equipped with hot water coils, chilled water coils, steam humidifier, DDC temperature controls by Andover Controls, pneumatic control devices, and has main ductwork extended from the unit below grade and into COS Building. This unit is older but has been well maintained and is in good condition.

The balance of the central HVAC equipment is located on the roof and penthouse area. This includes three main central station AHU's, two steam to hot water HX and hot water pumping systems, two steam PRV assemblies, chilled water pumping systems, DDC controls by Andover Controls, pneumatic controls components, site compressed air for temperature control application (refer to Plumbing narrative this section for further information), site steam mains, site brine mains, supply and return air duct distribution systems, and building zone controls.

AHU-1 and AHU-3 both are central station single zone units with hot water (AHU-3) heating coil, chilled water coil (AHU-1), and supply fan and remote return air fans with variable frequency drives (VFD). AHU-2 is a HV unit with hot water heating coils, supply and return air fans with VFD's. All 3 units have DDC control by Andover Controls and pneumatic control end devices. These units are all older but have been well maintained. They appear to be at least 15 to 20 years old.

The existing temperature control systems include DDC controls by Andover Controls, pneumatic devices from site compressed air, and electric/electronic control devices. This system may not be up to date to current technology for DDC control systems or replacement part availability.

There is a process chilled water system installed in the penthouse mechanical room. This includes a chilled water to chilled water heat exchanger and pumping system. This system is in good condition.

A new packaged outdoor air-cooled chiller installed on the roof has a nominal 200-ton capacity. This unit ties into the main site brine line pipes and piping to the mechanical room. The chiller capacity provides approximately 325 sf/ton cooling capacity to the building. This should be sufficient for general office and laboratory occupancy. The amount of process cooling load is approximately 200 tons. The process chilled water loads consume this chiller capacity and cannot be used for the building HVAC load.

General exhaust is provided for toilet rooms and general building exhaust requirements. Rooftop process exhaust fan systems serve laboratory areas in the building. These units appear to be older but in good condition.

b. List of basic work tasks

i. Building Modifications & Code
In general the HVAC AHU systems are older but have been well maintained. The useful life of the main air handling units AHU-1, -2, -3 is expected to be another 3-10 years. Replacement of these units will be required for reliable HVAC system performance beyond the expected life

of the units. Replacement of the central station AHU's should include upgrading outdoor air for current ventilation code requirements. The existing outdoor packaged chiller serves the building process load. A new central chilled water system is required to serve the building HVAC systems.

Decentralization of COS Building requires eliminating the site connections to the site brine lines and steam lines.

A new central heating plant is required to provide heating media to the building when site steam is eliminated. This boiler system needs to be compatible with building HVAC heating components, process loads, and plumbing water heaters. This can be either a hot water system or a steam system.

The building is currently heating by site steam service to the HVAC systems. Decentralization will require the addition of a building heating system, fired by new site natural gas. A new heating boiler system is needed to provide heating media to the building HVAC system.

The boiler system and chilled water system can be added in the mechanical penthouse, which might require architectural revisions to the penthouse, and structural support system renovations to the building.

The temperature control systems should be upgraded to current DDC technology. A new building compressed air system needs to be provided when site compressed air is eliminated. Control end devices need upgraded and replaced where deficiencies exist.

Building process exhaust fans should be added or replaced as required to serve facility user requirements. Replace existing process roof exhaust fans and general exhaust fans to increase expected life of equipment. The clean air unit located in Building 170 is older but well maintained.

The expected life of this unit is 10 - 20 years. Retrofit unit to maintain operation and provide steam humidifier system to serve unit humidifier.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained.

iii. Demolitions
Replace the building steam heat and steam to hot water HX systems with a new facility central heating plant.

Replace the site compressed air system with a building compressed air system for temperature control systems.

Replace main AHU systems to extend useful expected life of system.

Renovate the clean room AHU as required to maintain unit.

Replace or upgrade building temperature control systems.

Add chiller capacity for building HVAC loads and process loads.

Renovate building system ductwork and zone controls for new occupancy.

c. Lot/Building specific assumptions

The building occupancy will be similar to how the building is currently occupied. The building will be disconnected from site steam and brine systems. All new HVAC equipment for a new heating plan, chiller service, etc.. will be located on the roof or in the penthouse of the facility.

8. Electrical

a. General Description

The electrical service entrance to the building is at 480-VAC, 3-phase, 4-wire and terminates into a 1200-amp switchboard with additional space capacity. The source of the service is from the DOE substation. Low power is obtained from a 300-KVA transformer, 480 VAC to 208Y/120 VAC, which feeds a 1000-amp at 208Y/120 VAC busduct which traverses vertically from the penthouse to the basement. At each floor, the busduct is tapped using a fused disconnect. The output of these switches is circuited to panelboards. Each floor has a 480-VAC panelboard located in the electrical closet.

A separate 800A, 480V, 3-phase service feeds the Motor Control Center (MCC) with the main circuit breaker located in the Fan House. A 1500 KVA pad mounted, liquid filled transformer will be provided by DP&L. The 480 VAC, 3-phase, 4-wire secondary will be routed underground into an outdoor 2000 amp, main lugs only, pad mounted switchgear. Two feeder breakers, one 800 amp and the other 1200 amp will feed the Fan House MCC and the COS Penthouse located switchgear respectively.

The available watts per square foot density is 13.1 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft., and the laboratory space would be 11.5 watts/sq. ft. Combined, the weighted average watts/sq. ft. density would be 10.8 watts/sq. ft. Sufficient capacity exists to allow the addition of future loads to be attached to the building's electrical system.

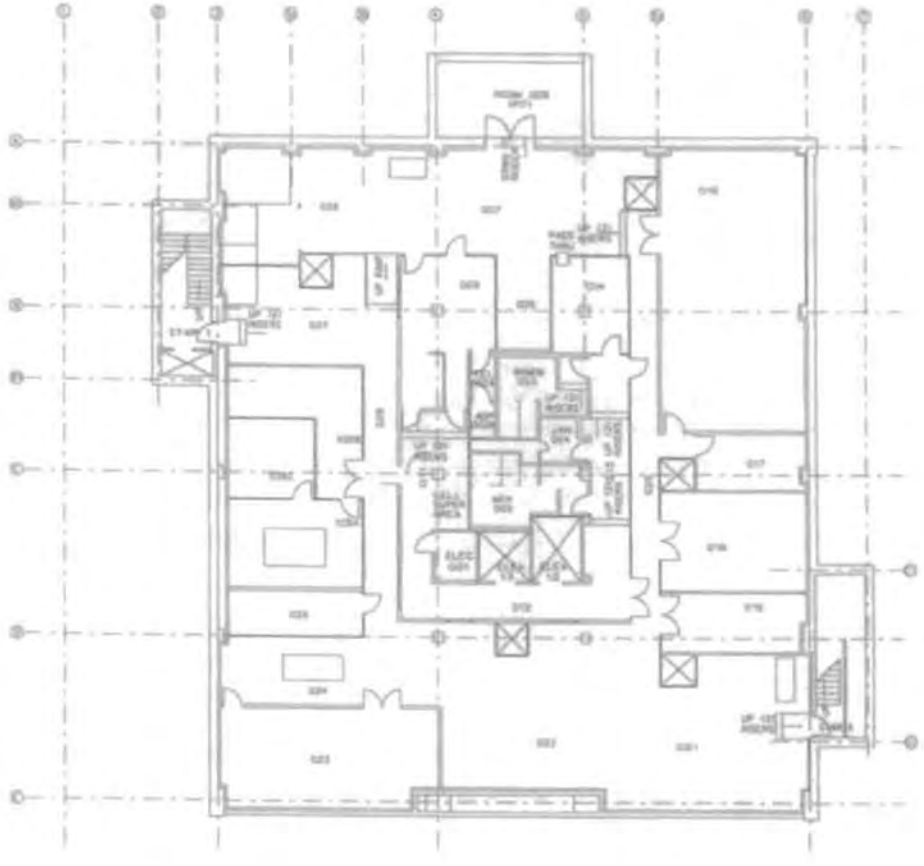
9. Telephone/Information Technology

a. General Description

A new 200 pair line has been installed by SBC. The cross-connects to this cable still need to be performed. At present, the building telephones route through the "A" Building switched network. MMCIC will decide when they would like switchover to occur.

10. Fire Alarm System

a. The existing Fire Alarm Control Panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



COS – BUILDING BASEMENT FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

MATC

COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

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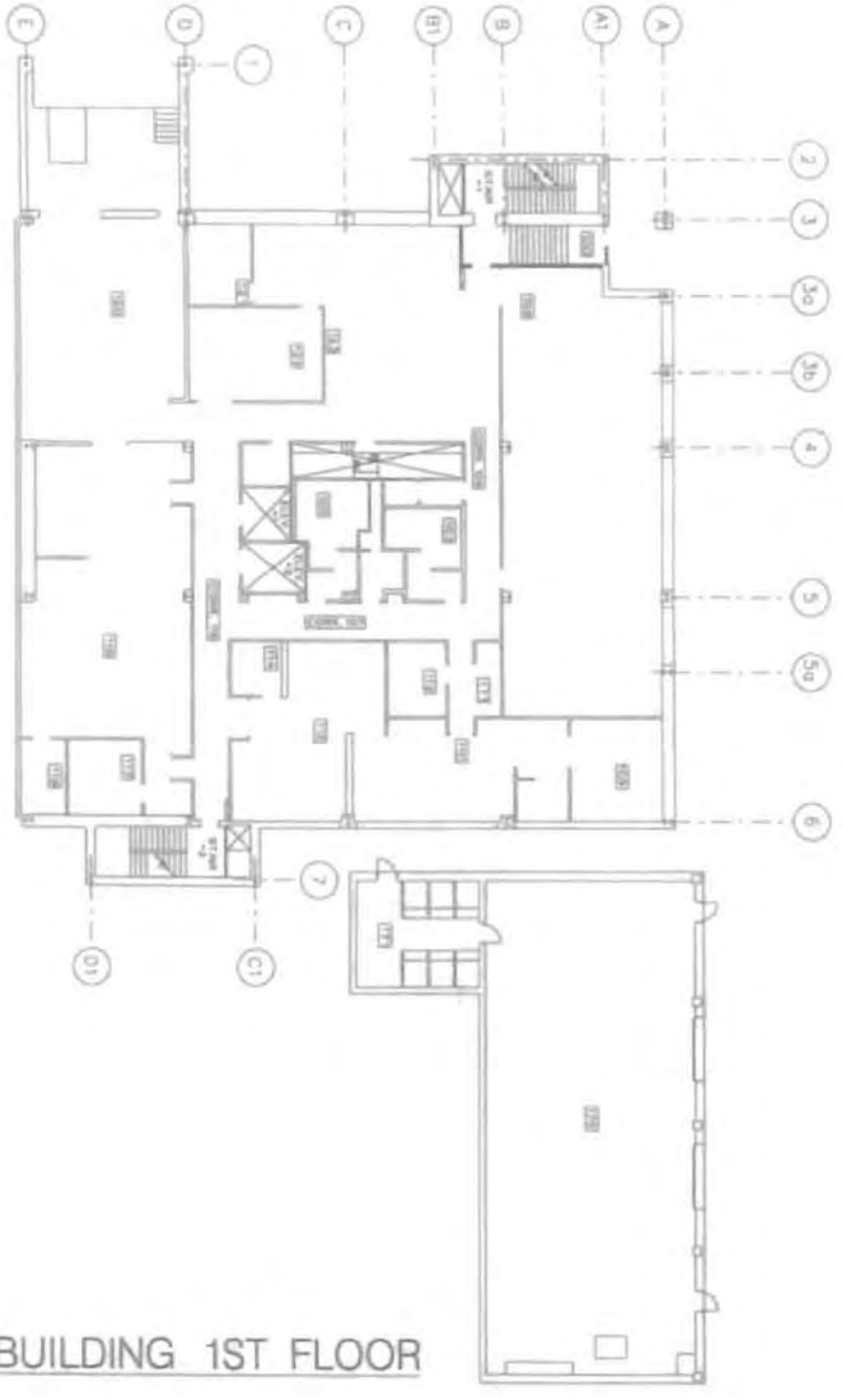

COS – BUILDING 1ST FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
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COMPREHENSIVE REUSE PLAN UPDATE
MIAMISBURG, OHIO

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Project No:	Date:
19480-00	01/20/03

COS - BUILDING 2ND FLOOR

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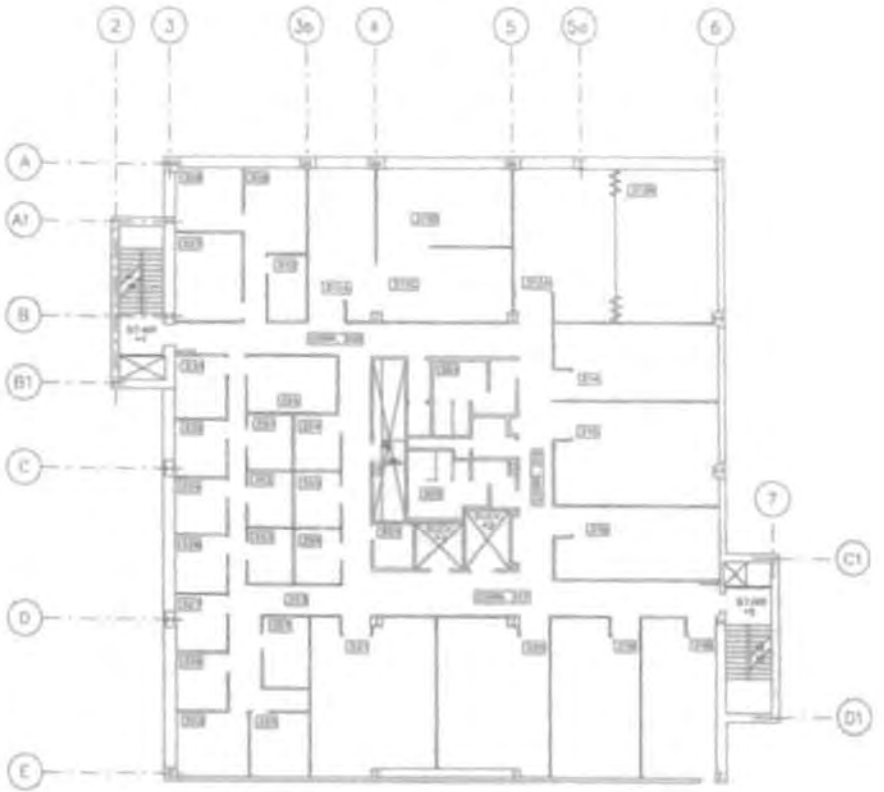
COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

COS-2.pdf

19480-00

01/20/03



COS – BUILDING 3RD FLOOR

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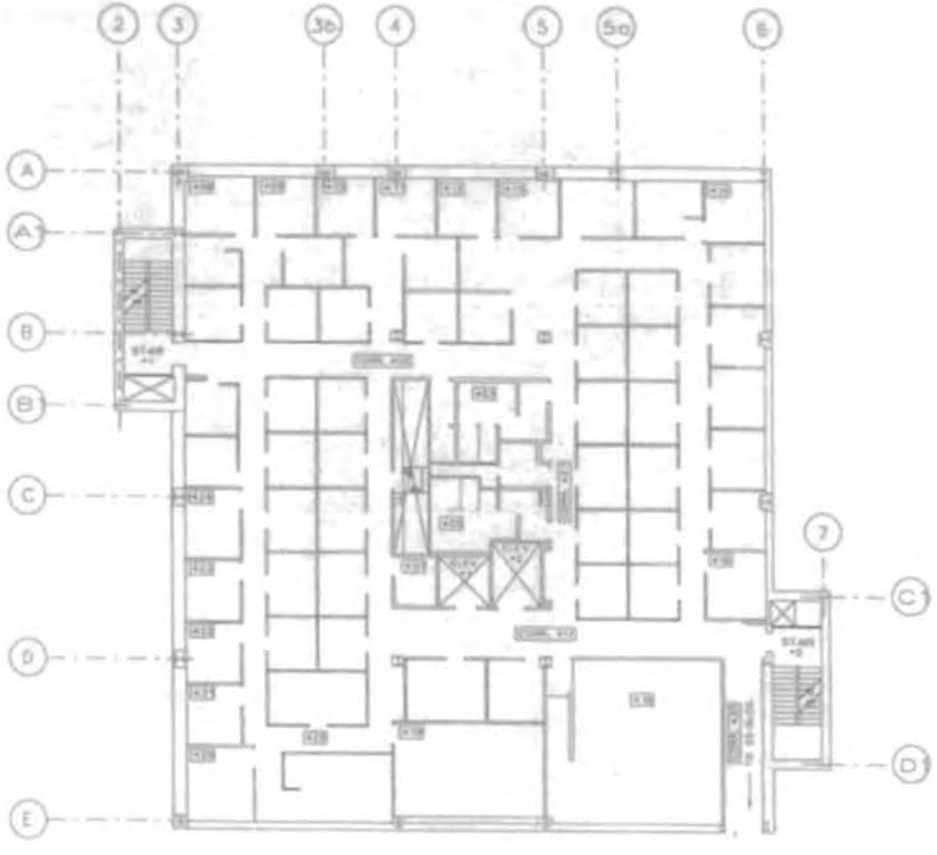
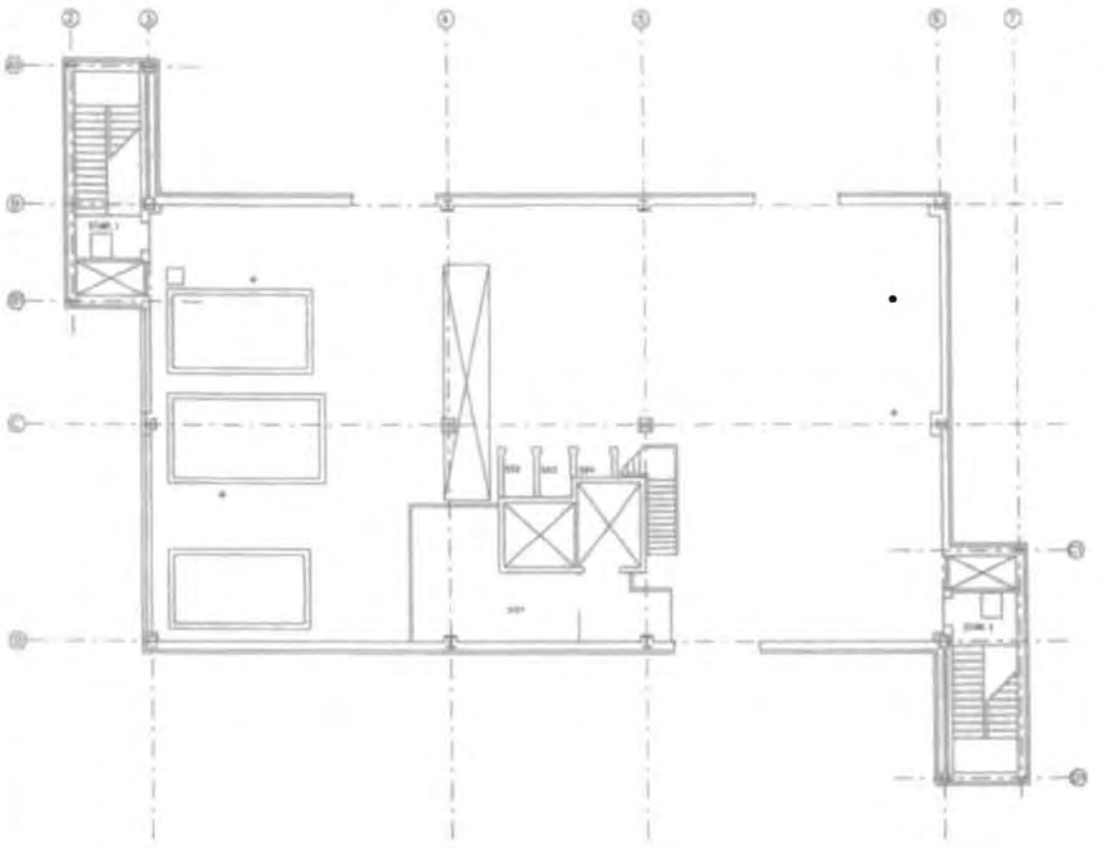


COS - BUILDING 4TH FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc. Engineers Architects Planners and Surveyors	MATC COMPREHENSIVE REUSE PLAN UPDATE MIAMISBURG, OHIO	Drawn By: / Checked By: Drawing No: COS-4.pdf Project No: 19480.00 / Date: 01/20/03



COS – BUILDING PENTHOUSE

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

MATC

COMPREHENSIVE REUSE PLAN UPDATE
MIAMISBURG, OHIO

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Project No: 19480-00
Date: 01/20/03

A.4 LOT 22 BUILDING OSE

1. General

a. Overview

Building OSE is an office building that was part of the DOE complex. This building is located on the High-Density Campus and its gross measured area is 89,290 square feet. This building will remain as an MMCIC building.

BUILDING OSE

2. Civil

General Description

At the current time, this building is still occupied by DOE. It has a 6-inch cast iron domestic water service from the Mound water system. The domestic service is not protected with a backflow preventer. It does have an 8-inch ACP fire line service. It does not have a fire booster pump. The sanitary lateral drains by gravity to an 8-inch sanitary main. There is no gas service to this building, although there is a main available for tapping.

b. List of basic work tasks

Water
The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is adequate for this building. The water will be served by the City's medium pressure water system.

ii. Waste Water
The sanitary usage for this building is estimated to be 32.28 gallons per minute (gpm). For utility planning purposes, this building was considered 80% office and 20% laboratory. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates.

Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
DP&L will supply a 1000-KVA pad-mounted liquid-filled transformer as service to the building. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductors will feed underground to pad-mounted switchgear with a 1600-amp main breaker with four 800- amp breakers and a 400-amp feeder breaker. The 800-amp breakers will feed the existing building loads. The 400-amp feeder breaker will feed the service to the boiler/chiller plant located on the roof.

iv. Gas
A gas service is proposed for this building.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains to the north toward Capstone Circle.

vii. Roadway Improvements
Roadway improvements to include Capstone Circle and B Street.

viii. Parking
Parking is planned for 301 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Formal Landscaped Areas
The area on the west side of the building will require new landscaping.

xii. Telephone/Information Technology
SBC will route new cable from the 600 pair near Capital Court to both OSE and OSW. CH2M Hill will create the structure from the manhole outside the building to the Demarc. SBC will supply the transmission media.

3. Structural

a. General Description

OSE Building is a four-story building with a mechanical penthouse at the roof level. It has overall plan dimensions of approximately 96 feet by 104 feet. The building has a structural steel frame. Concrete floor slabs act compositely with the steel framing.

The elevated floors typically have live load capacities of 100 PSF. Lateral stability is provided by vertical bracing.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
Roof modifications may be required to support mechanical equipment needed to separate the building from the site utilities.

A new structure will be required for use as the new entrance on the southwest corner of the building.

4. Architectural

a. General Description

The OSE Facility was constructed in 1986 as an operations support building with 90,072 square feet on four floors housing administrative offices, a cafeteria with full kitchen, auditorium and computer center. The building structure consists of structural steel frame and concrete masonry unit and face brick veneer exterior skin. The windows are ribbon type extruded aluminum with a duranodic finish.

The interior finishes are typically gypsum board painted walls, commercial carpeting and suspended lay-in acoustic tile ceilings with recessed fluorescent lighting. Most of the kitchen equipment has been removed from the kitchen area except for some walk-in cooler/freezers. The kitchen area now functions as a print shop and the cafeteria is not used. The upper office floors consist of perimeter hard wall offices with open office workstations in the center. The second floor has a large auditorium with sloping floor, fixed seating, and stage.

b. Listing of basic work tasks

i. Building Modifications & Code

There are no apparent building code violations other than the restrooms.

With the proposed demolition of the "A" Building and the development of the area between OSE and OSW for parking and vehicle circulation, a new entrance must be developed on the west side of the building. This new entrance will be located at the northwest corner on the west side of the building. This new entrance will be opposite the existing east side entrance. Two small restrooms will have to be demolished to accomplish this. The building will still have sufficient restroom facilities. A large entrance lobby will be formed between the new entrances. The existing security guard facilities in the lobby will be removed.

With the "A" Building removed, the access to OSE will remain as a secondary entrance/exit to the new parking lot to the west. Where possible on the first and second floors, a short horizontal band of windows will be added at the south end of the west façade to provide natural light into new potential office space.

The configuration of the interior partitions on all floors will remain until a future tenant is committed to lease the space.

The building restrooms require renovation to be ADA compliant.

Remove the entrance vestibule in the lobby entrance.

If the future building use becomes a type of conference center, the auditorium would be an asset; however, if it were to become strictly an office facility, then the auditorium would be of little use and would require the sloping floor to be filled in.

ii. Deferred Maintenance

Recaulk coping stones at joints.

Replace roof membrane and flashing.

Repair ceramic tile in restroom at water damaged areas.

Door hardware knob type not ADA compliant, replace with lever handles.

When the existing steam to the building is no longer available, a new boiler and chiller will have to be installed. There is adequate room in the existing penthouse for a new chiller and a new boiler could be located on the roof adjacent the penthouse.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the south side on the first floor in a mechanical/electrical equipment room. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

b. List of basic work tasks

i. Building Modifications & Code
The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure, and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure, and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

b. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure, and flow from the Mound site fire water system.

6. Plumbing

a. General Description

The 6-inch potable water main enters the building on the south side of the building in a mechanical equipment room on first floor. There is no backflow prevention device or meter present. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. These systems are in good condition. The building utilizes two large steam-fired domestic water heaters, which are in fair to good condition.

b. List of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a reduced pressure principle backflow preventer assembly for protection of site water. Adding a water meter assembly inside the building is also required. The installation of these two items at the service entrance will require additional space inside mechanical room.

Toilet room lavatories pipes are exposed and need to be insulated for ADA accessibility compliance.

Natural gas needs extended from site gas systems to the mechanical penthouse where a new building central heating plant is required for decentralization from site utilities.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for backflow prevention and metering will require additional building space or relocating the assembly to another location within the building.

The steam-fired potable water heaters should be replaced with a new potable water heater system that is compatible with the building's new heating system media (hot water, steam, etc.).

c. Lot/Building specific assumptions

i. Toilet room locations will remain. New building occupancy will utilize the toilet rooms at their present location.

7. HVAC

a. General Description

The building is currently connected to the site steam and brine line systems. The site steam and brine pipes rise up on the south side of OSE Building and enter the mechanical penthouse from the south side.

The central HVAC equipment is located on the roof and penthouse area. This includes five main central station AHUs (AHU-1, -2, -3, -4, -5), two steam to hot water HX and hot water pumping systems, a steam PRV assembly, zone heating hot water pumps, DDC controls by Andover Controls, pneumatic controls components, site compressed air for temperature control application, site steam mains, site brine mains, supply and return air duct distribution systems, and building zone controls. The building also has approximately 10 computer room AC units located in the building, with roof-mounted condenser units on the south end of the roof. These units are in good condition and have been well maintained. AHU-1 through AHU-5 are central-station, single-zone units each with a hot water heating coil, chilled water coil, and supply fan and remote return air fan. AHU-1, -2 have two speed motors, and AHU-3, -4, -5 have variable frequency drives (VFD). AHU-3 is not in operation at this time. This unit requires repair and maintenance. AHU-1, -2, -4 -5 are operating and are well maintained. All 5 units have DDC control by Andover Controls, and pneumatic control end devices. These units are all older but have been well maintained. They appear to be 10 to 15 years old.

The building heating system utilizes site steam, two steam PRV assemblies, main hot water pumps, and four zone heating inline hot water pumps. The main PRV assembly, steam to hot water HX, and pumps are older but have been well maintained. The secondary heating zone system including the PRV assembly, steam to hot water HX, and pumps are newer, in good condition, and have been well maintained.

The site brine lines provide cooling to the HVAC systems at this time. There are no central cooling systems installed in the facility at this time.

General exhaust is provided for toilet rooms and general building exhaust requirements. These units appear to be older but in good condition.

The existing temperature control systems include DDC controls by Andover Controls, and pneumatic devices from site compressed air, and electric/electronic control devices. This system may not be up-to-date to current technology for DDC control systems or replacement part availability.

b. List of basic work tasks

i. Building Modifications & Code

In general the HVAC AHU systems are older but have been well maintained. The useful life of the main air handling units AHU-1, 2, 4, and 5 is expected to be another 10 - 15 years. Units AHU-3 is not in operation and is in need of repair. Replacement of these units will be required for reliable HVAC system performance beyond the expected life of the units. Replacement of the central station AHUs should include upgrading outdoor air for current ventilation code requirements.

Decentralization of the OSE Building requires eliminating the site connections to the site brine lines and steam lines.

A new central heating system is required to provide heating media to the building when site steam is eliminated. This boiler system needs to be compatible with building HVAC heating components, process loads, and plumbing water heaters. This can be either a hot water system or a steam system.

The building is currently heated by site steam service to the HVAC systems. Decentralization will require the addition of a building heating system and fired by new site natural gas. A new heating boiler system is needed to provide heating media to the building HVAC system.

A new central cooling system is required to provide cooling media to the HVAC system when site brine is eliminated. This cooling system will provide chilled water to the AHU systems.

The heating system and cooling system can be added in the mechanical penthouse and roof, which might require architectural revisions, and structural support system renovations to the building. In addition, some mechanical system equipment and components located in the mechanical penthouse may need to be relocated to accommodate the new systems. The temperature control systems should be upgraded to current DDC technology. A new building compressed air system needs to be provided when site compressed air is eliminated. Control end devices need upgraded and replaced where deficiencies exist.

ii. Deferred Maintenance
The general, the HVAC systems that are active in the building have been well maintained. AHU-3 is not in operation and requires repair and maintenance.

iii. Demolitions
Replace the building steam heat and steam to hot water HX systems with a new facility central heating plant.

Replace the site compressed air system with a building compressed air system for temperature control systems.

Replace main AHU systems to extend useful expected life of system. Replace or upgrade building temperature control systems.

Add chiller system to facility for decentralization.

Renovate building system ductwork and zone controls for new occupancy.

c. Lot/Building specific assumptions

The building occupancy will be similar to how the building is currently occupied.

The building will be disconnected from site steam and brine systems.

All new HVAC equipment for a new heating plant, chiller service, etc., will be located on the roof or in the penthouse of the facility.

8. Electrical

a. General Description

The electrical service entrance to the building is at 480-VAC, 3-phase, 4-wire and terminates into an 800-amp motor control center and an 800-amp switchboard both located in the penthouse. Both have additional space capacity. A separate service at 480-VAC, 3-phase, 4-wire and 800 amps exists on the first floor near the cafeteria space. All sources are from the OSE substation which is just south of the building. Low power is obtained from a 500-KVA transformer located in the penthouse, 480-VAC to 208Y/120 VAC, which feeds a 1200 amp at 208Y/120 VAC busduct which traverses vertically from the penthouse to the first floor. At each floor, the busducts are tapped using a fused disconnect. The output of these switches is circuited to panelboards. A 1000 KVA pad mounted, liquid filled transformer will be supplied by DP&L. The 480 VAC, 3-phase, 4-wire secondary will be routed underground to a "main lugs only" 1600 amp switchgear. Two circuit breakers, both being 800 amps, will be provided. One will feed the cafeteria switchgear, and the other will feed the MCC in the penthouse.

The available watts per square foot density, excluding the 800-amp service near the cafeteria on the first floor, is 12.6 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. which includes local HVAC systems.

b. Listing of basic work tasks

i. Building Modifications & Code
A National Electrical Code (NEC) code deficiency issue may exist relating to the service entrance conductors and whether there is overcurrent protection at the entrance to the building. Building electrical drawings will be required to resolve this issue.

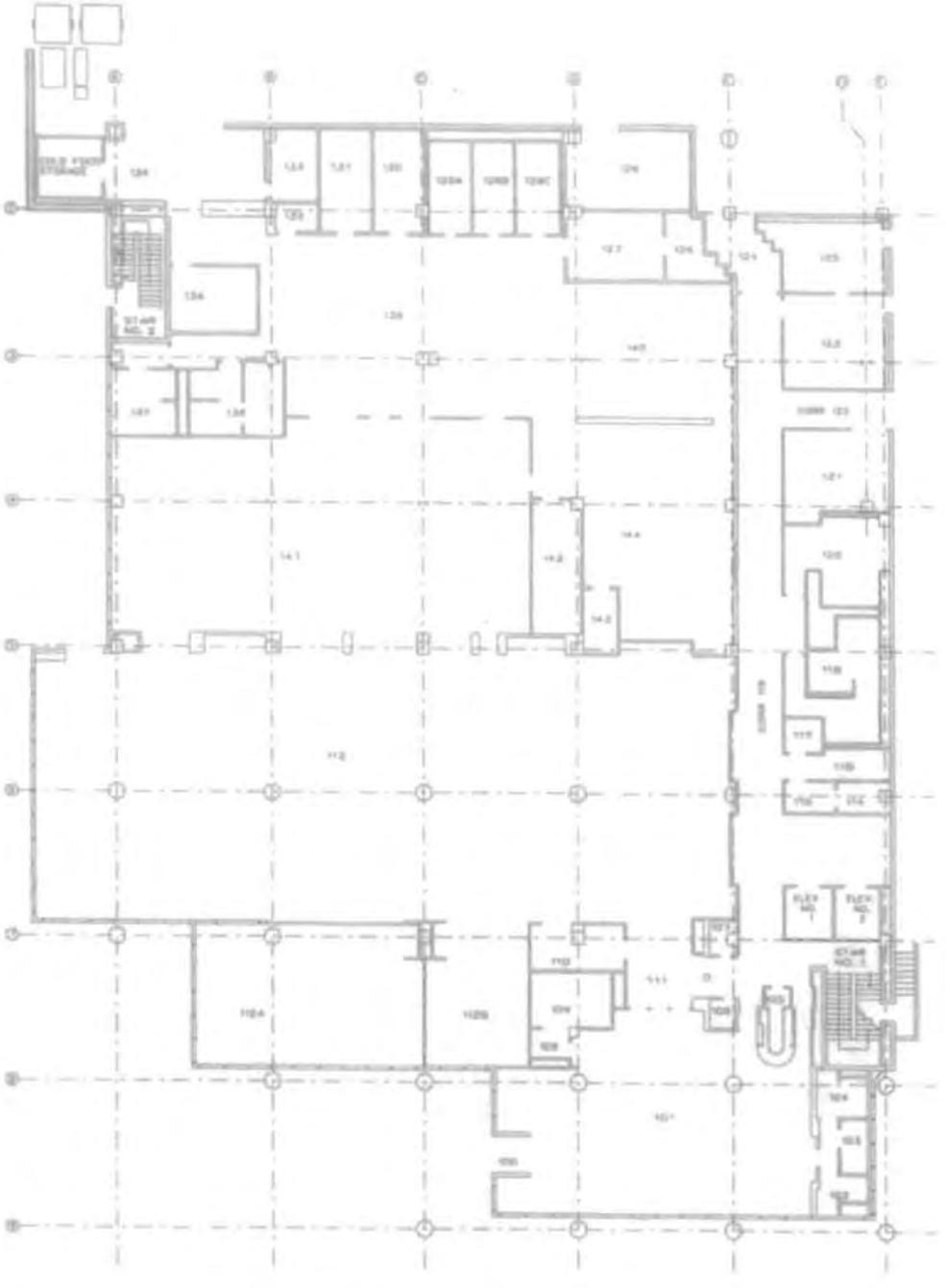
9. Telephone/Information Technology

a. General Description

Presently the service is part of DOE's switched system. New structure will be supplied from SBC's main line to the telephone backboard. SBC will provide the transmission media and termination for the phone service. MMCIC will decide when switchover will occur from the DOE network switched in "A" Building and the new SBC lines.

10. Fire Alarm System

a. The existing Fire Alarm Control Panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



OSE – BUILDING 1ST FLOOR

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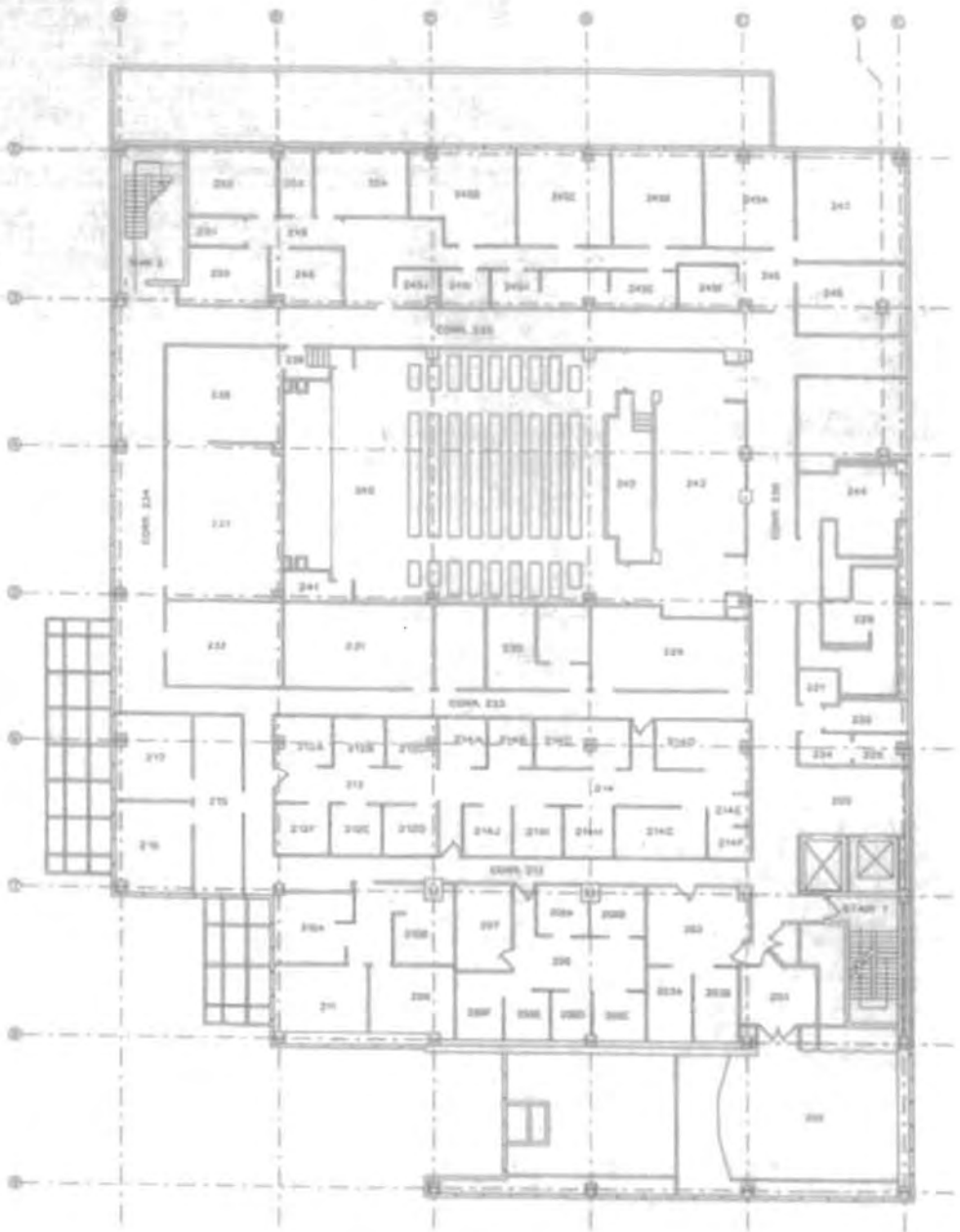

OSE – BUILDING 2ND FLOOR

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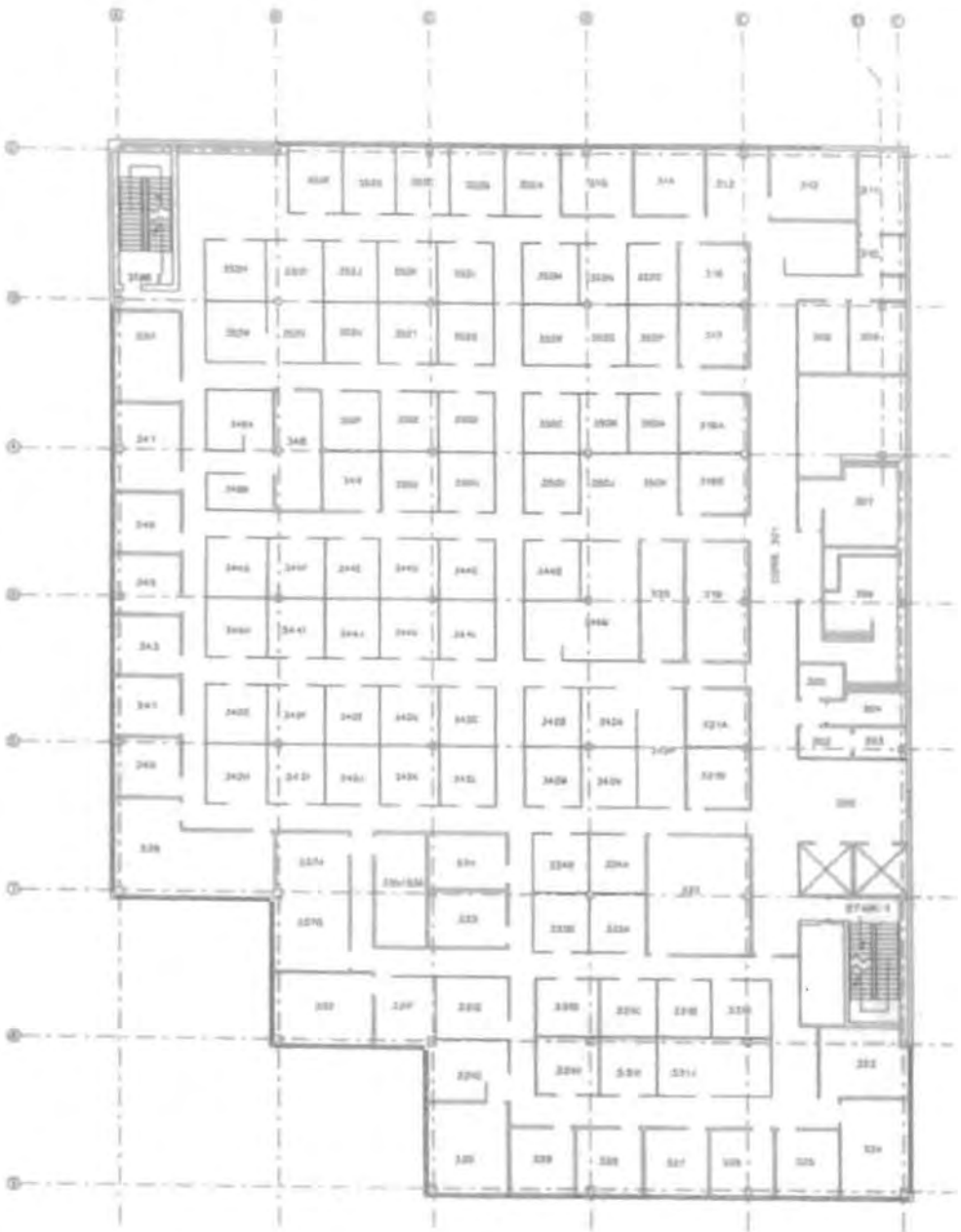

OSE - BUILDING 3RD FLOOR

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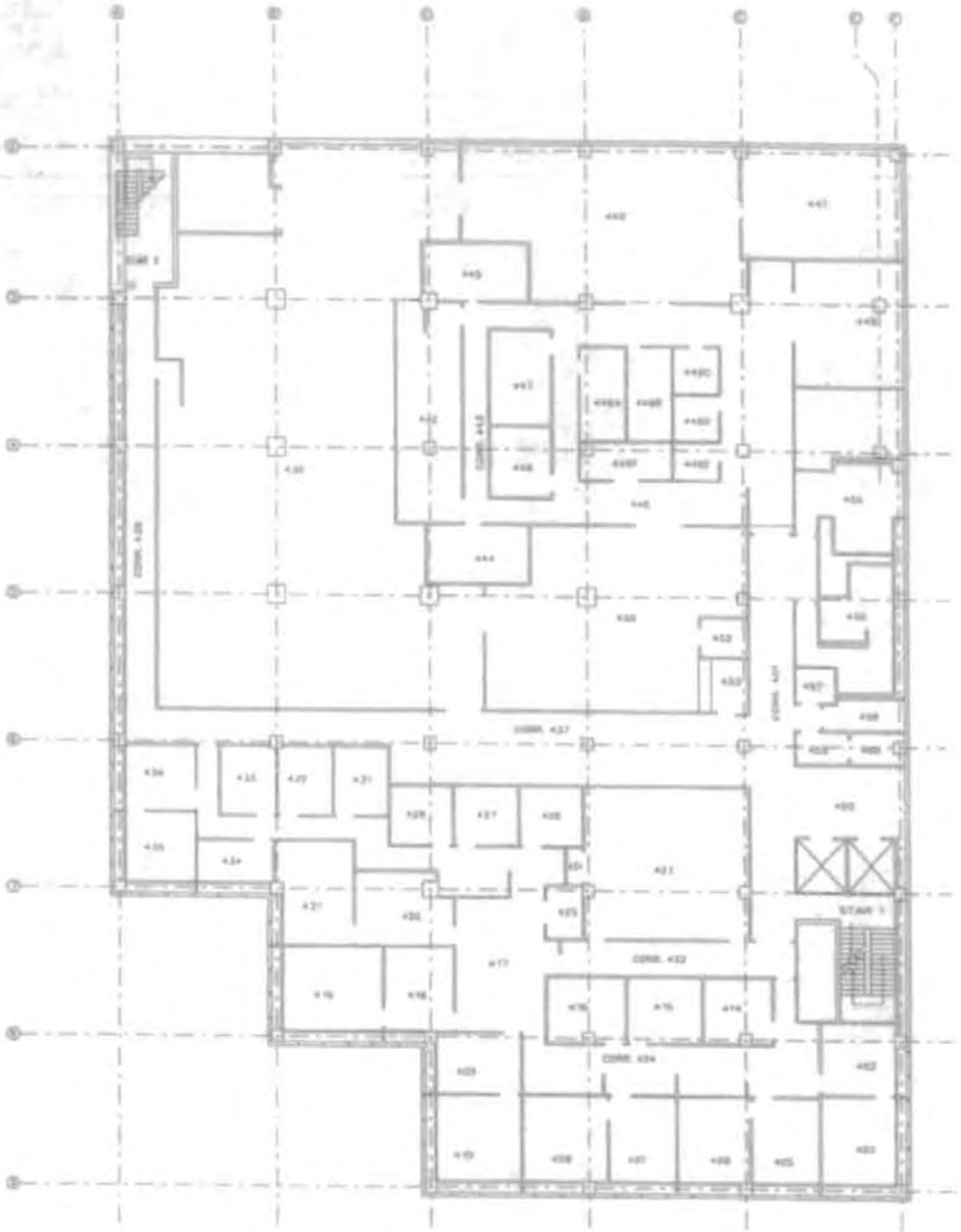

OSE – BUILDING 4TH FLOOR

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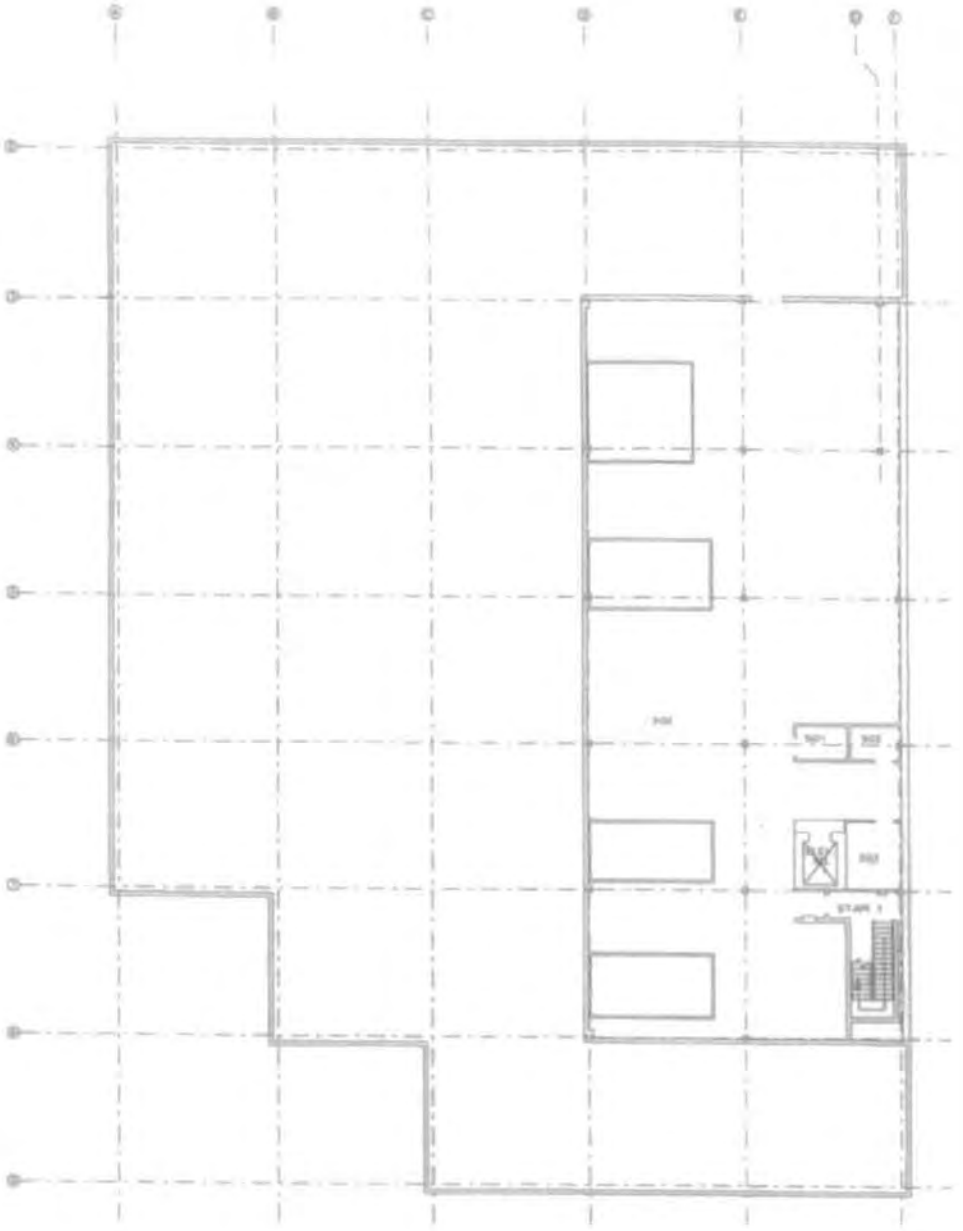

OSE – BUILDING PENTHOUSE

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MIAMISBURG, OHIO

Drawn By: | Checked By:
Drawing No: OSE-P.pdf
Project No: 19480-00 | Date: 01/20/03

A.5 LOT 21 BUILDING 45

1. General

a. Overview

Building 45 is an office/laboratory building that was part of the DOE complex. This building is located on the High-Density Campus and its gross measured area is 10, 260 square feet. This building will remain as an MMCIC building.

BUILDING 45

2. Civil

a. General Description

At the current time, this building is still occupied by DOE. It has a 3-inch ACP domestic water service from the Mound water system. The domestic service is not protected with a backflow preventer. It does have a 6-inch ACP fire line with a single check valve. It does have a fire booster pump. Two 4-inch sanitary laterals drain by gravity to the 8-inch main to the southeast of the building.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is expected to be adequate for this building. The water service will be connected to the City's medium pressure water system.

ii. Waste Water

The sanitary usage for this building is estimated to be 5.21 gallons per minute (gpm). For utility planning purposes, this building was considered 45% office, 30% laboratory, and 25% light industrial. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. However, the light industrial usage rate is estimated to be 0.40 gallon/square foot/day for

process, 0.10 gallon/square foot/day for potable, and both have a utilization rate of 1.0. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
DP&L will supply a 750-KVA pad-mounted liquid-filled transformer as service to the building. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductors will feed underground pad-mounted switchgear with a 1000-amp main breaker and a 600-amp and 400-amp feeder breaker. The 600-amp feeder breaker will feed the existing 600 amp – 480 VAC service entrance switchboard located in the main penthouse using the existing conduits from Manhole 25C. The 400 amp – 480 VAC feeder breaker will feed the new boiler/chiller building service.

iv. Gas
A new gas service is proposed for this building.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains east and north toward Capstone Circle.

vii. Roadway Improvements
No roadway improvements are associated with this building.

viii. Parking
Parking is planned for 32 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers.

The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Telephone/Information Technology
SBC will route new cable from the 900 pair near the Capital Court. MMCIC will supply the structure and SBC will supply and route the cable to the Demarc within the building.

3. Structural

a. General Description

Building 45 is two-story laboratory building with overall plan dimensions of approximately 144 feet by 90 feet. It is constructed of open-web steel roof/floor joists supported on load-bearing masonry walls.

The exterior masonry walls provide lateral stability through shear wall action.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
It is anticipated that a new mechanical building will be needed to house new boilers and chiller equipment which are required to separate the building from the existing site utilities.

ii. Deferred Maintenance
Add new masonry control joints at the corners of the existing mechanical penthouses. The lack of joints has caused large cracks to form in the walls due to thermal movement. The new joints will help minimize any future cracking in the walls.

4. Architectural

a. General Description

The building was originally constructed in the late 1960s, and subsequently the facility was added on to on two separate occasions. It is a two-story structure of 9,582 square feet and is constructed of concrete masonry unit load bearing walls and steel bar joist, metal deck and concrete floor construction. The interior finishes consist of painted gypsum wallboard or painted concrete masonry units.

Floor finishes consist of vinyl composition tile or carpeting. The ceilings consist of suspended lay-in acoustic tile in a metal grid. The exterior finish consists of painted concrete masonry units with some façade components of Exterior Insulation Finish System (EIFS). The several roofs to the building consist of either a coal tar built-up roof or a single-ply membrane. The windows are extruded aluminum with plastic laminate interior windowsills.

b. Listing of basic work tasks

i. Building Modifications & Code

The facility will require the addition of a boiler to heat the building once cut off from the main steam supply. The boiler will have to be housed in another addition to the building. Since the existing steam enters the building on the east side, this would be the ideal location for the boiler addition. Attention will have to be given to the steep grade in this location.

The existing wire mesh partition, which separates the elevator equipment room from the janitor's space does not comply with the building code which requires a solid wall to separate these two rooms. There are no other apparent building code violations.

ii. Deferred Maintenance

The existing roofing membranes and flashing need to be replaced.

Metal copings need to be installed on horizontal surfaces on the roof, which currently have an EIFS surface that is in very poor condition allowing water to penetrate the wall.

Sections of the building with stone copings will require the coping joints to be caulked.

In certain areas on the roof where the stone coping and the EIFS vertical wall finish meet is a potential problem and should be addressed. A new metal coping would resolve this potential problem.

The hollow metal door and frame on the roof to the northeast mechanical equipment room is badly rusted and should be replaced.

The exterior metal stairs to the roof have started to rust. The rust should be removed and the steel repainted.

The bearing plates to the chain link fence on the roof are rusting and should be painted.

The section of safety railing on the roof above the main entrance needs the rust removed and the rails repainted.

All exposed painted metal surfaces on the roof need to be repainted.

At the existing exterior concrete stairs on the east side of the building, there are signs of some heaving of the concrete steps. This does not present a problem at this time; however, over time the condition could deteriorate.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the east side of the building on the first floor in an end corridor. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

b. Listing of basic work tasks

i. Building Modifications & Code

The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure, and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure, and flow may be reduced. This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

Adding fire protection sprinkler coverage to a new mechanical boiler room addition is required.

ii. Deferred Maintenance

The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure, and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Potable water enters the building on the east side of the building in a janitor's closet on the first floor. There is no backflow prevention device or meter present. Building sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. The building utilizes an electric water heater. These systems are in good condition.

b. Listing of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a reduced pressure principle backflow preventer assembly for protection of site water. Adding a water meter assembly inside the building is also required. The installation of these two items at the service entrance will require additional space inside the building, and possibly relocating the service main location inside the building.

Toilet room lavatories pipes are exposed and need to be insulated for ADA accessibility compliance.

Add plumbing service to a mechanical boiler room addition. This includes natural gas service, potable water with backflow preventions, sanitary, and possibly storm.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for backflow prevention and metering will require additional building space or relocating the assembly to another location within the building.

c. Lot/Building specific assumptions

i. Toilet room locations will remain. New building occupancy will utilize the toilet rooms at their present location.

7. HVAC

a. General Description

The HVAC system consists of central station air handling units (AHU) with split DX system cooling, steam heat, direct digital control (DDC) by Andover Controls, and a ducted distribution system. The central equipment is located on the roof and in two roof penthouse mechanical rooms.

The northeast penthouse houses an older central station AHU, DDC control and pneumatic controls panels, an abandoned steam heat exchanger (HX) system (disconnected), an older system powered condensate return pump system, a newer temperature controls compressed air system, a steam pressure reducing valve

(PRV) assembly, abandoned hot water circulating pump system (disconnected), and a packaged outdoor condensing unit serving the AHU. This system serves the northeast area of the building.

The penthouse located in the center area of the roof houses a newer central station AHU, a newer steam to hot water HX and pumping system, a steam PRV assembly, a newer system powered condensate return pump system, DDC control and pneumatic controls panels, and a packaged outdoor condensing unit serving the AHU. This system serves the central and southwest areas of the building.

Supply air and return air duct systems are extended from the penthouses. Rooftop exhaust fans serve toilet room and general building exhaust requirements. Older process exhaust fans serving fume hoods and other areas are located on the roof.

The building temperature control systems are Andover Controls. DDC controls are used, with pneumatic control components and devices, with some electric or electronic control components. Space thermostats/sensors provide zone control in occupied spaces. Controls in the northeast penthouse are in fair to good condition. Controls in the center penthouse are in good condition.

b. Listing of basic work tasks

i. Building Modifications & Code

The northeast penthouse AHU system and associated outdoor AC unit are older and suspect. This system should be replaced.

The center penthouse AHU system is newer and in good shape. Proper outdoor air ventilation to occupied spaces may require adjustments to the system.

Control systems in the older system should be replaced. The newer AHU system controls should be calibrated and checked for proper operation and commissioning.

The building air distribution system and zone controls will need to be modified as appropriate for new building occupancy. Adding thermostat zones of control and renovation ductwork systems will be required to accommodate new building use.

Replace process exhaust fan systems per user requirements.

Provide HVAC system testing, adjusting, balancing, and commissioning for new occupancy.

The building is currently heated by site steam service to the HVAC systems. Decentralization will require the addition of a building heating system, fired by new site natural gas. A new heating boiler system is needed to provide heating media to the building HVAC system. Steam would be compatible with existing AHUs and HXs. Hot water would require retrofitting some central equipment for hot water heat.

The new central heating boiler system requires a mechanical room addition, possibly on the northeast area of the building. A secondary option is to put the boiler system on the roof, which would require architectural additions to the penthouse, and structural support system renovations to the building.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained. The abandoned systems as described above no longer operate and have not been maintained.

iii. Demolitions
Replacement of the older HVAC system in the northeast penthouse is required.

Renovate building system ductwork and zone controls for new occupancy. Renovate central AHU systems for proper outdoor air ventilation to occupied spaces.

Replace process exhaust systems with new based upon user needs.

c. Lot/Building specific assumptions

The building will be disconnected from site steam.

The existing HVAC system capacity is sufficient for the new building occupancy. This will be verified when existing building documents are available for the HVAC systems.

The building occupancy will be similar to how the building is currently occupied.

8. Electrical

a. General Description

The electrical service entrance to the building is at 480-VAC, 3-phase, 4-wire and terminates into a 600-amp switchboard with additional space capacity. The source of the service is from a DOE substation. Low power is obtained from multi-transformers which feed numerous panelboards.

The available watts per square foot density is 44.2 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. and the laboratory space would be 11.5 watts/sq. ft. Sufficient capacity exists to allow the addition of future loads to be attached to the building's electrical system.
No electrical code deficiencies were noted relating to the building.

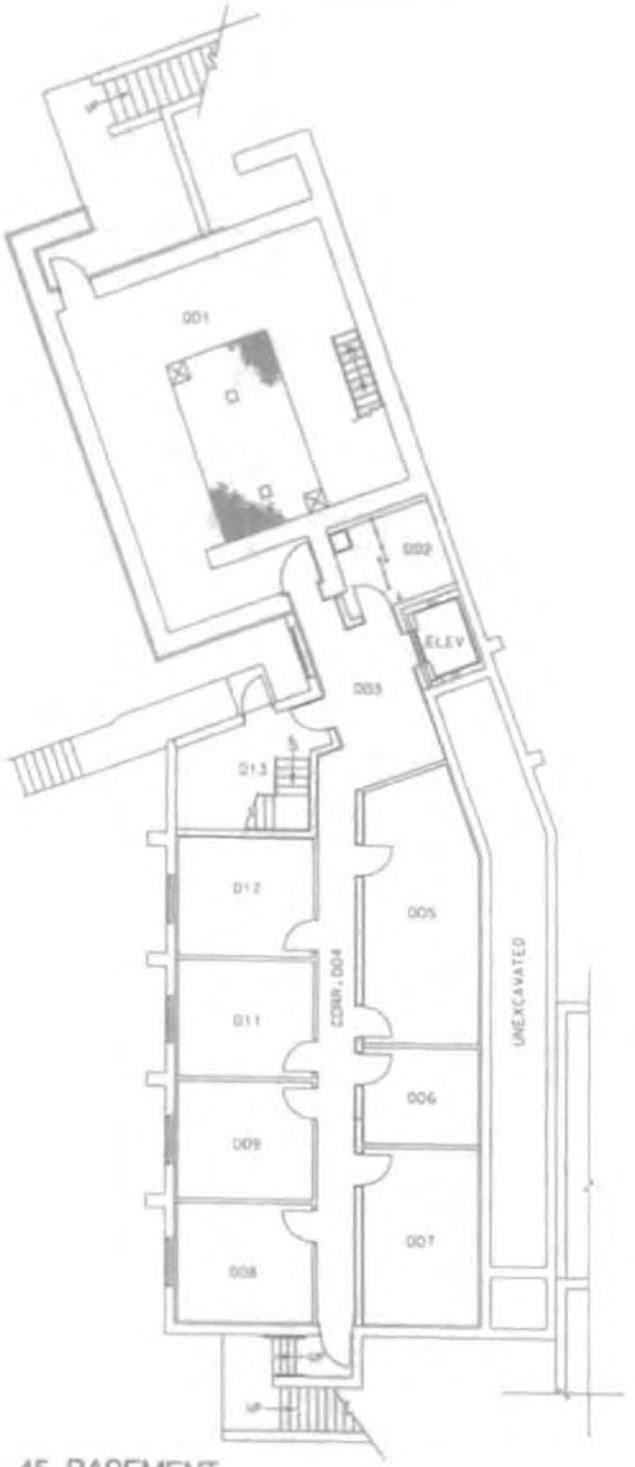
9. Telephone/Information Technology

a. General Description

The telephone service size is adequate for the building. Presently the service is part of DOE's switched system. Isolation from DOE's system will require new lines from Ameritech.

10. Fire Alarm System

a. The existing Fire Alarm Control Panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



BUILDING 45 BASEMENT

BWSC Barge Waggoner Sumner & Cannon, Inc.
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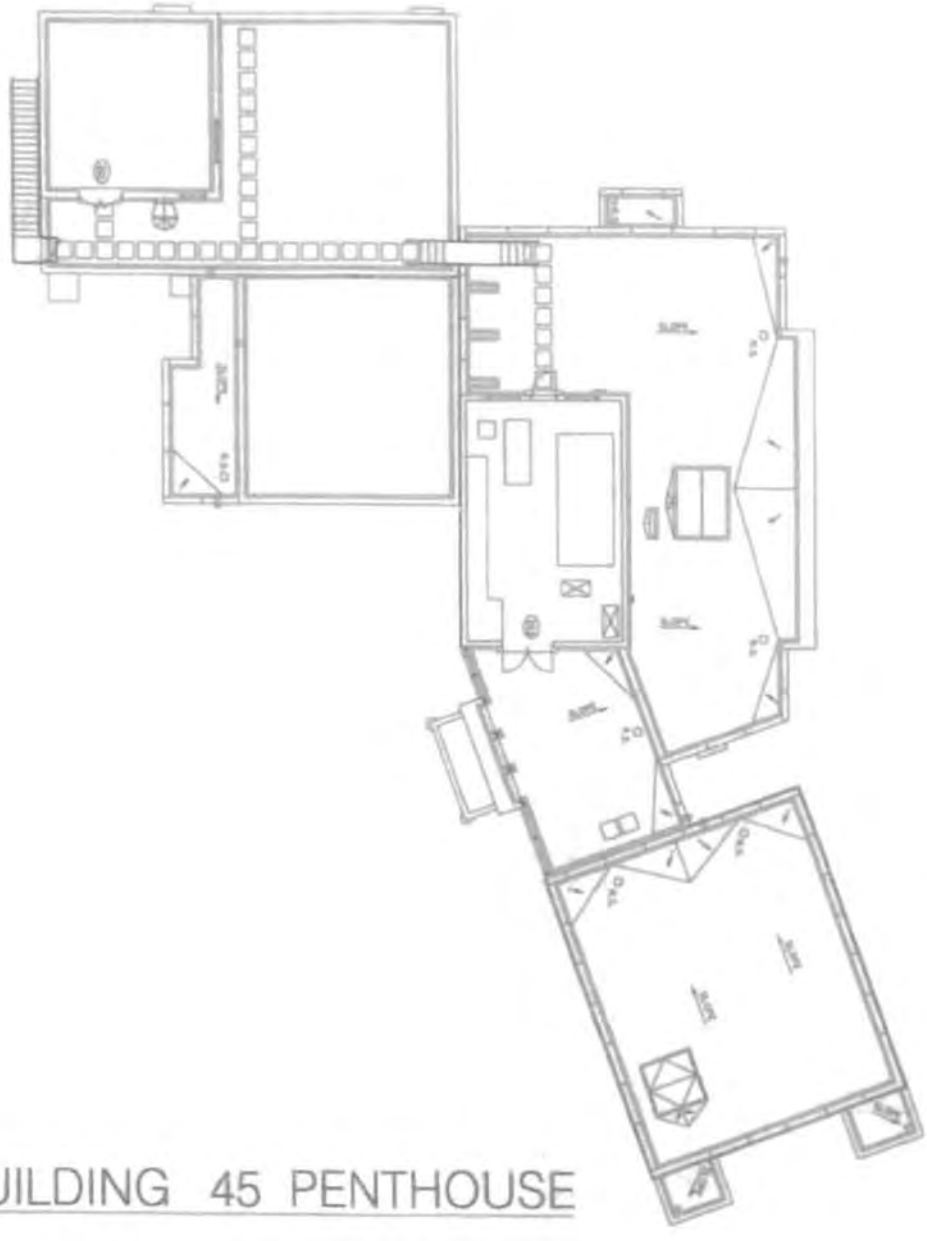

BUILDING 45 PENTHOUSE

BWSC Barge Waggoner Sumner & Cannon, Inc.
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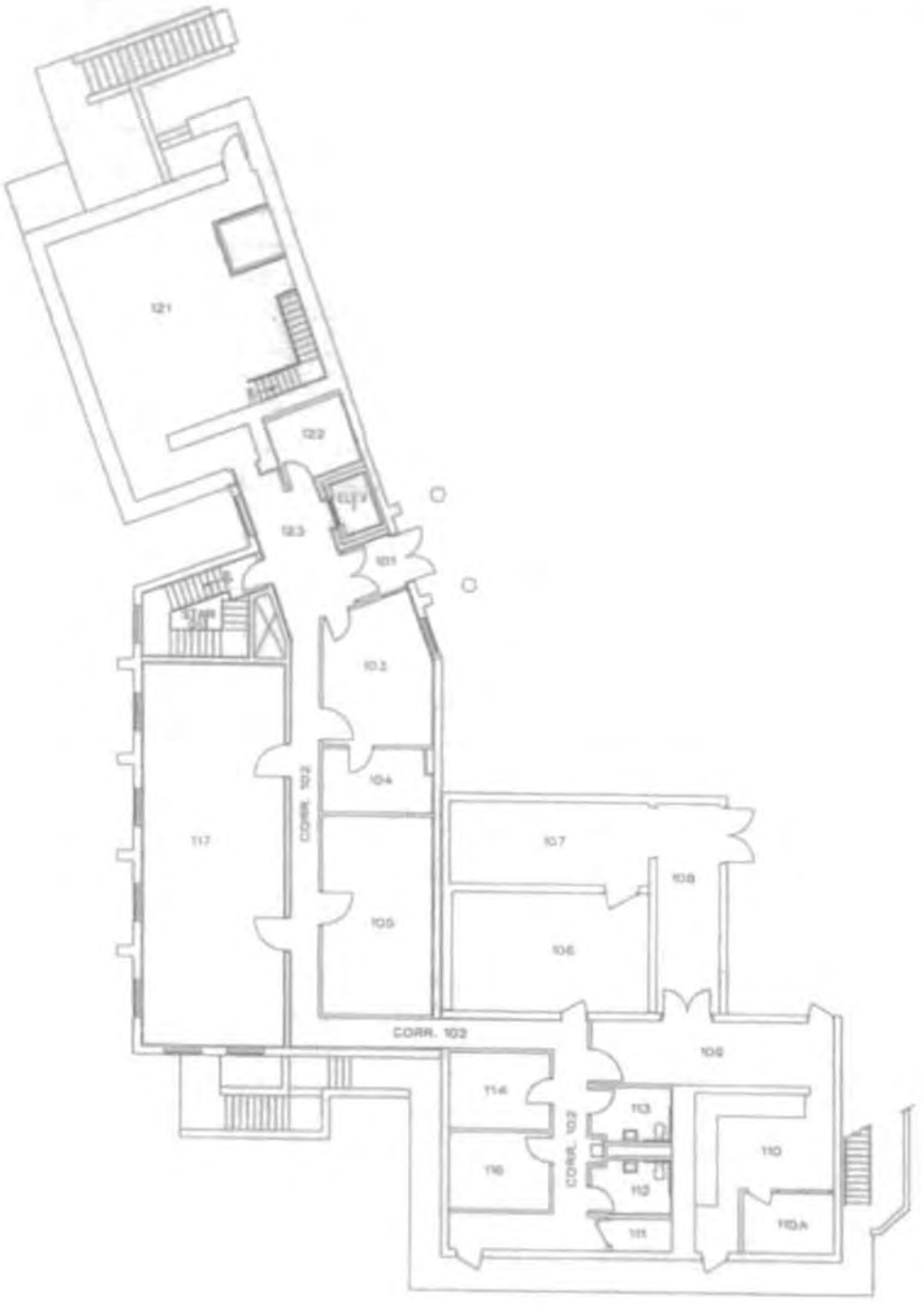

BUILDING 45 1ST FLOOR

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A.6 LOT 17 BUILDING 61

1. General

a. Overview

Building 61 is an office/warehouse building that was part of the DOE complex. This building is located on the Low-Density Campus and its gross measured area is 44,540 square feet. This building will remain as an MMCIC building.

BUILDING 61

2. Civil

a. General Description

At the current time, this building is still occupied by DOE. It has two domestic water services and the sizes are unknown. The domestic services are not protected with a backflow preventer. It does have two 8-inch fire lines, which have single check valves. It does not have a fire booster pump. The sanitary lateral drains by gravity to a 6-inch sanitary main. There is an existing gas service to this building.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. Since sizes of the existing domestic water services are unknown, it is assumed that both of the services will be adequate for this building. The water will be connected to the City's medium-pressure water system.

ii. Waste Water

The sanitary usage for this building is estimated to be 35.03 gallons per minute (gpm). For utility planning purposes, this building was considered 5% office, 5% laboratory, and 90% light industrial. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the

1996 Utility Transfer Feasibility Study. However, the light industrial usage rate is estimated to be 0.40 gallon/square foot/day for process, 0.10 gallon/square foot/day for potable, and both have a utilization rate of 1.0. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
DP&L will supply a 500-KVA pad-mounted liquid-filled transformer as service to the building. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductors will feed underground to the 600 amp – 480 VAC service entrance switchboard. The new 600- amp service conductors/ conduit will intercept the existing building service outside the building in order to prevent disturbing the building slab.

iv. Gas
It is anticipated that the existing gas service is adequate for this building.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains west toward Vanguard Boulevard.

vii. Roadway Improvements
No roadway improvements are associated with this building.

viii. Parking
Parking is planned for 152 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk, and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Formal Landscaped Areas
The parking lot area at Mound Road will require new landscaping.

xii. Telephone/Information Technology
SBC will route new cable from Mound Road. MMCIC will supply the structure from the Light Span Box to the building Demarc and SBC will supply and route the cable.

3. Structural

a. General Description

Building 61 is a two-story building used primarily as a warehouse with some office space. It is constructed of load-bearing precast concrete exterior walls with an interior steel frame.

The second floor has a live load capacity of approximately 100 PSF. Lateral loads are resisted through shear wall action in the external concrete walls.

4. Architectural

a. General Description

Building 61 was originally constructed in 1980 as a single-story, 8,052 square foot general warehouse facility. In 1983 a building addition was built on the south and east sides. The 45,490 square foot facility provides shipping, receiving, and warehouse operations. The main floor consists of 33,973 square feet of warehouse and support facilities. The second floor consists of 588 square feet of mezzanine storage and 10,929 square feet of office space in the northwest corner of the building.

The first floor is a concrete slab on grade. The supporting structure consists of tilt-up concrete exterior walls and interior steel columns support the steel-framed roof structure. The second floor framing consists of hollow core concrete deck with a concrete topping slab supported by steel frame enclosed with gypsum board. The original roof is framed with steel purlins and rigid steel-framed members. Open web steel joists and joists girders support the roof addition.

A ballasted EPDM roof membrane covers a 20 ft wide flat roof down the middle of the building between two pitched standing seam metal roofs. The office area has punched aluminum windows in the precast concrete panels. The facility due to its design will most likely remain a warehouse type facility with administrative support facilities. Interior renovation in the office area will be required including replacement of lay-in acoustic ceiling, lighting, carpeting and wall finishes. This

task could be undertaken by the future tenant. The building exterior appearance needs to be enhanced. This can be accomplished by using an EIFS system to articulate the exterior walls with a more appealing treatment. The main entrance also needs to be enhanced with a new entrance and canopy.

b. Listing of basic work tasks

i. Building Modifications & Code
There are no apparent building code violations.

The restrooms will require upgrading to meet ADA requirements.

The building exterior elevations and entrance could be enhanced from the aesthetic point of view.

ii. Deferred Maintenance
The standing seams of the metal roof appear to need to be recrimped.

The metal roof needs to be repainted.

The flat EPDM roof will need replacement in the near future as it is nearing the end of its useful life.

The loading dock seals and bumpers will require replacement due to deterioration.

Windows in the office area will require recaulking.

Restroom and locker facilities need to be cleaned and louvers repainted.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building at two locations. One riser is located on the north side of the building in the central stairwell. The other riser is located in the northwest corner of the building. Each riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

b. List of basic work tasks

i. Building Modifications & Code
The building's main fire risers and wet pipe sprinkler systems are assumed to be designed and sized for the static pressure, residual pressure and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler systems in order to accommodate a potential reduced capacity in the site water main serving the system.
When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

ii. Deferred Maintenance
The fire suppression systems have been well maintained and are in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Potable water enters the building at two locations, each adjacent to the two fire protection mains. One 2-inch line enters on the north side of the building in the central stairwell, and the other in the northwest corner of the building. There are no backflow prevention devices or meters present. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures on the second floor are ADA accessible, including water closets, urinals, lavatories and water coolers. Plumbing fixtures on the first floor include water closets, urinals, lavatories, water coolers, and showers. The first floor plumbing fixtures do not appear to be ADA accessible. The building utilizes an electric water heater and a hot water to hot water heater exchanger system. There are showers located in the first floor locker room areas. The plumbing systems are in fair to good condition.

A new natural gas main enters the building in the northwest side of the building. The natural gas serves the new central steam boiler system located in the warehouse area.

b. List of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a reduced pressure principle backflow preventer assembly for protection of site water. Adding a water meter assembly inside the building is also required. The installation of these two items at the service entrance will require additional space.

Toilet room lavatory pipes are exposed and need to be insulated for ADA accessibility compliance.

Plumbing fixtures on the first floor, including water closets, urinals, lavatories, water coolers and showers need to be upgraded for ADA compliance. Refer to the Architectural narrative for further information.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for backflow prevention and metering will require additional space near the water main locations.

c. Lot/Building specific assumptions

i. Toilet room locations will remain. New building occupancy will utilize the toilet rooms at their present location.

7. HVAC

a. General Description

The building is currently disconnected from site steam and brine systems. The HVAC system consists of central station AHU's serving office type areas, heating and ventilating (HV) units serving warehouse areas, DX split systems cooling for AHU's with cooling, a building central steam boiler system by Andover Controls, and DDC temperature controls with electric end devices. The central steam boiler system is new. The balance of the HVAC system appears to be the building's original equipment, which was installed around 1980.

The office area second floor is served by AHU-1, located on the first floor Mechanical Room 118. This unit is a four-zone multi-zone unit with steam heat and DX cooling. The split system condensing unit is located on the south end of the building.

The first floor work areas are served by HV-1, located on the first floor in Mechanical Room 118. This unit is a single-zone unit with steam heat. The office area in the northwest corner of the building is served by AHU-2 and is hung under the structure in the warehouse adjacent to the spaces. This unit is a small unit that looks newer and is cooled only with a small split DX condensing unit located outdoors on the northwest side of the building.

The warehouse area is served by three HV units HV-2, 3,4 that are hung under the roof structure. One unit is located on the south wall in the southeast section, one unit is located on the south wall in the southwest section, and one unit is located on the west wall in the west-central area. Each unit is a single-zone unit with steam heat and ventilation air.

General exhaust fans serve toilet rooms, locker/shower areas, and office area general building exhaust requirements.

b. List of basic work tasks

i. Building Modifications & Code
Since much of the HVAC systems installed in this facility are the original systems, their age can be approximated to be from 20-23 years old. This equipment appears to have been well maintained, but is older. This equipment can be expected to reach the end of its useful life in the next 2-5 years. It is therefore recommended to replace AHU-1 and ACCU-1 (Condensing Unit), HV-1, -2, -3, -4 and related secondary systems.

Provide new DDC temperature control systems throughout the facility to bring equipment up to state-of-the-art control technology, to be newer systems compatible, and make replacement parts and technology readily available.

Renovate AHU systems outdoor air ventilation to current code requirements. This will occur with equipment replacement.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained.

iii. Demolitions
Replace and renovate HVAC systems described above.

Renovate building system ductwork and zone controls for new occupancy.

c. Lot/Building specific assumptions

The existing HVAC system capacity is sufficient for the new building occupancy. This will be verified when existing building documents are available for the HVAC systems.

The building occupancy will be similar to how the building is currently occupied.

8. Electrical

a. General Description

The electrical service entrance to the building is at 48-VAC, 3-phase, 4-wire and terminates into a 600-amp switchboard with additional space capacity. The source of the service is from the DOE substation located northeast of the building. Low power is obtained from multi-transformers which feed numerous panelboards.

The available watts per square foot density is 9.3 watts/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. and the non-air conditioned warehouse space would be 2.1 watts/sq. ft. Combined, the weighted average watts/sq. ft. density would be 4.1 watts/sq. ft. Sufficient capacity exists to allow the addition of future loads to be attached to the building's electrical system.

9. Telephone/Information Technology

a. General Description

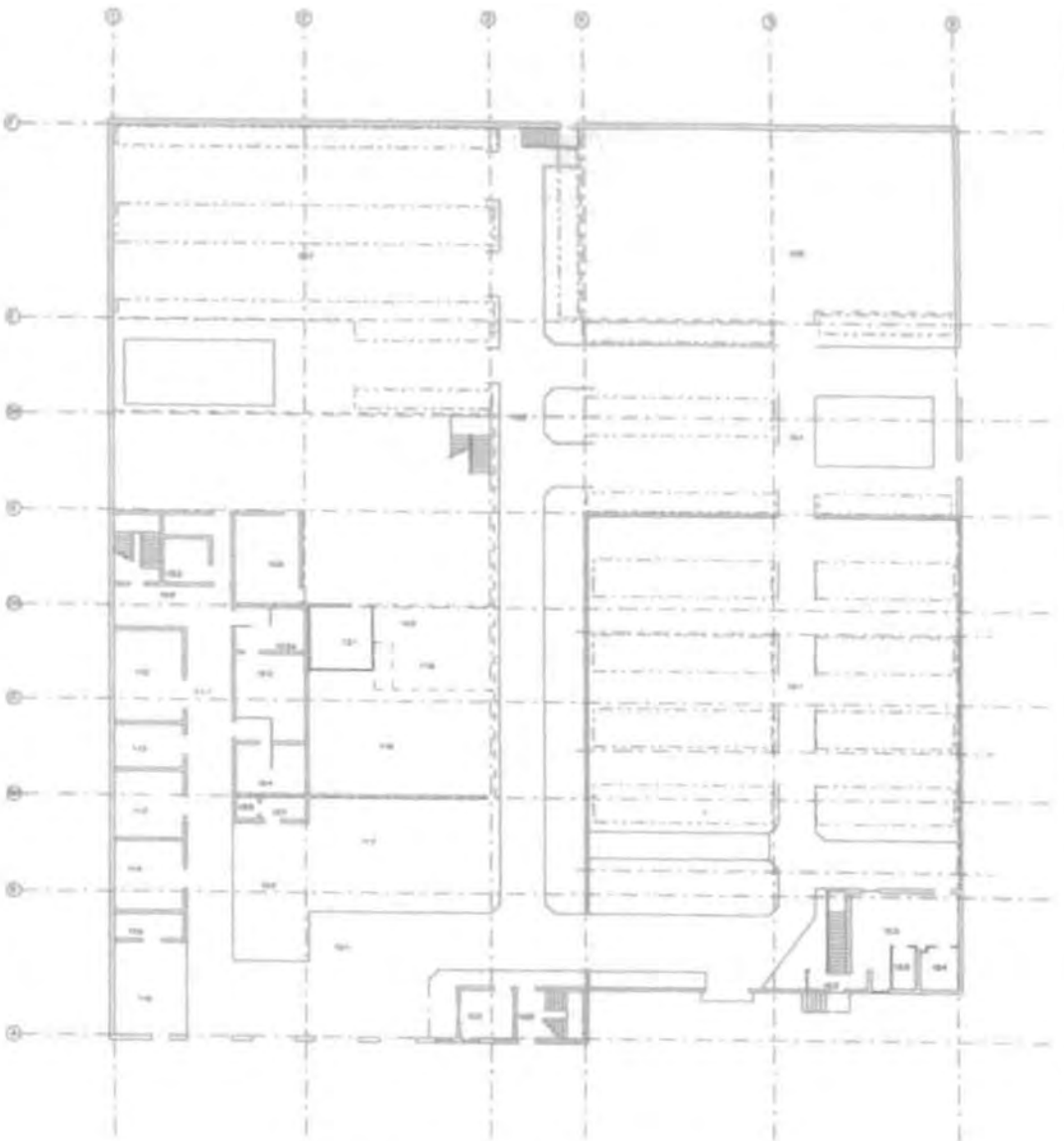
The telephone service size is adequate for the building. Presently, the service is part of DOE's switched system. Isolation from DOE's system will require new lines from Ameritech.

b. Listing of basic work tasks

i. Building Modifications & Code
No electrical code deficiencies were noted relating to the building.

10. Fire Alarm System

a. The existing fire alarm control panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



BUILDING #61 1ST FLOOR

BWSC | BARGE WAGGONER SUMNER & CANNON, INC.
ENGINEERS ARCHITECTS PLANNERS AND SURVEYORS

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COMPREHENSIVE REUSE PLAN UPDATE
MIAMISBURG, OHIO

DRAWING NO. 61-1.pdf
PROJECT NO. 19480-00
DATE 01/20/03

BUILDING #61 2ND FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

MATC

COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

Drawn By:	Checked By:
Drawing No.	61-2.pdf
Project No.	19480-00
Date	01/20/03

A.7 LOT 26 BUILDING 126

BUILDING 126

1. General

a. Overview

Building 126 is an office building that was part of the DOE complex. This building is located on the Medium-Density Campus and gross measure area is 11,570 square feet. This building will remain as an MMCIC building.

2. Civil

a. General Description

At the current time, this building is still occupied by DOE. It has a 2-inch copper domestic water service from the Mound water system. The domestic water service is protected with a reduced pressure backflow preventer. It does have a 6-inch fire line. The sanitary lateral drains by gravity to a 6-inch sanitary main. There is an existing 2-inch gas service to this building.

b. List of basic work tasks

i. Water

The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is adequate for this building. The water will be connected to the City's medium pressure water system.

ii. Waste Water

The sanitary usage for this building is estimated to be 4.15 gallons per minute (gpm). For utility planning purposes, this building was considered 80% office and 20% laboratory. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallons/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
DP&L will supply a 500-KVA pad-mounted liquid-filled transformer as service to the building and Boiler Building. This transformer will be located on the south side of the building adjacent to the new Boiler Building. High voltage service will be provided to the transformer by DP&L from the high voltage line routed along Mound Avenue. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductors will feed underground to the existing 400 amp – 480 VAC service entrance to the building and to a 200 service to the boiler building. The service entrance to this building will be a main breaker motor control center.

iv. Gas
It is anticipated that the existing gas service to the building is adequate.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains west to a cross-country sewer which drains north to Vanguard Boulevard.

vii. Roadway Improvements
No roadway improvements are associated with this building.

viii. Parking
Parking is planned for 42 spaces.

ix. Parking Lighting
Parking lot lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Building electrical power, controlled by an adjustable photoelectric cell and timer, will be used to illuminate the parking areas. The photocell will allow the lights to "turn on" at dusk and the timer will allow the lights to "turn off" during the night without waiting for dawn to arrive.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Telephone/Information Technology
SBC will route new cable from the Mound Road. MMCIC will supply the structure and SBC will supply and route the cable.

3. Structural

a. General Description

Building 126 is a single-story building used for office space. It is constructed of load-bearing concrete masonry exterior walls with a wood truss roof structure.

Lateral loads are resisted through shear wall action in the external concrete masonry walls.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
It is anticipated that a new addition will be needed to house new boilers and chiller equipment which are required to separate the building from the existing site utilities.

ii. Deferred Maintenance
No deferred structural maintenance items were noted.

4. Architectural

a. General Description

Building 126 was constructed in 2001 as a single-story 12,500 square foot administrative office building. It consists of concrete slab on grade floor, load-bearing concrete masonry unit exterior walls, with brick veneer. The roof structure is made up of prefabricated wood roof trusses and a standing seam metal roof. The windows are extruded aluminum with a duranodic finish and 1-inch insulated tinted glass. Finishes on the interior are commercial carpet floor covering, painted gypsum wallboard partitions, and suspended lay-in acoustic tile ceilings. This facility is ready for a new tenant without having any modifications or maintenance to be performed.

b. Listing of basic work tasks

i. Building Modifications & Code

There are no apparent building code violations.

The facility will, at the point of being cut off from the central steam, require installation of a boiler and an addition to the building to accommodate it.

ii. Deferred Maintenance

The facility has virtually a maintenance-free exterior and should not require any maintenance in the foreseeable future.

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the south side of the building in the main mechanical room. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

b. List of basic work tasks

i. Building Modifications & Code
The building's main fire riser and wet pipe sprinkler system is designed and sized for a 40 psig static pressure, 25 psig residual pressure, and 1000 gpm. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure, and flow are anticipated to be sufficient to serve this system. A double-check backflow preventer is added to the fire riser assembly.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required. This would be done to accommodate changes in ceiling systems, wall locations, etc.

Adding fire protection sprinkler coverage to a new mechanical boiler room addition is required.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure, and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure, and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Potable water enters the building on the south side of the building in the mechanical room. There is a reduced pressure principle backflow preventer installed in the main service to the building. The main is not equipped with a metering device in the building. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. The building utilizes an electric water heater. These systems are in new/excellent condition.

b. List of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a water meter assembly inside the building. The installation of this device at the service entrance will require additional space inside the mechanical room.

Add plumbing service to a mechanical boiler room addition. This includes natural gas service, potable water with backflow preventions, sanitary, and possibly storm.

ii. Deferred Maintenance
The plumbing systems have been well maintained and are in new condition. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for metering will require additional space in the mechanical room.

c. Lot/Building specific assumptions

i. Toilet room locations will remain. New building occupancy will utilize the toilet rooms at their present location.

7. HVAC

a. General Description

The building is currently disconnected from site steam and brine systems. The building HVAC system utilizes site hot water piping from the boiler building on the Medium-Density Campus, and cooling from a packaged outdoor condensing unit DX system. The HVAC system consists of a central AHU, central DDC controls system by The Trane Company, supply and return air duct distribution systems, and room zone controls.

General exhaust is provided for toilet rooms and general building exhaust requirements.

b. List of basic work tasks

i. Building Modifications & Code
The building systems are in new/excellent condition and have been well maintained.

A new central hot water boiler system is required in order to disconnect from the site hot water lines from the Medium-Density Campus boiler plant. This is recommended to be a boiler room addition to the mechanical room on the south end of the building at the mechanical room. Retrofit this area for the boiler room addition, including relocating the outdoor condensing unit, utility piping systems (potable water, fire water, sanitary, storm), doors, louvers, etc., as required.

This facility is new and has been installed and maintained per code. There are no major items of concern for code issues.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained.

iii. Demolitions
Eliminate the site heating hot water piping service to building.

Make renovations to support adding a building heating plant to the facility.

c. Lot/Building specific assumptions

The building occupancy will be similar to how the building is currently occupied.

8. Electrical

a. General Description

The electrical service entrance to the building is at 480 VAC, 3-phase, 4-wire and terminates into a 400-amp switchboard with space capacity. The source of the service is from the AF substation located south of Building 50. Low power is obtained from a 75-KVA transformer which feeds a 225-amp, 42-pole, 208Y/120-VAC, 3-phase, 4-wire panelboard.

The available watts per square foot density is 22.6 watt/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. Sufficient capacity exists to allow the addition of future decentralized mechanical units to be attached to the building's electrical system.

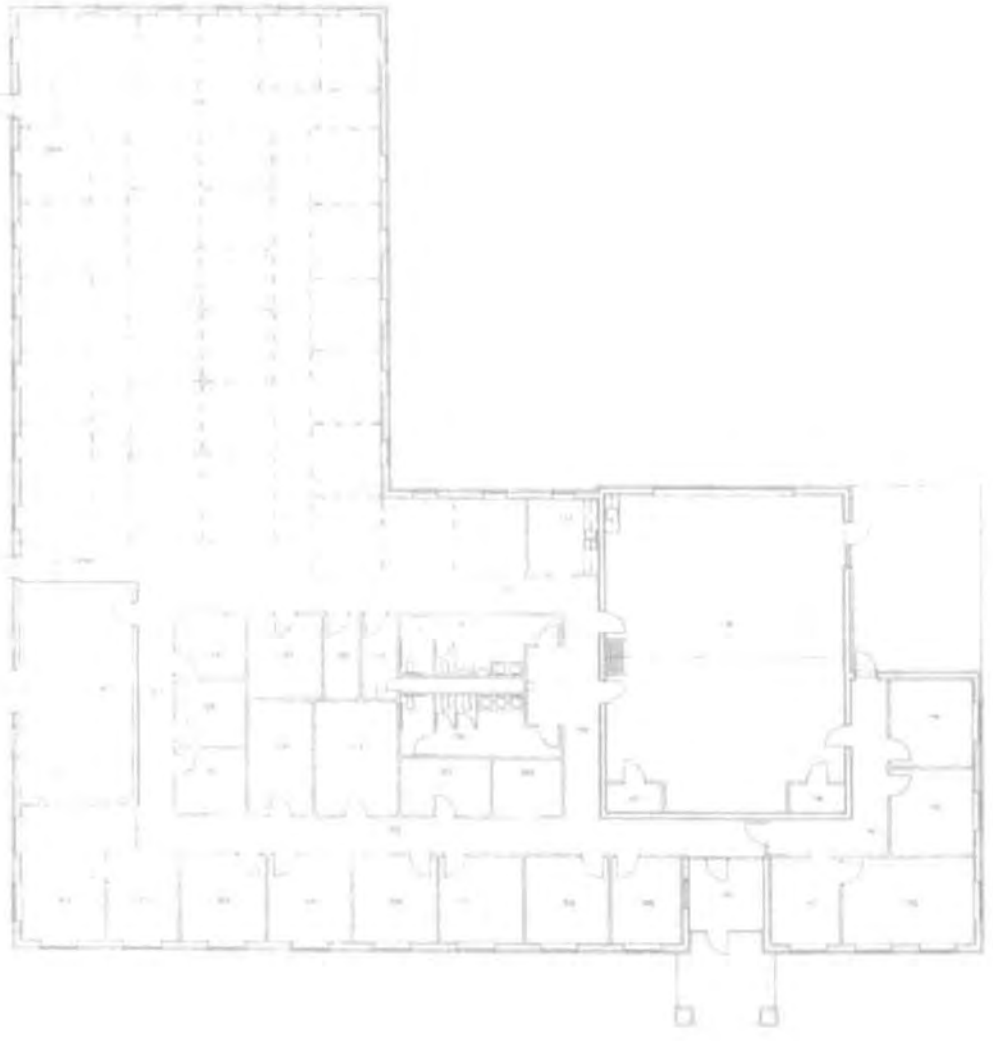
9. Telephone/Information Technology

a. General Description

The telephone service size is adequate for the building. Presently the service is part of DOE's switched system. Isolation from DOE's system will require new lines from Ameritech.

10. Fire Alarm System

a. The existing Fire Alarm Control Panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.



BUILDING 126 1ST FLOOR

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COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

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A.8 LOT 30 BUILDING 102

BUILDING 102

1. General

a. Overview

Building 102 is an office building that was part of the DOE complex. This building is located on the Medium-Density Campus and its gross measured area is 10, 320 square feet. This building will remain as an MMCIC building.

2. Civil

a. General Description

The building has a 2-inch water service from the Mound water system; its pipe material is unknown. The domestic service is not protected with a backflow preventer. It does have a 6-inch fire line; its pipe material is unknown. It does not have a fire booster pump. The sanitary lateral drains by gravity to a 6-inch sanitary main. There is a gas service to this building.

b. List of basic work tasks

Water
The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is adequate for this building. The water will be served by the City's medium pressure water system.

ii. Waste Water
The sanitary usage for this building is estimated to be 5.24 gallons per minute (gpm). For utility planning purposes, this building was considered 45% office, 30% laboratory, and 25% light industrial. Usage rates for office is estimated to be 0.17 gallon/square foot/day, and laboratory is estimated to be 0.27 gallon/square foot/day. Utilization rates were applied to these usage rates. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. However, the light industrial usage rate is estimated to be 0.40 gallon/square foot/day for process, 0.10 gallon/square foot/day for potable, and both have a utilization rate of 1.0. A peaking factor of 4 from Ten State Standards is

also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
DP&L will supply a 750-KVA pad-mounted liquid-filled transformer as service to the building. The DP&L provided transformer includes revenue metering including the socket, meter, CT's (if required) and conductors. The secondary conductors will feed underground to the 800 amp – 480 VAC service entrance switchboard.

iv. Gas

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains to the north and the west.

vii. Roadway Improvements
No roadway improvements are associated with this building.

viii. Parking
Parking is planned for 130 spaces.

ix. Parking Lighting
Parking lot lighting currently exists. No improvements are required.

x. Site Lighting
Roadway and miscellaneous site lighting will be metal halide type with fixtures and poles matching the existing culture of the site. Power will be obtained from dedicated and metered pad-mounted transformers. The lights will be controlled by a photoelectric cell without timer. The lights will be operational from dusk to dawn.

xi. Telephone/Information Technology
SBC will route new cable from Enterprise Court. MMCIC will supply the structure and SBC will supply and route the cable.

3. Structural

a. General Description

Building 102 is a two-story building used for office space. It is constructed of load-bearing precast concrete exterior walls with precast concrete plank floor construction.

The second floor has a live load capacity of approximately 100 PSF. Lateral loads are resisted through shear wall action in the external concrete walls.

b. Listing and explanation of basic work tasks.

i. Building Modifications & Code
No structural modifications are anticipated.

ii. Deferred Maintenance
No deferred structural maintenance items were noted.

4. Architectural

a. General Description

The facility was completed in 1989 as a two-story office building with 38,882 square feet on two floors. Its construction consists of a structural steel frame, precast concrete plank floors, precast concrete exterior walls, and a single slope standing seam metal roof.

The interior consists of perimeter hard wall individual offices on both floors with open office space on the south side of the second floor. Interior finishes consist of painted gypsum board walls, commercial carpeting, suspended lay-in acoustic tile ceiling with recessed fluorescent lighting. The restrooms are ADA-compatible with ceiling hung stainless steel toilet partitions and ceramic tile floors and wall finishes. There are no restrooms on the second floor. The building is equipped with a single hydraulic elevator.

b. Listing of basic work tasks

i. Building Modifications & Code
There are no apparent building code violations

Main entrance needs to be renovated and the security guard booth removed.

Install new restrooms on the second floor directly above the restrooms on the first floor.

ii. Deferred Maintenance
Windows need to be recaulked and flashing installed at the window heads and sills.

Caulking at precast concrete wall panels will need to be replaced.

The interior perimeter walls will need to be repaired due to water damage.

Interior windowsills need replacement due to water damage.

Metal facing on the various entrance canopies requires repainting.

Flashing and drainage at the main entrance canopy requires repair to prevent water running down the exterior face of the wall.

VCT floor in the elevator needs to be replaced.

Restroom traps and water lines require ADA safety covering.

Window glazing gaskets need to be replaced.

Aluminum storefront entrance framing needs cleaning,

5. Fire Suppression Systems

a. General Description

The main wet pipe system fire riser assembly enters the building on the south end of the building. The riser includes an alarm check valve assembly with a fire department connection. The building sprinkler system provides coverage to the entire facility. The system is in good condition.

b. List of basic work tasks

i. Building Modifications & Code
The building's main fire riser and wet pipe sprinkler system is assumed to be designed and sized for the static pressure, residual pressure, and flow currently available from the existing site fire water system. The existing Mound site fire water system provides a static pressure to this facility. When the Mound site fire water system is replaced with the City water main, the available static pressure, residual pressure and flow may be reduced.

This may require modifications and/or replacement of part or all of the existing wet pipe sprinkler system in order to accommodate a potential reduced capacity in the site water main serving the system.

When the space is renovated for a new tenant, modification to the sprinkler system piping and sprinkler head installation may be required.

This would be done to accommodate changes in ceiling systems, wall locations, etc.

ii. Deferred Maintenance
The fire suppression system has been well maintained and is in good condition. Future maintenance, testing, inspections, and certification of the building's fire suppression system will be required.

iii. Demolitions
If the existing system is not adequate to serve the system due to reduced capacity in the site water main system, parts or all the sprinkler system may need to be modified or replaced.

c. Lot/Building specific assumptions

i. When the City water system replaces the existing site fire system, a reduction in available static pressure, residual pressure, and flow may occur.

ii. The building's fire suppression system was designed and sized for the available static pressure, residual pressure and flow from the Mound site fire water system.

6. Plumbing

a. General Description

Potable water enters the building on the west side of the building in the mechanical room on the first floor. There is no backflow prevention device present. The 2-inch main is installed with a meter assembly inside the mechanical room. Sanitary sewer and storm sewer mains exit the building. Refer to the Civil narrative for further information.

Plumbing fixtures are ADA accessible, including water closets, urinals, lavatories and water coolers. The building utilizes an electric water heater, which is believed to be installed in the first-floor ceiling plenum. These systems are in good condition.

A new natural gas main enters the building in the west side of the building in the mechanical room. The natural gas serves the new central hot water boiler system located in the mechanical room.

b. List of basic work tasks

i. Building Modifications & Code
The potable water service entrance requires the addition of a reduced pressure principle backflow preventer assembly for protection of site water. The installation of this device at the service entrance will require additional space inside the mechanical room.

Toilet room lavatories pipes are exposed and need to be insulated for ADA accessibility compliance.

Add toilet room systems on second floor.

ii. Deferred Maintenance
The plumbing systems have been well maintained. There are no observed deficiencies.

iii. Demolitions
The renovation of the potable water main for backflow prevention will require additional space in the mechanical room.

Install new toilet rooms on the second floor above first floor toilet rooms.

7. HVAC

a. General Description

The building system is currently disconnected from site steam and brine systems. The HVAC system consists of a central station AHU, central hot water boiler system, packaged outdoor air cooled chiller system, central DDC control system by Andover Controls, temperature controls compressed air system, supply and return air duct distribution systems, and room zone controls. All central equipment is located in the mechanical room on the first floor. The outdoor packaged chiller is located on the west side of the building adjacent to the mechanical room.

The AHU is a single-zone unit with a chilled water coil and hot water coil, pneumatic control devices, and DDC controlled. The unit is in good condition.

The package outdoor chiller system, indoor hot water boiler system, and related secondary systems, accessories, and piping are in new/excellent condition. The location of the chilled water circulating pump could not be seen.

General exhaust is provided for toilet rooms and general building exhaust requirements.

b. List of basic work tasks

i. Building Modifications & Code
Renovate AHU system outdoor air ventilation to current code.

Provide a new chilled water pump system. If this component is found to be sufficient for its application and in new condition similar to the rest of the system, this item would not be required.

Provide adjustments and renovation to existing temperature controls package to ensure state-of-the-art technical package and parts compatibility.

ii. Deferred Maintenance
The HVAC systems that are active in the building have been well maintained.

iii. Demolitions
Renovate building system ductwork and zone controls for new occupancy.

c. Lot/Building specific assumptions

The existing HVAC system capacity is sufficient for the new building occupancy. This will be verified when existing building documents are available for the HVAC systems.

The building occupancy will be similar to how the building is currently occupied.

8. Electrical

a. General Description

The electrical service entrance to the building is at 480-VAC, 3-phase, 4-wire and terminates into an 800-amp switchboard with no additional space capacity. The source of the service is from the DOE substation located southwest of the building. Low power is obtained from multi-transformers which feed numerous panelboards.

The available watts per square foot density is 14.5 watt/sq. ft assuming an 85% power factor. The normal low-rise office space density is 10.5 watts/sq. ft. Sufficient capacity exists to allow the addition of future loads to be attached to the building's electrical system.

One of the transformers, T-PS-MB a 37.5KVA-480VAC to 120/240 VAC single phase, located in the mechanical room 123, does not have secondary overcurrent protection on its secondary. The secondary conductors go to a junction box then into the floor. It appears that these conductors do or did feed a trailer outside of the building. Once remediation is complete, this transformer requirement should be eliminated and the transformer and its circuits should be removed. Otherwise, a fused disconnect should be installed on the secondary of this transformer.

9. Telephone/Information Technology

a. General Description

The telephone service size is adequate for the building. Presently the service is part of DOE's switched system. Isolation from DOE's system will require new lines from Ameritech.

10. Fire Alarm System

a. The existing fire alarm control panel (FACP) in this building is not designed to be used in a non-campus environment. The present FACP is designed to notify a local fire alarm supervisory monitoring station. A new FACP will be required to provide a dial-out feature to notify of an alarm condition. Presently, DOE has converted some of the buildings with a new FACP which is a Silent Knight 5208. The FACP dials DOE-Savannah River under a trouble or alarm condition. The existing FACP in this building will be replaced with a Silent Knight 5208. The existing annunciators and detectors will directly interface with the new FACP.

BUILDING #102 1ST FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

MATC

COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

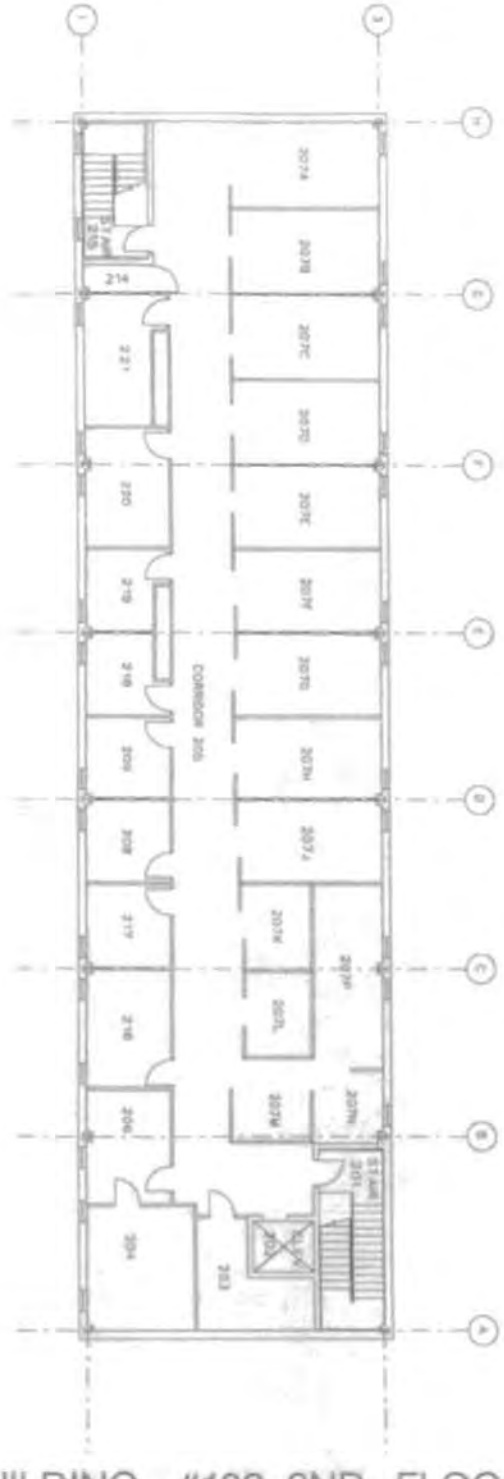
Drawn By:

Checked By:

Drawing No: 102-1.pdf

Project No: 19480-00

Date: 01/20/03



BUILDING #102 2ND FLOOR

BWSC Barge Waggoner Sumner & Cannon, Inc.
Engineers Architects Planners and Surveyors

MATC

COMPREHENSIVE REUSE PLAN UPDATE

MIAMISBURG, OHIO

Drawn By:

Checked By:

Drawing No: 102-2.pdf

Project No: 19480-00

Date: 01/20/03

A.9 LOT 31 BUILDING 105 (THALER MACHINE SHOP)

1. General

Overview

Building 105 is a manufacturing building that was part of the DOE complex. This building is located on the Medium-Density Campus and its gross measured area is 31,500 square feet. This building will remain as an MMCIC building.

2. Civil

General Description

At the current time, this building is occupied by the Thaler Machine Shop. It has a 6-inch domestic water service from the City's water system; its pipe material is unknown. The domestic service is not protected with a backflow preventer. It does have an 8-inch fire line service; its pipe material is unknown. It does not have a fire booster pump. The sanitary lateral drains by gravity to a 6-inch sanitary main. There is an existing 2-inch gas service to this building.

The existing fire department connection is on the southwest corner of the building; this is the location of the fire service entering the building. There is a chain-link fence around the building which would impede usage of the fire department connection, and there is not a fire hydrant within close proximity to the fire department connection. A fire hydrant will be installed within 75 feet of the fire department connection, per the Southwest Ohio Fire Safety Council standards. The fence needs to be modified and a drive installed to allow access to the fire department connection.

List of Basic Work Tasks

Water

The water usage for this building is estimated to be the same as sanitary usage. The existing domestic water service is expected to be adequate for this building. The water service is already connected to the City's medium pressure water system.

Waste Water

The sanitary usage for this building is estimated to be 26.23 gallons per minute (gpm). For utility planning purposes, this building was considered 100% light industrial. Both the usage and utilization rates are consistent with the 1996 Utility Transfer Feasibility Study. However, the light industrial usage rate is estimated to be 0.40 gallon/square foot/day for process, 0.10 gallon square foot/day for potable, and both have a

utilization rate of 1.0. A peaking factor of 4 from Ten State Standards is also used in the calculations. The existing sanitary service will be utilized for this building.

iii. Electric
It is anticipated that the electrical service is adequate.

iv. Gas
It is anticipated that the existing gas service is adequate for this building.

v. Storm Water Detention
This building drains toward the detention basins along Vanguard Boulevard.

vi. Storm Water Sewer
This building drains toward Enterprise Court and then continues via a cross-country sewer toward Vanguard Boulevard.

vii. Roadway Improvements
No roadway improvements are associated with this building.

A.10 LOT 37 BUILDING 100

1. General

Building 100 is currently vacant. There is a paved parking area for 10 cars including one handicap space. The building is constructed in the side of a hill with only the south wall exposed. The grade is approximately 1'-6" below the roof on the three remaining sides. A steel pipe guardrail is provided along the south edge of the roof. There are no overhead utilities in the vicinity.

2. Architectural

Building 100 was constructed in 1988. The single-story building has a gross floor area of 5,800 square feet. The main entrance and the emergency exit doors face the courtyard of the U-shaped building. Room 116 has an 18-inch depressed floor slab which could accommodate a computer access floor system. Room 117 was designed for acoustic isolation with an acoustic rated door and sound absorbing panels.

The floor is concrete slab on grade with spread footings. The building perimeter is fortified with load-bearing reinforced concrete walls, hardened steel doors and a bullet-resistant security window. The exterior walls are surfaced with an exterior insulation finish system (EIFS). The hollow core concrete roof deck supports the insulated built-up asphalt roof approximately 13 feet above the floor. The roof sheds stormwater southward through scuppers and downspouts to the site storm system.

The interior walls are generally concrete block with stud-framed walls in the office and restroom areas. The floor is generally finished with vinyl tile. There is a suspended ceiling only in the office/restroom area with exposed roof structure in the other areas. The lockers have been removed from the shower area.

3. Fire Suppression Systems

Building 100 has a wet pipe automatic fire suppression system served by the site fire protection system. Fire extinguishers and fire hose cabinets (without hoses) are present and appear to be sufficient for previous operations.

The fire alarm system consists of a sprinkler flow switch, manual pull stations at the exits and a local bell and strobe light annunciation. These components are tied into the site-wide fire protection system which signals Mound's fire station.

4. Plumbing

Building 100 is served by a 2-inch water main. There is no backflow preventer at the service entrance.

There are two restrooms in the building. Men's Room 106 has two lavatories, two urinals, two toilets and three showers. Women's Room 105 has two lavatories, two toilets and two showers. There is one drinking fountain located in Corridor 109. There is one emergency eye wash and shower station located in Room 109 adjacent to the Mechanical Room. There are two electric water heaters that provide hot water for the building. Sanitary waste flows by gravity to a sewage ejector located west of the building.

5. HVAC

Building 100 is served by a split system. The air handling unit serving the building is located in Mechanical Room 119. An air cooled heat pump is located outside adjacent to the southeast wing. There is no steam or chilled water routed to this building.

The constant volume air handling units consist of a 4500 CFM, 5 HP supply fan, electric heating coil, filter mixing box and a 2500 CFM, 1.5 HP in-line return fan. The unit provides 102 MBH of cooling and a 57 KW electric coil supplements the heat pump's reverse cycle heating. A separate heat-recovery wheel uses building exhaust to preheat outside air. The air handling system is controlled with the site Andover Direct Digital Control (DDC) system.

Building 100 has general building exhaust, where some air is exhausted from most spaces, and emergency generator exhaust.

6. Electrical

Building 100 is fed from panelboard PDP-2A in the "PM" Substation. The service entrance is one 400 amp power distribution panel and is operated at 480 VAC, 3-phase. The building contains one transformer that creates the 208Y/120 VAC, 3-phase from the 480 VAC and distributes the power to two panelboards. At one time, the building contained an emergency generator which made the space electrically self-sufficient. This generator and fuel tank has been removed from the building.

The building has public address and telephone services which are tied into the site communications system.

General interior lighting in the building is provided by recessed fluorescent. Exit signs are self-contained, luminescent (tritium) units with 20-year life and are not connected to an electrical circuit. Emergency lights are double sealed-lamp fixtures with battery packs. External egress lighting is provided by high intensity discharge fixtures mounted on the walls. No lightning protection is present.

A.11 LOT 14 BUILDING 87

1. General

Building 87, Explosive Component Test Facility, was constructed in 1986 to house laboratories and office areas. The gross floor area is 39,530 square feet. The first floor is concrete slab on grade with spread footings. The administration area on the north side of the building has precast exterior walls, steel frame structure, and an insulated built-up asphalt roof on a metal deck. The south side of the building has reinforced concrete walls and roof for the process area to provide structural support and explosion containment. The 6,502 square foot penthouse over the laboratory area is steel framed with metal siding and a standing seam metal roof.

The main entrance is on the north side of the facility. The penthouse is accessed by an internal stairwell or over roof from an exterior stair.

2. Fire Suppression Systems

Building 87 has a wet pipe automatic fire suppression system served by the site fire protection system. The cell and preparation complexes contain smoke detectors. Fire extinguishers and fire hose cabinets (without hoses) are present and appear to have been sufficient for former operations. Fire alarms are tied into the site-wide system.

3. Plumbing

Building 87 is served by a 3-inch water main. There is no backflow preventer at the service entrance; however, the main splits, in the penthouse, into a potable water line and a service water line. The service water line has a reduced pressure backflow preventer which maintains separation between the two services.

There are two handicap-accessible restrooms in the building. The men's room has three lavatories, three urinals, two toilets, and one shower. The women's room has three lavatories, four toilets, and one shower. There are three drinking fountains, one in the lunch room (Room 110), one in Corridor 105, and one in Corridor 137. There are four emergency eye wash and shower stations, one in each dark room (Rooms 135, 142 and 150) and one in Room 154. An electric water heater located in the penthouse provides domestic hot water to the building.

All floor drains in the building connect on the north side of Building 87 to the site sanitary system.

4. Electrical

All three 480 volt, 3-phase feeds to the building are from three circuit breakers in the "CFT" substation, which is located west and adjacent to the building. The three feeds terminate in 2 large power distribution panels, 14 circuits each, and a 6-bay Motor Control Center (MCC). There is no back-up power routed to this building.

Communications, security, and fire alarm systems are served from the penthouse and are distributed to the building above the first floor suspended ceiling. Security and fire alarm annunciators are located in the corridor adjacent to the cell area.

The building is protected with a lightning protection system.

REUSE PLAN COST SUMMARY

LOT	DEVELOPED	BUILDING COSTS	SITE COSTS	TOTAL COSTS
1	SPECULATIVE BUILDING	$1,200,000	$5,522	$1,205,522
2	UNDEVELOPED	$0	$19,126	$19,126
3	UNDEVELOPED	$0	$38,220	$38,220
4	UNDEVELOPED	$0	$56,627	$56,627
5	UNDEVELOPED	$0	$72,711	$72,711
6	UNDEVELOPED	$0	$432,032	$432,032
7	UNDEVELOPED	$0	$153,391	$153,391
8	UNDEVELOPED	$0	$102,295	$102,295
9	UNDEVELOPED	$0	$135,505	$135,505
10	UNDEVELOPED	$0	$102,511	$102,511
11	UNDEVELOPED	$0	$604,410	$604,410
12	UNDEVELOPED	$0	$672,735	$672,735
13	UNDEVELOPED	$0	$915,005	$915,005
14	87	$718,948	$608,015	$1,326,961
15	DEMOLISH 2, 3 & 83	$449,863	$458,921	$908,784
16	UNDEVELOPED	$0	$529,500	$529,500
17	81	$2,737,541	$659,769	$3,397,310
18	UNDEVELOPED	$0	$67,795	$67,795
19	UNDEVELOPED	$0	$148,573	$148,573
20	DEMOLISH GH	$67,543	$163,077	$230,620
21	45	$813,623	$215,791	$1,029,414
22	OSE	$5,641,107	$1,080,136	$6,721,243
23	DEMOLISH Z6	$144,007	$115,224	$259,231
24	COS	$2,270,464	$1,627,135	$3,897,599
25	T	$8,018,695	$98,988	$8,117,684
26	OSW	$3,763,717	$1,186,855	$4,949,572
27	128	$182,840	$364,655	$547,495
28	UNDEVELOPED	$0	$148,196	$148,196
29	UNDEVELOPED	$0	$13,528	$13,528
30	UNDEVELOPED	$0	$12,431	$12,431
31	107	$669,451	$235,680	$905,130
32	105	$390,313	$78,840	$469,153
33	UNDEVELOPED	$0	$331,774	$331,774
34	UNDEVELOPED	$0	$153,974	$153,974
35	UNDEVELOPED	$0	$78,884	$78,884
36	UNDEVELOPED	$0	$66,471	$66,471
37	UNDEVELOPED	$0	$138,964	$138,964
38	100	$319,733	$270,551	$590,284
39	UNDEVELOPED	$0	$139,296	$139,296
40	UNDEVELOPED	$0	$480,997	$480,997
41	UNDEVELOPED	$0	$209,478	$209,478
42	UNDEVELOPED	$0	$138,235	$138,235
43	UNDEVELOPED	$0	$61,889	$61,889
44	UNDEVELOPED	$0	$63,038	$63,038
45	UNDEVELOPED	$0	$221,437	$221,437
46	UNDEVELOPED	$0	$284,290	$284,290
	ON SITE TOTALS	$27,386,756	$13,938,388	$41,325,144
	OFF SITE TOTALS	NA	NA	$7,334,271
	TOTAL DEVELOPMENT COSTS			$48,659,415

FUTURE SITE COSTS SUMMARY BY COST ACCOUNT

	10 DESIGN AMOUNT	20 BIDDING AMOUNT	30 CONSTRUCTION AMOUNT	40 CA AMOUNT	TOTALS ITEM TOTAL	TOTALS ITEM W/CONTINGENCY TOTAL
BUILDINGS TO BE REUSED						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code	$1,072,362	$214,472	$10,723,621	$643,417	$12,653,873	$15,184,648
210 Plumb'g/Mech'l/Elect'l Upgrades	$287,323	$57,465	$2,873,234	$172,394	$16,028,973	$4,068,500
220 HVAC Improvements	$401,475	$80,295	$4,014,750	$240,885	$4,737,405	$5,685,679
230 Deferred Maintenance	$115,955	$23,191	$1,159,553	$69,573	$1,368,273	$1,641,928
240 Building Demolition	$56,921	$11,384	$569,210	$34,153	$671,668	$806,001
	$1,932,935	$386,587	$19,329,368	$1,159,622	$22,808,915	$27,386,756
2 SITE						
250 Water	$87,808	$17,562	$878,077	$52,685	$1,036,131	$1,243,355
260 Waste Water	$53,643	$10,729	$536,429	$32,186	$632,986	$759,580
270 Electric	$89,938	$13,988	$1,028,875	$49,073	$1,076,873	$1,232,273
280 Gas	$15,827	$3,165	$158,265	$9,496	$186,753	$224,102
290 Stormwater-Detention	$37,267	$7,453	$372,668	$22,360	$439,748	$527,698
300 Stormwater-Sewer	$121,997	$24,399	$1,219,967	$73,198	$1,439,561	$1,727,477
310 Road Improvements	$281,882	$56,376	$2,818,816	$169,129	$3,326,203	$3,991,441
320 Road Lighting	$22,200	$4,440	$222,000	$13,320	$261,960	$314,352
330 Parking	$126,839	$25,328	$1,266,388	$76,983	$1,494,336	$1,793,203
340 Parking Lighting	$14,700	$2,940	$147,000	$8,820	$173,460	$208,152
350 Site Lighting	$0	$0	$0	$0	$0	$0
360 Demolition of Stanchions	$0	$0	$0	$0	$0	$0
370 Formal Landscaped Areas	$53,487	$10,697	$534,870	$32,092	$631,147	$757,377
380 Natural Landscaped Areas	$37,537	$7,507	$375,369	$22,522	$442,935	$531,526
390 Telephone/Information Technology	$43,950	$8,790	$439,500	$26,370	$518,610	$622,330
	$966,794	$193,374	$9,668,224	$580,234	$11,410,702	$13,932,866
LOT TOTALS	$2,815,063	$563,013	$28,480,133	$1,696,148	$33,469,356	$40,119,622

TOTAL PROJECT COSTS SITE SUMMARY BY COST ACCOUNT			
	Original CRP (Addendum 2)	Subtotal to Date	CRP Update 2 Costs
BUILDING/SITE RELATED WORK			
1 BUILDING			
COST CODE STRUCTURE			
200 Building Modifications & Code	$13,903,533	$1,482,789	$15,667,417
210 Plumbing/Mechanical/Electrical Upgrades	$642,170	$293,058	$4,381,556
220 HVAC Improvements	$5,906,347	$1,498,460	$7,164,139
230 Deferred Maintenance	$4,484,400	$756,230	$2,400,158
240 Building Demolition	$3,042,917	$1,484,395	$2,270,396
BUILDING TOTALS	$27,979,367	$5,498,910	$33,883,666
2 SITE			
250 Water	$2,541,363	$600,407	$2,043,767
260 Waste Water	$234,378	$361,833	$1,121,503
270 Electric	$1,840,625	$135,918	$1,368,191
280 Gas	$468,750	$215,813	$440,015
290 Stormwater Detention	$429,687	$691,358	$1,119,056
300 Stormwater Sewer	$2,125,000	$1,078,297	$2,363,774
310 Road Improvements	$5,799,758	$2,961,226	$8,972,667
320 Road Lighting	$342,500	$660,907	$675,269
330 Parking	$1,415,625	$407,568	$2,409,791
340 Parking Lighting	$468,874	$137,833	$345,975
350 Site Lighting	$156,363	$18,475	$18,475
360 Demolition of Stanchions	$625,000	$26,510	$26,510
370 Formal Landscaped Areas	$1,041,250	$515,178	$1,271,838
380 Natural Landscaped Areas	$2,148,377	$147,975	$679,501
390 Telephone/Information Technology	$987,582	$117,030	$739,360
SITE TOTALS	$21,383,189	$8,294,829	$27,227,694
OFF-SITE IMPROVEMENTS			$7,334,271
LOT TOTALS	$49,362,576	$13,791,738	$62,445,631

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WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 1 BUILDING
SPECULATIVE BUILDING

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
1 BUILDING											
COST CODE STRUCTURE											
200	Building Modifications & Code										
1	Speculative Building	10%	$84,746	2%	$16,949	1 LS	$847,458	$847,458	6% $50,847	$1,000,000	$1,200,000
TOTALS			$84,746		$16,949			$847,458	$50,847	$1,000,000	$1,200,000
210	Plumbing/Mechanical/Electrical Upgrades										$0
TOTALS			$0		$0			$0	$0	$0	$0
220	HVAC Improvements										$0
TOTALS			$0		$0			$0	$0	$0	$0
230	Deferred Maintenance										$0
TOTALS			$0		$0			$0	$0	$0	$0
240	Building Demolition										$0
TOTALS			$0		$0			$0	$0	$0	$0
BUILDING TOTALS			$84,746		$16,949			$847,458	$50,847	$1,000,000	$1,200,000

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
1	SPECULATIVE BUILDING	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250 Water											
TOTALS			$0		$0			$0	$0	$0	$0
260 Waste Water											
TOTALS			$0		$0			$0	$0	$0	$0
270 Electric											
TOTALS			$0		$0			$0	$0	$0	$0
280 Gas											
TOTALS			$0		$0			$0	$0	$0	$0
290 Stormwater-Detention											
TOTALS			$0		$0			$0	$0	$0	$0
300 Stormwater-Sewer											
TOTALS			$0		$0			$0	$0	$0	$0
310 Road Improvements											
TOTALS			$0		$0			$0	$0	$0	$0
320 Road Lighting											
TOTALS			$0		$0			$0	$0	$0	$0
330 Parking											
TOTALS			$0		$0			$0	$0	$0	$0
340 Parking Lighting											
TOTALS			$0		$0			$0	$0	$0	$0
350 Site Lighting											
TOTALS			$0		$0			$0	$0	$0	$0
360 Demolition of Stanchions											
TOTALS			$0		$0			$0	$0	$0	$0
370 Formal Landscaped Areas											
1 Deciduous		10%	$210	2%	$42	8 EA	$350	$2,100	8% $126	$2,478	$2,974
2 Evergreen		10%	$180	2%	$36	6 EA	$300	$1,800	6% $108	$2,124	$2,549
TOTALS			$390		$78			$3,900	$234	$4,602	$5,523
380 Natural Landscaped Areas											
TOTALS			$0		$0			$0	$0	$0	$0
390 Telephone/Information Technology											
TOTALS			$0		$0			$0	$0	$0	$0
SITE SUBTOTAL			$390		$78			$3,900	$234	$4,602	$5,523
LOT TOTALS			$85,136		$17,027			$851,358	$51,081	$1,004,602	$1,205,523

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 2 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN	20 BIDDING	30 CONSTRUCTION	40 CA	ITEM	ITEM
	UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	AMOUNT/INVESTMENT TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 2 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	W/CONTINGENCY TOTAL
ON-SITE RELATED WORK											
250	Water										
	TOTALS		$0		$0			$0	$0	$0	$0
260	Waste Water										
	TOTALS		$0		$0			$0	$0	$0	$0
270	Electric										
	TOTALS		$0		$0			$0	$0	$0	$0
280	Gas										
	TOTALS		$0		$0			$0	$0	$0	$0
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
	TOTALS		$0		$0			$0	$0	$0	$0
320	Road Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$360	2%	$112	18 EA	$350	$6,600	6% $338	$6,808	$7,936
2	Evergreen	10%	$570	2%	$114	18 EA	$300	$5,700	6% $342	$6,726	$8,071
	TOTALS		$1,130		$226			$11,300	$678	$13,334	$16,001
380	Natural Landscaped Areas										
1	Native Grasses	10%	$28	2%	$8	0.0275 AC	$10,000	$275	6% $17	$328	$389
2	Reforestation	10%	$193	2%	$38	0.1810 AC	$12,000	$1,932	6% $116	$2,280	$2,736
	TOTALS		$221		$44			$2,207	$132	$2,604	$3,125
390	Telephone/Information Technology										
	TOTALS		$0		$0			$0	$0	$0	$0
SUBTOTALS			$1,351		$270			$13,507	$810	$15,938	$19,126
LOT TOTALS			$1,351		$270			$13,507	$810	$15,938	$19,126

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 3 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM WEIGHTED TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 3 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE/RELATED WORK											
260	Water										
1	Service	10%	$152	2%	$30	1	LS	$1,515 $1,515	6% $91	$1,788	$2,145
2	Main On Banner	10%	$1,804	2%	$361	1	LS	$18,044 $18,044	6% $1,083	$21,292	$25,550
	TOTALS		$1,956		$391			$19,559	$1,174	$23,080	$27,696
260	Waste Water										
	TOTALS		$0		$0			$0	$0	$0	$0
270	Electric										
	TOTALS		$0		$0			$0	$0	$0	$0
280	Gas										
	TOTALS		$0		$0			$0	$0	$0	$0
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
	TOTALS		$0		$0			$0	$0	$0	$0
320	Road Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$70	2%	$14	2	EA	$350 $700	6% $42	$826	$991
	TOTALS		$70		$14			$700	$42	$826	$991
380	Natural Landscaped Areas										
1	Native Grasses	10%	$150	2%	$30	0.1500	AC	$10,000 $1,500	6% $90	$1,770	$2,124
2	Reforestation	10%	$523	2%	$105	0.4360	AC	$12,000 $5,232	6% $314	$6,174	$7,409
	TOTALS		$673		$135			$6,732	$404	$7,944	$9,533
390	Telephone/Information Technology										
	TOTALS		$0		$0			$0	$0	$0	$0
LOT TOTALS			$2,699		$540			$26,991	$1,619	$31,849	$38,220

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 4 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 4 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/INTERRELATED WORK												
SITE												
250	Water											
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$3,145
2	Main	10%	$1,804	2%	$361	1 LS	$18,044	$18,044	6%	$1,083	$21,292	$28,350
	TOTALS		$1,956		$391			$19,559		$1,174	$23,080	$27,496
260	Waste Water											
	TOTALS		$0		$0			$0		$0	$0	$0
270	Electric											
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
1	Main	10%	$469	2%	$94	1 LS	$4,693	$4,693	6%	$282	$5,538	$8,648
	TOTALS		$469		$94			$4,693		$282	$5,538	$8,648
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$385	2%	$77	1 LS	$3,851	$3,851	6%	$231	$4,544	$5,453
	TOTALS		$385		$77			$3,851		$231	$4,544	$5,453
310	Road Improvements											
	TOTALS		$0		$0			$0		$0	$0	$0
320	Road Lighting											
1	Light & Pole Assembly	10%	$300	2%	$60	1 EA	$3,000	$3,000	6%	$180	$3,540	$4,248
	TOTALS		$300		$60			$3,000		$180	$3,540	$4,248
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$350	2%	$70	10 EA	$350	$3,500	6%	$210	$4,130	$4,956
2	Evergreen	10%	$50	2%	$10	3 EA	$300	$900	6%	$54	$1,062	$1,274
	TOTALS		$400		$80			$4,400		$264	$5,192	$6,230
380	Natural Landscaped Areas											
1	Native Grasses	10%	$204	2%	$41	0.2040 AC	$10,000	$2,040	6%	$122	$2,407	$2,888
2	Reforestation	10%	$245	2%	$49	0.2040 AC	$12,000	$2,448	6%	$147	$2,888	$3,466
	TOTALS		$449		$90			$4,488		$269	$5,296	$6,356
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
SITE TOTALS			$3,959		$800			$33,991		$2,399	$47,189	$56,627
LOT TOTALS			$3,959		$800			$33,991		$2,399	$47,189	$56,627

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 5 — BUILDING — UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0 $0 $0 $0 $0 $0 $0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
5	UNDEVELOPED												
BUILDING/SITE RELATED WORK													
SITE													
250	Water												
1	Service	10%	$152	2%	$30	1	LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$442	2%	$88	1	LS	$4,419	$4,419	6%	$265	$5,214	$6,257
	TOTALS		$593		$119				$5,934		$356	$7,002	$8,403
260	Waste Water												
1	Lateral	10%	$61	2%	$12	1	LS	$613	$613	6%	$37	$723	$868
2	Main on Vanguard	10%	$379	2%	$76	1	LS	$3,786	$3,786	6%	$227	$4,467	$5,361
	TOTALS		$440		$89				$4,399		$264	$5,191	$6,229
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$842	2%	$128	1	LS	$8,418	$8,418	6%	$505	$7,573	$9,088
	TOTALS		$842		$128				$8,418		$505	$7,573	$9,088
310	Road Improvements												
1	Infrastructure-Vanguard	10%	$2,525	2%	$505	1	LS	$25,248	$25,248	6%	$1,515	$28,793	$36,791
	TOTALS		$2,525		$505				$25,248		$1,515	$28,793	$36,791
320	Road Lighting												
1	Light & Pole Assembly	10%	$600	2%	$120	2	EA	$3,000	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$600		$120				$6,000		$360	$7,080	$8,496
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$245	2%	$49	7	EA	$350	$2,450	6%	$147	$2,891	$3,469
2	Evergreen	10%	$90	2%	$18	3	EA	$300	$900	6%	$54	$1,062	$1,274
	TOTALS		$335		$67				$3,350		$201	$3,953	$4,744
380	Natural Landscaped Areas												
	TOTALS		$0		$0				$0		$0	$0	$0
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$4,335		$867				$51,349		$3,081	$60,592	$72,711
LOT TOTALS			$5,135		$1,027				$51,349		$3,081	$60,592	$72,711

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 6 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 6 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		%	AMOUNT	%	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	%	AMOUNT	TOTAL	CONTINGENCY TOTAL
250	Water											
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$3,639	2%	$728	1 LS	$36,393	$36,393	6%	$2,184	$42,944	$51,532
	TOTALS		$3,791		$758			$37,908		$2,274	$44,731	$53,676
260	Waste Water											
1	Main on Vanguard	10%	$3,003	2%	$601	1 LS	$30,030	$30,030	6%	$1,802	$35,435	$42,522
	TOTALS		$3,003		$601			$30,030		$1,802	$35,435	$42,522
270	Electric											
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
1	Service	10%	$160	2%	$32	1 LS	$1,595	$1,595	6%	$96	$1,883	$2,259
	TOTALS		$160		$32			$1,595		$96	$1,883	$2,259
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$2,965	2%	$599	1 LS	$29,651	$29,651	6%	$1,797	$35,342	$42,411
	TOTALS		$2,965		$599			$29,651		$1,797	$35,342	$42,411
310	Road Improvements											
1	Infrastructure-Vanguard	10%	$18,926	2%	$3,785	1 LS	$189,260	$189,260	6%	$11,356	$223,327	$267,992
2	Pavement Removal	10%	$606	2%	$121	1 LS	$6,063	$6,063	6%	$364	$7,154	$8,585
	TOTALS		$19,532		$3,906			$195,323		$11,719	$230,481	$276,577
320	Road Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$700	2%	$140	20 EA	$350	$7,000	6%	$420	$8,260	$9,912
2	Evergreen	10%	$330	2%	$66	11 EA	$300	$3,300	6%	$198	$3,894	$4,673
	TOTALS		$1,030		$206			$10,300		$618	$12,154	$14,585
380	Natural Landscaped Areas											
	TOTALS		$0		$0			$0		$0	$0	$0
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
LOT TOTALS			$30,511		$6,102			$395,107		$18,306	$360,026	$432,037

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 7 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0
						$0
						$0
						$0
						$0
						$0
						$0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 7 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SUPERSTRUCTURE												
250	Water											
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$2,146
2	Main on Vanguard	10%	$1,288	2%	$258	1 LS	$12,888	$12,888	6%	$773	$15,208	$18,249
	TOTALS		$1,440		$288			$14,403		$864	$16,996	$20,395
260	Waste Water											
1	Lateral	10%	$81	2%	$12	1 LS	$613	$613	6%	$37	$723	$868
2	Main on Vanguard	10%	$1,055	2%	$211	1 LS	$10,549	$10,549	6%	$633	$12,448	$14,937
	TOTALS		$1,136		$223			$11,162		$670	$13,171	$15,805
270	Electric											
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
	TOTALS		$0		$0			$0		$0	$0	$0
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$899	2%	$180	1 LS	$8,985	$8,985	6%	$539	$10,602	$12,723
	TOTALS		$899		$180			$8,985		$539	$10,602	$12,723
310	Road Improvements											
1	Infrastructure-Vanguard	10%	$6,058	2%	$1,212	1 LS	$60,577	$60,577	6%	$3,635	$71,481	$85,777
		10%	$0	2%	$0	1 LS	$0	$0	6%	$0	$0	$0
		10%	$0	2%	$0	1 LS	$0	$0	6%	$0	$0	$0
	TOTALS		$6,058		$1,212			$60,577		$3,635	$71,481	$85,777
320	Road Lighting											
1	Light & Pole Assembly	10%	$900	2%	$180	3 EA	$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180			$9,000		$540	$10,620	$12,744
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$420	2%	$84	12 EA	$350	$4,200	6%	$252	$4,956	$5,947
	TOTALS		$420		$84			$4,200		$252	$4,956	$5,947
380	Natural Landscaped Areas											
	TOTALS		$0		$0			$0		$0	$0	$0
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
SUBTOTALS			$10,833		$2,167			$106,327		$6,500	$127,826	$153,391
LOT TOTALS			$10,833		$2,167			$106,327		$6,500	$127,826	$153,391

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 8 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN	20 BIDDING	30 CONSTRUCTION	40 C.A.	ITEM	ITEM
	UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						$0
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						$0
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						$0
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 8 BUILDING UNDEVELOPED

		WORK PHASES									TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA		ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK												
UTILITIES												
250	Water											
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$1,559	2%	$312	1 LS	$15,589	$15,589	6%	$935	$18,395	$22,074
	TOTALS		$1,710		$342			$17,104		$1,026	$20,183	$24,219
260	Waste Water											
1	Lateral	10%	$61	2%	$12	1 LS	$613	$613	6%	$37	$723	$868
2	Main on Vanguard	10%	$1,282	2%	$256	1 LS	$12,820	$12,820	6%	$769	$15,128	$18,153
	TOTALS		$1,343		$269			$13,433		$806	$15,851	$19,021
270	Electric											
									6%	$0	$0	$0
									6%	$0	$0	$0
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
	TOTALS		$0		$0			$0		$0	$0	$0
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$1,070	2%	$214	1 LS	$10,697	$10,697	6%	$642	$12,622	$15,147
	TOTALS		$1,070		$214			$10,697		$642	$12,622	$15,147
310	Road Improvements											
1	Infrastructure-Vanguard	10%	$7,362	2%	$1,472	1 LS	$73,620	$73,620	6%	$4,417	$86,872	$104,246
2	Pavement Removal	10%	$278	2%	$56	1 LS	$2,777	$2,777	6%	$167	$3,277	$3,932
	TOTALS		$7,640		$1,528			$76,397		$4,584	$90,148	$108,178
320	Road Lighting											
1	Light & Pole Assembly	10%	$1,200	2%	$240	4 EA	$3,000	$12,000	6%	$720	$14,160	$16,992
	TOTALS		$1,200		$240			$12,000		$720	$14,160	$16,992
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$350	2%	$70	10 EA	$350	$3,500	6%	$210	$4,130	$4,956
2	Evergreen	10%	$150	2%	$30	3 EA	$300	$1,500	6%	$90	$1,770	$2,124
	TOTALS		$500		$100			$5,000		$300	$5,900	$7,080
380	Natural Landscaped Areas											
1	Reforestation	10%	$117	2%	$23	0.0978 AC	$12,000	$1,171	6%	$70	$1,382	$1,658
	TOTALS		$117		$23			$1,171		$70	$1,382	$1,658
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
SITE TOTALS			$13,580		$2,716			$135,802		$8,148	$160,247	$192,295
LOT TOTALS			$13,580		$2,716			$135,802		$8,148	$160,247	$192,295

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 9 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 9 — BUILDING / UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30/40 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
		UNIT %		UNIT		QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE / AMOUNT	TOTAL	TOTAL
BUILDING/SITE/RESPONSIBLE WORK											
SITE											
250	**Water**										
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6% $91	$1,788	$2,143
2	Main on Vanguard	10%	$927	2%	$185	1 LS	$9,267	$9,267	6% $556	$10,935	$13,122
	TOTALS		$1,078		$216			$10,782	$647	$12,723	$15,267
260	**Waste Water**										
1	Lateral	10%	$61	2%	$12	1 LS	$613	$613	6% $37	$723	$868
2	Main on Vanguard	10%	$762	2%	$152	1 LS	$7,621	$7,621	6% $457	$8,993	$10,791
	TOTALS		$823		$165			$8,234	$494	$9,716	$11,659
270	**Electric**										
	TOTALS		$0		$0			$0	$0	$0	$0
280	**Gas**										
	TOTALS		$0		$0			$0	$0	$0	$0
290	**Stormwater-Detention**										
	TOTALS		$0		$0			$0	$0	$0	$0
300	**Stormwater-Sewer**										
1	Infrastructure	10%	$482	2%	$96	1 LS	$4,824	$4,824	6% $289	$5,692	$6,831
	TOTALS		$482		$96			$4,824	$289	$5,692	$6,831
310	**Road Improvements**										
1	Infrastructure-Vanguard	10%	$4,383	2%	$873	1 LS	$43,826	$43,826	6% $2,629	$51,479	$61,774
2	Pavement Removal	10%	$478	2%	$96	1 LS	$4,780	$4,780	6% $287	$5,640	$6,768
	TOTALS		$4,841		$968			$48,406	$2,904	$57,119	$68,543
320	**Road Lighting**										
1	Light & Pole Assembly	10%	$600	2%	$120	2 EA	$3,000	$6,000	6% $360	$7,080	$8,496
	TOTALS		$600		$120			$6,000	$360	$7,080	$8,496
330	**Parking**										
	TOTALS		$0		$0			$0	$0	$0	$0
340	**Parking Lighting**										
	TOTALS		$0		$0			$0	$0	$0	$0
350	**Site Lighting**										
	TOTALS		$0		$0			$0	$0	$0	$0
360	**Demolition of Stanchions**										
	TOTALS		$0		$0			$0	$0	$0	$0
370	**Formal Landscaped Areas**										
1	Deciduous	10%	$245	2%	$49	7 EA	$350	$2,450	6% $147	$2,891	$3,469
2	Evergreen	10%	$30	2%	$6	1 EA	$300	$300	6% $18	$354	$425
	TOTALS		$275		$55			$2,750	$165	$3,245	$3,894
380	**Natural Landscaped Areas**										
1	Native Grasses	10%	$6	2%	$1	0.0060 AC	$10,000	$60	6% $4	$71	$85
2	Reforestation	10%	$1,464	2%	$293	1.2200 AC	$12,000	$14,640	6% $878	$17,275	$20,730
	TOTALS		$1,470		$294			$14,700	$882	$17,346	$20,816
390	**Telephone/Information Technology**										
	TOTALS		$0		$0			$0	$0	$0	$0
SITE TOTALS			$9,570		$1,914			$95,696	$5,742	$112,921	$135,505
LOT TOTALS			$9,570		$1,914			$95,696	$5,742	$112,921	$135,505

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING
10	UNDEVELOPED

	WORK PHASES										TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	WORK/HISTORY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
TOTALS		$0		$0				$0		$0	$0	$0
BUILDING TOTALS		$0		$0				$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 10 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C/A	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	INCONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
Sitework													
250	Water												
1	Service	10%	$152	2%	$30	1	LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$902	2%	$180	1	LS	$9,022	$9,022	6%	$541	$10,646	$12,775
	TOTALS		$1,054		$211				$10,537		$632	$12,434	$14,920
260	Waste Water												
1	Lateral	10%	$81	2%	$12	1	LS	$813	$813	6%	$37	$723	$868
2	Main on Vanguard	10%	$81	2%	$16	1	LS	$808	$808	6%	$48	$853	$1,144
	TOTALS		$142		$28				$1,421		$85	$1,677	$2,013
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
1	Fill in Ex. Detention Basin	10%	$5,261	2%	$1,052	1	LS	$52,607	$52,607	6%	$3,156	$62,076	$74,493
	TOTALS		$5,261		$1,052				$52,607		$3,156	$62,076	$74,493
300	Stormwater-Sewer												
1	Infrastructure	10%	$517	2%	$103	1	LS	$5,169	$5,169	6%	$310	$6,099	$7,319
	TOTALS		$517		$103				$5,169		$310	$6,099	$7,319
310	Road Improvements												
1	Infrastructure-Vanguard	10%	$4,281	2%	$952	1	LS	$42,606	$42,606	6%	$2,556	$50,275	$60,330
2	Pavement Removal	10%	$334	2%	$71	1	LS	$3,338	$3,338	6%	$213	$4,175	$5,010
	TOTALS		$4,614		$923				$46,144		$2,769	$54,450	$65,340
320	Road Lighting												
1	Light & Pole Assembly	10%	$600	2%	$120	2	EA	$3,000	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$600		$120				$6,000		$360	$7,080	$8,496
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$140	2%	$28	4	EA	$350	$1,400	6%	$84	$1,652	$1,982
2	Evergreen	10%	$90	2%	$18	3	EA	$300	$900	6%	$54	$1,062	$1,274
	TOTALS		$230		$46				$2,300		$138	$2,714	$3,257
380	Natural Landscaped Areas												
1	Native Grasses	10%	$172	2%	$34	0.1720	AC	$10,000	$1,720	6%	$103	$2,030	$2,436
2	Reforestation	10%	$1,006	2%	$201	0.8360	AC	$12,000	$10,056	6%	$603	$11,866	$14,239
	TOTALS		$1,178		$236				$11,776		$707	$13,896	$16,675
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
LOT TOTALS			$13,595		$2,718				$135,954		$8,157	$160,426	$192,511

WORK TASKS BY LOT/COST CODE STRUCTURE

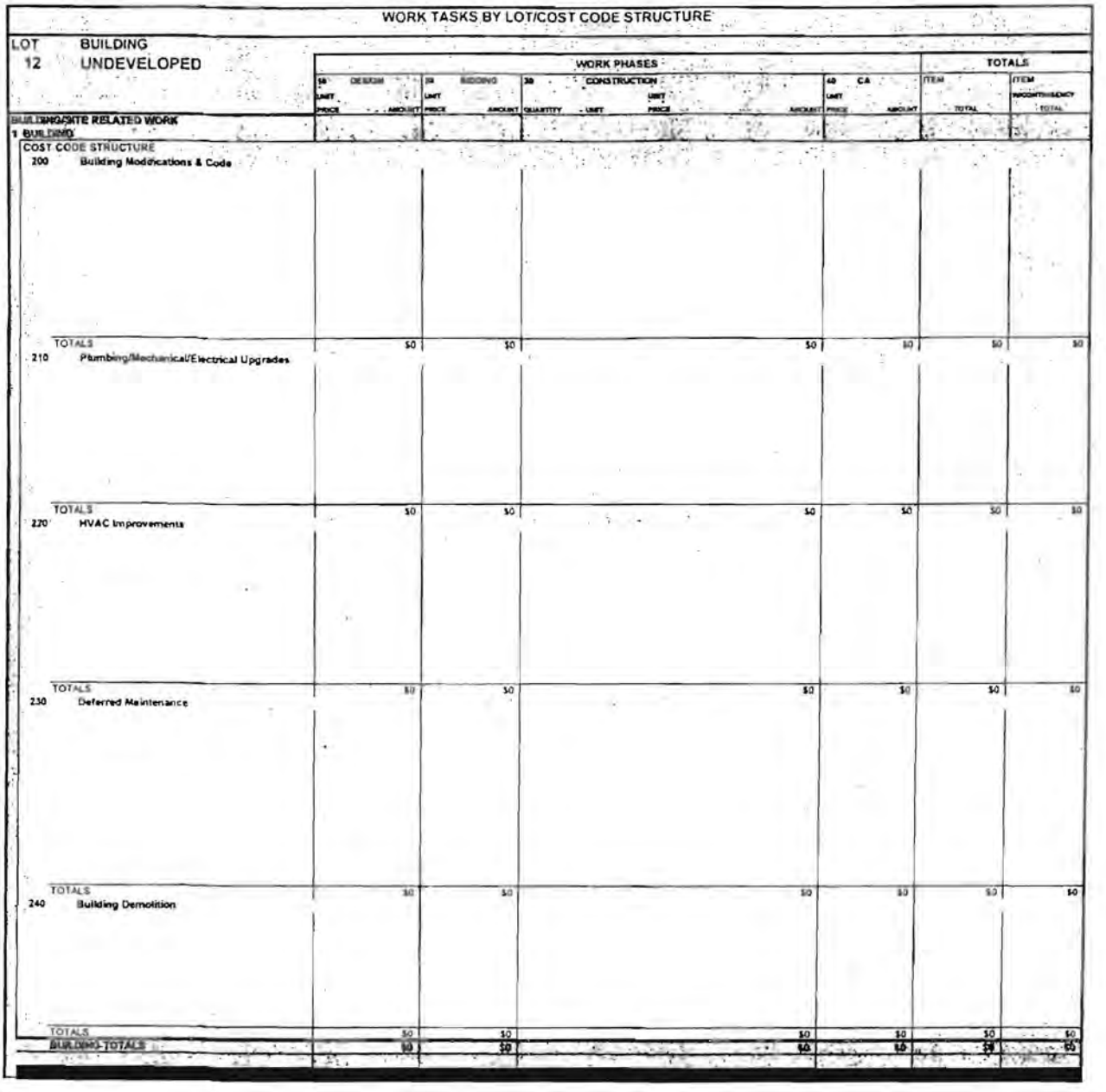
LOT 11 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	40 CA UNIT PRICE / AMOUNT	TOTAL	INCONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS	$0	$0					$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS	$0	$0					$0	$0	$0	$0
220 HVAC Improvements										
TOTALS	$0	$0					$0	$0	$0	$0
230 Deferred Maintenance										
TOTALS	$0	$0					$0	$0	$0	$0
240 Building Demolition										
TOTALS	$0	$0					$0	$0	$0	$0
BUILDING TOTALS	$0	$0					$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 11 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE/AREA DEVELOPMENT											
SITE											
250	Water										
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6% $91	$1,788	$2,145
2	Main on Vanguard	10%	$2,443	2%	$489	1 LS	$24,426	$24,426	6% $1,466	$28,823	$34,587
3	Existing Main Improvements	10%	$58	2%	$12	1 LS	$580	$580	6% $35	$684	$821
	TOTALS		$2,652		$530			$26,521	$1,591	$31,295	$37,554
260	Waste Water										
1	Lateral	10%	$61	2%	$12	1 LS	$613	$613	6% $37	$723	$868
2	Main on Vanguard	10%	$2,010	2%	$402	1 LS	$20,095	$20,095	6% $1,206	$23,712	$28,455
	TOTALS		$2,071		$414			$20,708	$1,242	$24,435	$29,323
270	Electric										
1	Site Distribution	10%	$910	2%	$182	364 LF	$25	$9,100	6% $546	$10,738	$12,886
	TOTALS		$910		$182			$9,100	$546	$10,738	$12,886
280	Gas										
1	Main	10%	$232	2%	$46	1 LS	$2,320	$2,320	6% $139	$2,738	$3,285
	TOTALS		$232		$46			$2,320	$139	$2,738	$3,285
290	Stormwater-Detention										
1	Detention Basin	10%	$13,018	2%	$2,604	1 LS	$130,176	$130,176	6% $7,811	$153,608	$184,329
	TOTALS		$13,018		$2,604			$130,176	$7,811	$153,608	$184,329
300	Stormwater-Sewer										
1	Infrastructure	10%	$9,866	2%	$1,933	1 LS	$96,864	$96,864	6% $5,800	$114,064	$136,878
	TOTALS		$9,866		$1,933			$96,864	$5,800	$114,064	$136,878
310	Road Improvements										
1	Infrastructure-Vanguard	10%	$11,533	2%	$2,307	1 LS	$115,354	$115,354	6% $6,921	$138,116	$163,341
2	Pavement Removal	10%	$345	2%	$69	1 LS	$3,450	$3,450	6% $207	$4,071	$4,885
	TOTALS		$11,880		$2,376			$118,804	$7,128	$140,189	$168,226
320	Road Lighting										
1	Light & Pole Assembly	10%	$1,500	2%	$300	5 EA	$3,000	$15,000	6% $900	$17,700	$21,240
	TOTALS		$1,500		$300			$15,000	$900	$17,700	$21,240
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$665	2%	$133	19 EA	$350	$6,650	6% $399	$7,847	$9,416
2	Evergreen	10%	$90	2%	$18	3 EA	$300	$900	6% $54	$1,062	$1,274
	TOTALS		$755		$151			$7,550	$453	$8,909	$10,691
380	Natural Landscaped Areas										
	TOTALS		$0		$0			$0	$0	$0	$0
390	Telephone/Information Technology										
	TOTALS		$0		$0			$0	$0	$0	$0
SITE TOTALS		$42,684	$8,537					$426,843	$25,611	$503,575	$604,410
LOT TOTALS		$42,684	$8,537					$426,843	$25,611	$503,575	$604,410



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 12 BUILDING UNDEVELOPED	WORK PHASES						TOTALS	
	10 DESIGN UNIT PRICE	AMOUNT	20 BIDDING UNIT PRICE	AMOUNT	30 CONSTRUCTION QUANTITY	UNIT PRICE AMOUNT	40 CA UNIT PRICE	AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS	$0		$0			$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS	$0		$0			$0		$0	$0	$0
220 HVAC Improvements										
TOTALS	$0		$0			$0		$0	$0	$0
230 Deferred Maintenance										
TOTALS	$0		$0			$0		$0	$0	$0
240 Building Demolition										
TOTALS	$0		$0			$0		$0	$0	$0
BUILDING TOTALS	$0		$0			$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION		40 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY / UNIT / PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
12	UNDEVELOPED										
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$2,148
2	Main on Vanguard	10%	$3,541	2%	$708	1 LS	$35,411	$35,411	6%	$2,125	$41,785	$50,142
3	Existing Main Improvements	10%	$87	2%	$17	1 LS	$870	$870	6%	$52	$1,027	$1,232
	TOTALS		$3,780		$756			$37,796		$2,268	$44,599	$53,519
260	Waste Water										
1	Lateral	10%	$81	2%	$12	1 LS	$813	$813	6%	$37	$723	$868
2	Main on Vanguard	10%	$2,544	2%	$509	1 LS	$25,437	$25,437	6%	$1,526	$30,016	$36,019
3	Replace Ex. Main	10%	$1,159	2%	$232	1 LS	$11,588	$11,588	6%	$695	$13,674	$16,409
	TOTALS		$3,784		$753			$37,838		$2,258	$44,413	$53,295
270	Electric										
1	Site Distribution	10%	$810	2%	$162	384 LF	$25	$9,100	6%	$546	$10,738	$12,886
2	Site Distribution	10%	$1,495	2%	$299	299 LF	$50	$14,950	6%	$897	$17,641	$21,169
	TOTALS		$2,405		$481			$24,050		$1,443	$28,379	$34,055
280	Gas										
1	Main	10%	$364	2%	$73	1 LS	$3,643	$3,643	6%	$219	$4,299	$5,158
	TOTALS		$364		$73			$3,643		$219	$4,299	$5,158
290	Stormwater-Detention										
1		10%	$0	2%	$0	1 LS	$0	$0	6%	$0	$0	$0
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer										
1	Infrastructure	10%	$11,124	2%	$2,225	1 LS	$111,240	$111,240	6%	$6,674	$131,263	$157,516
	TOTALS		$11,124		$2,225			$111,240		$6,674	$131,263	$157,516
310	Road Improvements										
1	Infrastructure-Vanguard & Capstone	10%	$19,900	2%	$3,980	1 LS	$199,002	$199,002	6%	$11,940	$234,822	$281,787
2	Pavement Removal	10%	$756	2%	$151	1 LS	$7,563	$7,563	6%	$454	$8,924	$10,709
	TOTALS		$20,657		$4,131			$206,565		$12,394	$243,747	$292,496
320	Road Lighting										
1	Light & Pole Assembly	10%	$800	2%	$120	2 EA	$3,000	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$800		$120			$6,000		$360	$7,080	$8,496
330	Parking										
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas										
1	Site Signage & Bollards	10%	$1,500	2%	$300	1 EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$770	2%	$154	22 EA	$350	$7,700	6%	$462	$9,086	$10,903
	TOTALS		$3,270		$654			$32,700		$1,962	$38,586	$46,303
380	Natural Landscaped Areas										
1	Native Grasses	10%	$75	2%	$15	0.0748 AC	$10,000	$748	6%	$45	$880	$1,056
2	Reforestation	10%	$83	2%	$17	0.0690 AC	$12,000	$828	6%	$50	$977	$1,172
	TOTALS		$157		$31			$1,574		$94	$1,857	$2,229
390	Telephone/Information Technology										
1	Site Distribution	10%	$1,389	2%	$278	463 LF	$30	$13,890	6%	$833	$16,390	$19,668
	TOTALS		$1,389		$278			$13,890		$833	$16,390	$19,668
SITE TOTALS		$47,610		$9,502				$475,096		$28,506	$560,613	$672,735
LOT TOTALS		$47,610		$9,502				$475,096		$28,506	$560,613	$672,735

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 13 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY UNIT	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS		$0		$0			$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS		$0		$0			$0	$0	$0	$0
220 HVAC Improvements										
TOTALS		$0		$0			$0	$0	$0	$0
230 Deferred Maintenance										
TOTALS		$0		$0			$0	$0	$0	$0
240 Building Demolition										
TOTALS		$0		$0			$0	$0	$0	$0
BUILDING TOTALS		$0		$0			$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 13 — BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING SITE/REMEDIATION WORK													
250	Water												
1	Service	10%	$152	2%	$30	1	LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$2,693	2%	$539	1	LS	$27,740	$26,932	6%	$1,616	$31,780	$38,136
3	Existing Main Improvements	10%	$1,041	2%	$208	1	LS	$10,719	$10,407	6%	$624	$12,260	$14,736
	TOTALS		$3,885		$777				$38,854		$2,331	$45,848	$55,017
260	Waste Water												
1	Lateral	10%	$35	2%	$7	1	LS	$351	$351	6%	$21	$414	$497
2	Main on Vanguard	10%	$3,543	2%	$709	1	LS	$35,430	$35,430	6%	$2,126	$41,807	$50,169
	TOTALS		$3,578		$716				$35,781		$2,147	$42,222	$50,666
270	Electric												
1	Site Distribution	10%	$1,043	2%	$209	417	LF	$25	$10,425	6%	$626	$12,302	$14,762
2	Site Distribution	10%	$930	2%	$186	372	LF	$25	$9,300	6%	$558	$10,974	$13,169
	TOTALS		$1,973		$395	1			$19,725		$1,184	$23,276	$27,931
280	Gas												
1	Main	10%	$944	2%	$189	1	LS	$9,442	$9,442	6%	$567	$11,142	$13,370
	TOTALS		$944		$189				$9,442		$567	$11,142	$13,370
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure in Vanguard and Capstone	10%	$15,470	2%	$3,094	1	LS	$154,701	$154,701	6%	$9,282	$182,547	$219,057
	TOTALS		$15,470		$3,094				$154,701		$9,282	$182,547	$219,057
310	Road Improvements												
1	Infrastructure-Vanguard & Capstone	10%	$27,364	2%	$5,473	1	LS	$273,638	$273,638	6%	$16,418	$322,890	$387,468
	TOTALS		$27,364		$5,473				$273,638		$16,418	$322,890	$387,468
320	Road Lighting												
1	Light & Pole Assembly	10%	$1,200	2%	$240	4	EA	$3,000	$12,000	6%	$720	$14,160	$16,992
	TOTALS		$1,200		$240				$12,000		$720	$14,160	$16,992
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Site Signage & Bollards	10%	$1,500	2%	$300	1	EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1	LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$350	2%	$70	10	EA	$350	$3,500	6%	$210	$4,130	$4,956
	TOTALS		$2,850		$570				$28,500		$1,710	$33,630	$40,356
380	Natural Landscaped Areas												
1	Native Grasses	10%	$947	2%	$189	0.9470	AC	$10,000	$9,470	6%	$568	$11,175	$13,410
2	Reforestation	10%	$5,232	2%	$1,046	4.3600	AC	$12,000	$52,320	6%	$3,139	$61,736	$74,083
	TOTALS		$6,179		$1,236				$61,790		$3,707	$72,912	$87,493
390	Telephone/Information Technology												
1	Site Distribution	10%	$1,176	2%	$235	392	LF	$30	$11,760	6%	$706	$13,877	$16,652
	TOTALS		$1,176		$235				$11,760		$706	$13,877	$16,652
LOT TOTALS			$64,619		$12,924				$646,185		$38,771	$762,503	$915,003

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING		WORK PHASES								TOTALS	
		30 DESIGN		35 BIDDING		38 CONSTRUCTION			40 CA		ITEM	ITEM
14	87	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	W/CONTINGENCY TOTAL
	39,530 SF												
BUILDING/SITE RELATED WORK													
1 BUILDING													
COST CODE STRUCTURE													
200	Building Modifications & Code												
1	Improve security at entrances	10%	$600	2%	$120	1 EA		$6,000.00	$6,000	6%	$360	$7,080	$8,496
2	Improve dumpster pad/screening	10%	$500	2%	$100	1 LS		$5,000.00	$5,000	6%	$300	$5,900	$7,080
	TOTALS		$1,100		$220				$11,000		$660	$12,980	$15,576
210	Plumbing/Mechanical/Electrical Upgrades												
1	Add Water Meter	10%	$600	2%	$120	1 EA		$6,000	$6,000	6%	$360	$7,080	$8,496
2	Add Backflow Preventer	10%	$900	2%	$180	1 EA		$9,000	$9,000	6%	$540	$10,620	$12,744
3	Fire Alarm System	10%	$1,200	2%	$240	1 LS		$12,000	$12,000	6%	$720	$14,160	$16,992
4	Remove Fire Protection System	10%	$23,718	2%	$4,744	39,530 SF		$6.00	$237,180	6%	$14,231	$279,872	$335,847
	TOTALS		$26,418		$5,284				$264,180		$15,851	$311,732	$374,079
220	HVAC Improvements												
	TOTALS		$0		$0				$0		$0	$0	$0
230	Deferred Maintenance												
1	Replace roofing system	10%	$22,400	2%	$4,480	32,000 SF		$7.00	$224,000	6%	$13,440	$264,320	$317,184
2	Repair building caulkings/sealants	10%	$600	2%	$120	1 LS		$6,000.00	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$23,000		$4,600				$230,000		$13,800	$271,400	$325,680
240	Building Demolition												
1	Remove chain link fencing	10%	$255	2%	$51	1,000 LF		$2.55	$2,550	6%	$153	$3,009	$3,611
	TOTALS		$255		$51				$2,550		$153	$3,009	$3,611
	BUILDING TOTALS		$80,773		$16,155				$807,730		$48,464	$953,121	$1,143,746

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 14 — BUILDING 87 — 39,530 SF

		WORK PHASES										TOTALS	
		10 DESIGN		25 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	INCONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
SITE													
250	**Water**												
1	Service	10%	$520	2%	$104	1 LS		$5,202	$5,202	6%	$312	$6,138	$7,366
2	Main on Vanguard	10%	$1,270	2%	$254	1 LS		$12,704	$12,704	6%	$762	$14,991	$17,989
3	Existing Main Improvements	10%	$287	2%	$57	1 LS		$2,867	$2,867	6%	$172	$3,383	$4,060
	TOTALS		$2,077		$415				$20,773		$1,246	$24,512	$29,418
260	**Waste Water**												
1	Lateral, Extend to Vanguard	10%	$315	2%	$63	1 LS		$3,152	$3,152	6%	$189	$3,719	$4,463
2	Main on Vanguard	10%	$1,360	2%	$272	1 LS		$13,600	$13,600	6%	$816	$16,048	$19,258
	TOTALS		$1,675		$335				$16,752		$1,005	$19,767	$23,721
270	**Electric**												
	TOTALS		$0		$0				$0		$0	$0	$0
280	**Gas**												
	TOTALS		$0		$0				$0		$0	$0	$0
290	**Stormwater-Detention**												
1	Detention Basin	10%	$8,413	2%	$1,683	1 LS		$84,129	$84,129	6%	$5,048	$99,272	$119,127
	TOTALS		$8,413		$1,683				$84,129		$5,048	$99,272	$119,127
300	**Stormwater-Sewer**												
1	Infrastructure	10%	$6,109	2%	$1,222	1 LS		$61,085	$61,085	6%	$3,665	$72,080	$86,496
	TOTALS		$6,109		$1,222				$61,085		$3,665	$72,080	$86,496
310	**Road Improvements**												
1	Infrastructure-Vanguard	10%	$6,000	2%	$1,200	1 LS		$60,000	$60,000	6%	$3,600	$70,800	$84,960
2	Pavement Removal	10%	$1,188	2%	$238	1 LS		$11,877	$11,877	6%	$713	$14,015	$16,818
	TOTALS		$7,188		$1,438				$71,877		$4,313	$84,815	$101,778
320	**Road Lighting**												
1	Light & Pole Assembly	10%	$900	2%	$180	3 EA		$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180				$9,000		$540	$10,620	$12,744
330	**Parking**												
1	Parking Lot	10%	$13,658	2%	$2,732	1 LS		$136,576	$136,576	6%	$8,195	$161,160	$193,392
	TOTALS		$13,658		$2,732				$136,576		$8,195	$161,160	$193,392
340	**Parking Lighting**												
1	Light & Pole Assembly	10%	$900	2%	$180	3 EA		$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180				$9,000		$540	$10,620	$12,744
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	Deciduous	10%	$630	2%	$126	18 EA		$350	$6,300	6%	$378	$7,434	$8,921
2	Evergreen	10%	$150	2%	$30	5 EA		$300	$1,500	6%	$90	$1,770	$2,124
	TOTALS		$780		$156				$7,800		$468	$9,204	$11,045
380	**Natural Landscaped Areas**												
1	Native Grasses	10%	$136	2%	$28	0.1360 AC		$10,000	$1,360	6%	$82	$1,626	$1,951
2	Reforestation	10%	$1,102	2%	$220	0.9160 AC		$12,000	$11,016	6%	$661	$12,999	$15,599
	TOTALS		$1,240		$248				$12,396		$744	$14,627	$17,553
390	**Telephone/Information Technology**												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$44,351		$8,951				$529,351		$31,753	$624,076	$749,015
LOT TOTALS			$92,712		$18,742				$937,118		$56,227	$1,105,799	$1,326,961

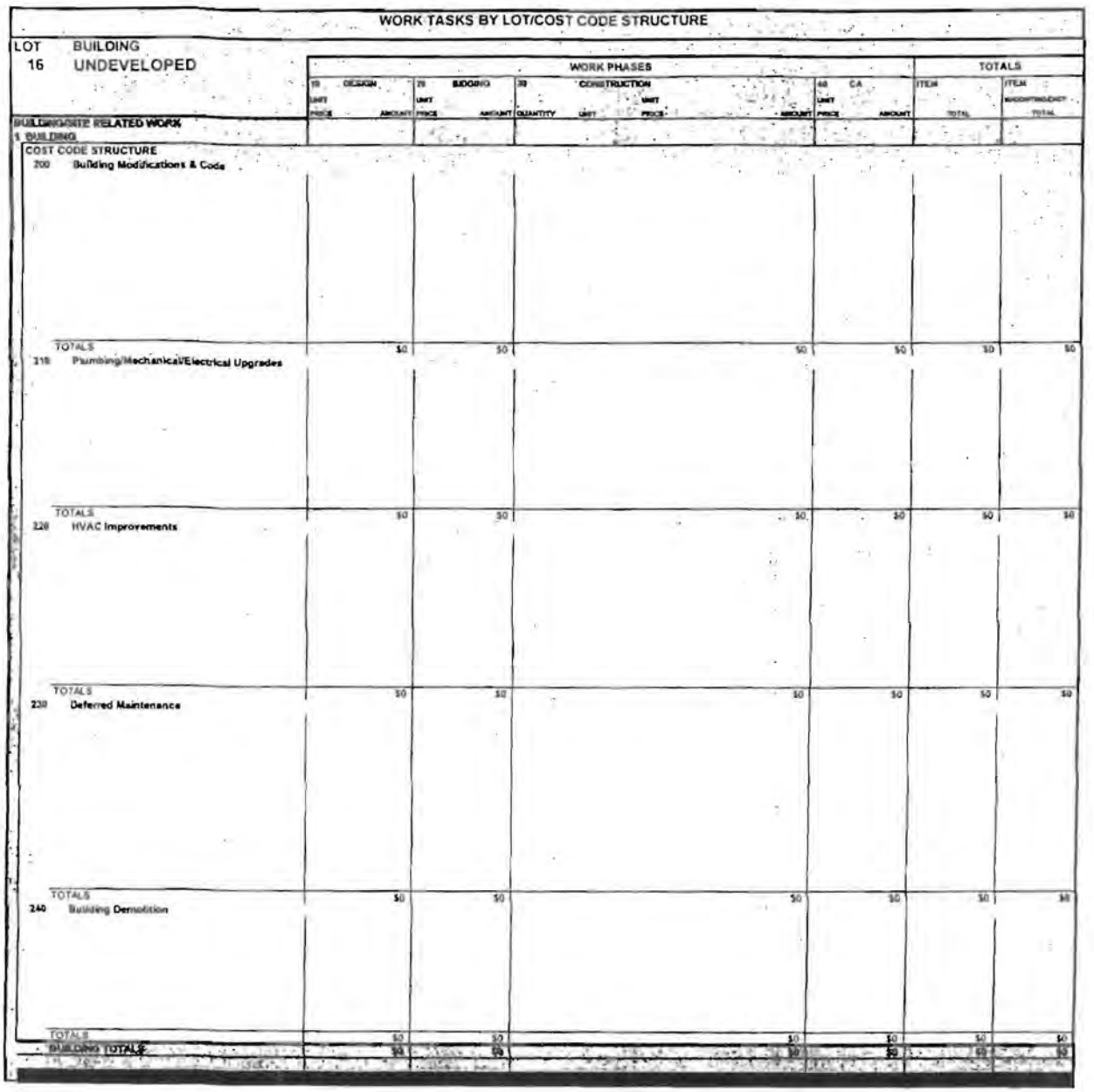
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 15 BUILDING — DEMOLISH 2, 3 & 63

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 C.A.		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
1 Demolish Building 2	10%	$5,870	2%	$1,134	75,600 CF		$0.75	$56,700	6%	$3,402	$86,906	$80,387
2 Demolish Building 3	10%	$11,160	2%	$2,232	148,800 CF		$0.75	$111,600	6%	$6,696	$131,688	$158,026
3 Demolish Building 63	10%	$14,940	2%	$2,988	199,200 CF		$0.75	$149,400	6%	$8,964	$176,292	$211,550
TOTALS		$31,770		$6,354				$317,700		$19,062	$374,886	$449,863
BUILDING TOTALS		$31,770		$6,354				$317,700		$19,062	$374,886	$449,863

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
15	DEMOLISH 2, 3 & 63											
BUILDING/WATER RELATED WORK												
250	Water											
1	Service	10%	$152	2%	$30	1 LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$1,574	2%	$315	1 LS	$15,742	$15,742	6%	$945	$18,578	$22,291
3	Existing Main Improvements	10%	$348	2%	$70	1 LS	$3,477	$3,477	6%	$209	$4,103	$4,923
4	Connect Bldg 3 Water Service	10%	$309	2%	$62	1 LS	$3,090	$3,090	6%	$185	$3,646	$4,375
5	Connect Bldg 63 Water Service	10%	$309	2%	$62	1 LS	$3,090	$3,090	6%	$185	$3,646	$4,375
	TOTALS		$2,691		$538			$26,914		$1,615	$31,759	$38,110
260	Waste Water											
1	Lateral	10%	$61	2%	$12	1 LS	$613	$613	6%	$37	$723	$868
2	Main on Vanguard	10%	$3,735	2%	$747	1 LS	$37,348	$37,348	6%	$2,241	$44,071	$52,883
	TOTALS		$3,796		$759			$37,961		$2,278	$44,794	$53,753
270	Electric											
1	Site Distribution	10%	$930	2%	$186	372 LF	$25	$9,300	6%	$558	$10,974	$13,169
	TOTALS		$930		$186			$9,300		$558	$10,974	$13,169
280	Gas											
1	Main	10%	$661	2%	$132	1 LS	$6,611	$6,611	6%	$397	$7,801	$9,361
	TOTALS		$661		$132			$6,611		$397	$7,801	$9,361
290	Stormwater-Detention											
1	Detension Basin	10%	$7,681	2%	$1,536	1 LS	$76,808	$76,808	6%	$4,608	$90,633	$108,760
	TOTALS		$7,681		$1,536			$76,808		$4,608	$90,633	$108,760
300	Stormwater-Sewer											
1	Infrastructure	10%	$8,082	2%	$1,216	1 LS	$80,820	$80,820	6%	$3,649	$71,768	$86,121
	TOTALS		$8,082		$1,216			$80,820		$3,649	$71,768	$86,121
310	Road Improvements											
1	Infrastructure-Vanguard	10%	$8,885	2%	$1,377	1 LS	$88,851	$88,851	6%	$4,131	$81,244	$97,493
2	Pavement Removal	10%	$1,518	2%	$304	1 LS	$15,182	$15,182	6%	$911	$17,915	$21,498
	TOTALS		$8,403		$1,681			$84,033		$5,042	$99,159	$118,991
320	Road Lighting											
1	Light & Pole Assembly	10%	$600	2%	$120	2 EA	$3,000	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$600		$120			$6,000		$360	$7,080	$8,496
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$420	2%	$84	12 LS	$350	$4,200	6%	$252	$4,958	$5,947
2	Evergreen	10%	$120	2%	$24	4 LS	$300	$1,200	6%	$72	$1,416	$1,699
	TOTALS		$540		$108			$5,400		$324	$6,372	$7,646
380	Natural Landscaped Areas											
1	Native Grasses	10%	$5	2%	$1	0.0050 AC	$10,000	$50	6%	$3	$59	$71
2	Reforestation	10%	$480	2%	$96	0.4000 AC	$12,000	$4,800	6%	$288	$5,664	$6,797
	TOTALS		$485		$97			$4,850		$291	$5,723	$6,868
390	Telephone/Information Technology											
1	Site Distribution	10%	$540	2%	$108	180 LF	$30	$5,400	6%	$324	$6,372	$7,646
	TOTALS		$540		$108			$5,400		$324	$6,372	$7,646
SUB-TOTALS		$32,400		$6,480			$324,074		$19,444	$382,454	$458,945	
LOT TOTALS		$64,180		$12,836			$641,797		$38,508	$757,320	$908,784	



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 16 UNDEVELOPED	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
TOTALS		$0		$0				$0		$0	$0	$0
BUILDING TOTALS		$0		$0				$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 16 BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING RELATED WORK													
SITE													
250	Water												
1	Service	10%	$152	2%	$30	1	LS	$1,515	$1,515	6%	$91	$1,788	$2,145
2	Main on Vanguard	10%	$3,782	2%	$752	1	LS	$37,821	$37,821	6%	$2,297	$44,383	$53,271
3	Existing Main Improvements	10%	$174	2%	$35	1	LS	$1,739	$1,739	6%	$104	$2,052	$2,462
	TOTALS		$4,098		$818				$40,875		$2,493	$48,233	$57,879
260	Waste Water												
1	Lateral	10%	$61	2%	$12	1	LS	$613	$613	6%	$37	$723	$868
	TOTALS		$61		$12				$613		$37	$723	$868
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$11,223	2%	$2,245	1	LS	$112,229	$112,229	6%	$6,734	$132,430	$158,916
	TOTALS		$11,223		$2,245				$112,229		$6,734	$132,430	$158,916
310	Road Improvements												
1	Infrastructure-Vanguard	10%	$17,767	2%	$3,553	1	LS	$177,668	$177,668	6%	$10,660	$209,648	$251,578
2	Pavement Removal	10%	$551	2%	$110	1	LS	$5,506	$5,506	6%	$330	$6,497	$7,796
	TOTALS		$18,317		$3,663				$183,174		$10,990	$216,145	$259,374
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Site Signage & Bollards	10%	$1,500	2%	$300	1	EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1	LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$665	2%	$133	10	EA	$350	$6,650	6%	$399	$7,847	$9,416
4	Evergreen	10%	$210	2%	$42	7	EA	$300	$2,100	6%	$126	$2,478	$2,974
	TOTALS		$3,375		$675				$33,750		$2,025	$39,825	$47,790
380	Natural Landscaped Areas												
1	Reforestation	10%	$330	2%	$66	0.2750	AC	$12,000	$3,300	6%	$198	$3,894	$4,673
	TOTALS		$330		$66				$3,300		$198	$3,894	$4,673
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
EXTENDED TOTALS			$37,394		$7,479				$373,841		$22,436	$441,250	$529,500
LOT TOTALS			$37,394		$7,479				$373,841		$22,436	$441,250	$529,500

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING		WORK PHASES								TOTALS	
		10 DESIGN		25 BIDDING		30 CONSTRUCTION			40 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	RECONFIGURED TOTAL
17	61												
	44,540 SF												
BUILDING/SITE RELATED WORK													
1 BUILDING													
COST CODE STRUCTURE													
200	Building Modifications & Code												
1	Upgrade Restrooms to meet ADA requirements	10%	$2,048	2%	$410	2	EA	$10,241.00	$20,482	6%	$1,229	$24,169	$29,003
2	Add Backflow Preventer	10%	$800	2%	$160	2	EA	$4,000.00	$8,000	6%	$480	$9,440	$11,328
3	Upgrade building exterior	10%	$14,583	2%	$2,917	31,840	SF	$4.58	$145,827	6%	$8,750	$172,076	$206,491
4	Replace Door Hardware with ADA Compliant Handles	10%	$875	2%	$175	50	EA	$175.00	$8,750	6%	$525	$10,325	$12,390
5	Tenant Improvements	10%	$113,725	2%	$22,745	45,490	SF	$25.00	1137250	6%	68235	$1,341,955	$1,610,346
6	Improve security at entrances	10%	$1,200	2%	$240	2	EA	$6,000.00	12000	6%	720	$14,160	$16,992
7	Improve dumpster pad/screening	10%	$500	2%	$100	1	LS	$5,000.00	5000	6%	300	$5,900	$7,080
8	Add Water Meter	10%	$800	2%	$160	2	EA	$4,000.00	$8,000	6%	$480	$9,440	$11,328
TOTALS			$134,531		$26,906				$1,345,309		$80,719	$1,587,465	$1,904,958
210	Plumbing/Mechanical/Electrical Upgrades												
1	Fire Alarm System	10%	$700	2%	$140	1	LS	$7,000.00	$7,000	6%	$420	$8,260	$9,912
2	Renovate Fire Protection System	10%	$15,925	2%	$3,185	45,500	SF	$3.50	$159,250	6%	$9,555	$187,915	$225,498
3	Insulate Restroom Piping	10%	$80	2%	$16	8	SF	$100.00	$800	6%	$48	$944	$1,133
TOTALS			$16,705		$3,341				$167,050		$10,023	$197,119	$236,543
220	HVAC Improvements												
1	Provide new DDC System	10%	$10,500	2%	$2,100	70	PT	$1,500.00	$105,000	6%	$6,300	$123,900	$148,680
2	Replace AHU-1, HV1, 2, 3, 4 and related systems	10%	$22,800	2%	$4,560	12,000	CFM	$19.00	$228,000	6%	$13,680	$269,040	$322,848
TOTALS			$33,300		$6,660				$333,000		$19,980	$392,940	$471,528
230	Deferred Maintenance												
1	Recaulk Windows in Office Area	10%	$80	2%	$16	16	EA	$50.00	$800	6%	$48	$944	$1,133
2	Repaint Louvers	10%	$24	2%	$5	73	SF	$3.18	$217	6%	$14	$286	$336
3	Clean restrooms	10%	$50	2%	$10	1	LS	$500.00	$500	6%	$30	$590	$708
4	Repaint Roof	10%	36,578	2%	$1,316	29,900	SF	$2.20	$65,780	6%	$3,947	$77,820	393,144
5	Re-crimp standing seam roof	10%	$927	2%	$185	29,900	SF	$0.31	$8,269	6%	$558	$10,937	$13,125
6	Replace Loading Dock Seals & Bumpers	10%	$367	2%	$73	2	EA	$1,833.00	$3,666	6%	$220	$4,326	$5,191
7	Replace EPDM roof	10%	$768	2%	$154	3,840	SF	$2.00	$7,680	6%	$461	$9,062	$10,875
TOTALS			$8,793		$1,758				$87,932		$5,276	$103,760	$124,512
240	Building Demolition												
TOTALS			$0		$0				$0		$0	$0	$0
BUILDING TOTALS			$193,329		$38,665				$1,933,291		$115,997	$2,281,304	$2,737,541

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 17 — BUILDING 61 — 44,545 SF

		WORK PHASES										TOTALS	
		10 DESIGN		19 BIDDING		20 CONSTRUCTION				40 CA		ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING ASSOCIATED WORK													
250	**Water**												
1	Service	10%	$620	2%	$124	1	LS	$6,201	$6,201	6%	$372	$7,317	$8,781
2	Main on Vanguard	10%	$1,514	2%	$323	1	LS	$16,141	$16,141	5%	$968	$19,046	$22,856
3	Existing Main Improvements	10%	$243	2%	$49	1	LS	$2,434	$2,434	6%	$146	$2,872	$3,447
	TOTALS		$2,478		$496				$24,776		$1,487	$29,236	$35,083
260	**Waste Water**												
	TOTALS		$0		$0				$0		$0	$0	$0
270	**Electric**												
1	Decentralize Electrical Service	10%	$2,000	2%	$400	1	EA	$20,000	$20,000	6%	$1,200	$23,600	$28,320
2	"Kid to construction-OP&L"					1	EA	$45,000	$45,000			$45,000	$45,000
3	Site Distribution	10%	$3,880	2%	$776	776	LF	$50	$38,800	6%	$2,328	$45,784	$54,941
	TOTALS		$5,880		$1,176				$103,800		$3,528	$114,384	$99,841
280	**Gas**												
	TOTALS		$0		$0				$0		$0	$0	$0
290	**Stormwater-Detention**												
1	Detention Basin	10%	$1,762	2%	$352	1	LS	$17,618	$17,618	6%	$1,057	$20,789	$24,947
	TOTALS		$1,762		$352				$17,618		$1,057	$20,789	$24,947
300	**Stormwater-Sewer**												
1	Infrastructure	10%	$5,573	2%	$1,115	1	LS	$55,729	$55,729	6%	$3,344	$65,760	$78,912
	TOTALS		$5,573		$1,115				$55,729		$3,344	$65,760	$78,912
310	**Road Improvements**												
1	Infrastructure-Vanguard	10%	$4,841	2%	$968	1	LS	$48,407	$48,407	6%	$2,904	$57,120	$68,544
2	Pavement Removal	10%	$843	2%	$169	1	LS	$8,432	$8,432	6%	$506	$9,950	$9,108
	TOTALS		$5,484		$1,097				$56,839		$3,290	$64,710	$77,652
320	**Road Lighting**												
1	Light & Pole Assembly	10%	$900	2%	$180	3	EA	$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180				$9,000		$540	$10,620	$12,744
330	**Parking**												
1	Parking Lot	10%	$17,883	2%	$3,577	1	LS	$178,827	$178,827	6%	$10,730	$211,018	$253,219
	TOTALS		$17,883		$3,577				$178,827		$10,730	$211,018	$253,219
340	**Parking Lighting**												
1	Light & Pole Assembly	10%	$1,800	2%	$360	6	EA	$3,000	$18,000	6%	$1,080	$21,240	$25,488
	TOTALS		$1,800		$360				$18,000		$1,080	$21,240	$25,488
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	East Elevation at Parking Lot	10%	$182	2%	$36	320	SF	$6.00	$1,920	6%	$115	$2,298	$2,758
2	Deciduous	10%	$585	2%	$118	17	EA	$350	$5,950	6%	$357	$7,021	$8,425
3	Evergreen	10%	$450	2%	$90	15	EA	$300	$4,500	6%	$270	$5,310	$6,372
	TOTALS		$1,237		$247				$12,370		$742	$14,597	$17,516
380	**Natural Landscaped Areas**												
1	Native Grasses	10%	$0	2%	$0	0.0002	AC	$10,000	$2	6%	$0	$2	$2
2	Reforestation	10%	$551	2%	$110	0.4590	AC	$12,000	$5,508	6%	$330	$6,499	$7,799
	TOTALS		$551		$110				$5,510		$331	$6,502	$7,802
390	**Telephone/Information Technology**												
1	Install new phone service	10%	$900	2%	$180	1	EA	$9,000	$9,000	6%	$540	$10,620	$12,744
2	Site Distribution	10%	$969	2%	$194	323	LF	$30	$9,690	6%	$581	$11,434	$13,721
	TOTALS		$1,869		$374				$18,690		$1,121	$22,054	$26,465
LOT TOTALS			$238,745		$47,749				$2,432,450		$143,247	$2,862,191	$3,397,310

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 18 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 C.A		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
TOTALS		$0		$0				$0		$0	$0	$0
BUILDING TOTALS		$0		$0				$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 18 — BUILDING: UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			60 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
SITE													
250	Water												
1	Service	10%	$87	2%	$17	1	LS	$868	$868	6%	$52	$1,022	$1,226
2	Existing Main Improvements	10%	$116	2%	$23	1	LS	$1,159	$1,159	6%	$70	$1,368	$1,641
	TOTALS		$203		$41				$2,026		$122	$2,390	$2,867
260	Waste Water												
1	Lateral	10%	$81	2%	$12	1	LS	$813	$813	6%	$37	$723	$868
2	Main on Vanguard	10%	$252	2%	$50	1	LS	$2,524	$2,524	6%	$151	$2,978	$3,574
	TOTALS		$314		$63				$3,337		$188	$3,702	$4,442
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$1,506	2%	$301	1	LS	$15,064	$15,064	6%	$904	$17,776	$21,331
	TOTALS		$1,506		$301				$15,064		$904	$17,776	$21,331
310	Road Improvements												
1	Pavement Removal	10%	$2,208	2%	$442	1	LS	$22,082	$22,082	6%	$1,325	$26,057	$31,268
	TOTALS		$2,208		$442				$22,082		$1,325	$26,057	$31,268
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
	TOTALS		$0		$0				$0		$0	$0	$0
380	Natural Landscaped Areas												
1	Native Grasses	10%	$557	2%	$111	0.5570	AC	$10,000	$5,570	6%	$334	$6,573	$7,887
	TOTALS		$557		$111				$5,570		$334	$6,573	$7,887
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$4,788		$958				$47,878		$2,873	$56,496	$67,795
LOT TOTALS			$4,788		$958				$47,878		$2,873	$56,496	$67,795

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 19 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 C.A. UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 19 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING SITE RELATED WORK													
250	Water												
1	Service	10%	$87	2%	$17	1	LS	$866	$866	6%	$52	$1,022	$1,226
	TOTALS		$87		$17				$866		$52	$1,022	$1,226
260	Waste Water												
1	Lateral	10%	$61	2%	$12	1	LS	$613	$613	6%	$37	$723	$868
2	Main on Vanguard	10%	$945	2%	$189	1	LS	$9,446	$9,446	6%	$567	$11,146	$13,376
	TOTALS		$1,006		$201				$10,059		$604	$11,870	$14,244
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$613	2%	$123	1	LS	$6,129	$6,129	6%	$368	$7,232	$8,679
	TOTALS		$613		$123				$6,129		$368	$7,232	$8,679
310	Road Improvements												
1	Infrastructure-Capstone	10%	$4,933	2%	$987	1	LS	$49,328	$49,328	6%	$2,960	$58,205	$69,846
2	Pavement Removal	10%	$2,760	2%	$552	1	LS	$27,603	$27,603	6%	$1,656	$32,572	$39,086
	TOTALS		$7,693		$1,539				$76,929		$4,616	$90,776	$108,931
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$140	2%	$28	4	EA	$350	$1,400	6%	$84	$1,652	$1,982
2	Evergreen	10%	$240	2%	$48	8	EA	$300	$2,400	6%	$144	$2,832	$3,398
	TOTALS		$380		$76				$3,800		$228	$4,484	$5,381
380	Natural Landscaped Areas												
1	Native Grasses	10%	$573	2%	$115	0.5730	AC	$10,000	$5,730	6%	$344	$6,761	$8,114
	TOTALS		$573		$115				$5,730		$344	$6,761	$8,114
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
LOT TOTALS			$10,351		$2,070				$103,513		$6,211	$122,145	$146,575

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 20 BUILDING DEMOLISH GH

	WORK PHASES										TOTALS	
	10 DESIGN		25 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
1 Demolish Building GH	10%	$4,770	2%	$954	63,800 CF		$0.75	$47,700	6%	$2,862	$56,286	$67,543
TOTALS		$4,770		$954				$47,700		$2,862	$56,286	$67,543
BUILDING TOTALS		$4,770		$954				$47,700		$2,862	$56,286	$67,543

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 20 BUILDING DEMOLISH GH

		WORK PHASES										TOTALS	
		10 DESIGN		20 EXISTING		30 CONSTRUCTION			40 CA			ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
SITE													
250	Water												
1	Service	10%	$130	2%	$26	1	LS	$1,298	$1,298	6%	$78	$1,532	$1,838
2	Existing Main Improvements	10%	$319	2%	$64	1	LS	$3,187	$3,187	6%	$191	$3,761	$4,513
	TOTALS		$449		$90				$4,485		$269	$5,292	$6,351
260	Waste Water												
1	Lateral	10%	$35	2%	$7	1	LS	$351	$351	6%	$21	$414	$497
2	Main	10%	$505	2%	$101	1	LS	$5,047	$5,047	6%	$303	$5,955	$7,147
	TOTALS		$540		$108				$5,398		$324	$6,370	$7,644
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
	TOTALS		$0		$0				$0		$0	$0	$0
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$891	2%	$178	1	LS	$8,910	$8,910	6%	$535	$10,514	$12,617
	TOTALS		$891		$178				$8,910		$535	$10,514	$12,617
310	Road Improvements												
1	Infrastructure-Capstone & A Street	10%	$5,178	2%	$1,036	1	LS	$51,781	$51,781	6%	$3,107	$61,102	$73,322
2	Pavement Removal	10%	$193	2%	$39	1	LS	$1,933	$1,933	6%	$116	$2,281	$2,737
	TOTALS		$5,371		$1,074				$53,714		$3,223	$63,383	$76,059
320	Road Lighting												
1	Light & Pole Assembly	10%	$900	2%	$180	3	EA	$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180				$9,000		$540	$10,620	$12,744
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Site Signage & Bollards	10%	$1,500	2%	$300	1	EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1	LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$315	2%	$63	8	EA	$350	$3,150	6%	$189	$3,717	$4,460
	TOTALS		$2,815		$563				$28,150		$1,689	$33,217	$39,860
380	Natural Landscaped Areas												
1	Native Grasses	10%	$561	2%	$110	0.5510	AC	$10,000	$5,510	6%	$331	$6,502	$7,802
	TOTALS		$561		$110				$5,510		$331	$6,502	$7,802
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$13,917		$2,783				$139,167		$8,350	$164,217	$197,060
LOT TOTALS			$16,287		$3,257				$167,867		$9,772	$192,183	$230,620

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 21 — BUILDING 45 — 10,240 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A.	ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK													
$ BUILDING													
COST CODE STRUCTURE													
200	**Building Modifications & Code**												
1	New wall elev. equip. rm. and jan. clos	10%	$209	2%	$42	240	SF	$8.71	$2,090	6%	$125	$2,467	$2,960
2	Insulate Restroom Piping	10%	$20	2%	$4	3	SF	$100.00	$200	6%	$12	$236	$283
3	Construct new mechanical room	10%	$1,938	2%	$387	450	SF	$43.02	$19,359	6%	$1,162	$22,844	$27,413
4	Tenant Improvements	10%	$14,373	2%	$2,875	9,582	SF	$15.00	$143,730	6%	$8,624	$169,601	$203,522
5	Improve security at entrances	10%	$1,800	2%	$360	3	EA	$6,000.00	18000	6%	1080	$21,240	$25,488
6	Improve dumpster pad/screening	10%	$500	2%	$100	1	LS	$5,000.00	5000	6%	300	$5,900	$7,080
7	Add Backflow Preventer	10%	$1,000	2%	$200	1	LS	$10,000.00	$10,000	6%	$600	$11,800	$14,160
	TOTALS		$19,838		$3,968				$198,379		$11,903	$234,088	$280,905
210	**Plumbing/Mechanical/Electrical Upgrades**												
1	Fire Alarm System	10%	$700	2%	$140	1	EA	$7,000.00	$7,000	6%	$420	$8,260	$9,912
2	Renovate Fire Protection System	10%	$5,760	2%	$1,152	9,600	SF	$6.00	$57,600	6%	$3,456	$67,968	$81,562
	TOTALS		$6,460		$1,292				$64,600		$3,876	$76,228	$91,474
220	**HVAC Improvements**												
1	Provide new DDC System	10%	$5,400	2%	$1,080	30	PT	$1,800.00	$54,000	6%	$3,240	$63,720	$76,464
2	Replace AHU-1	10%	$4,320	2%	$864	4,800	CFM	$9.00	$43,200	6%	$2,592	$50,976	$61,171
3	AHU-2 Calibration	10%	$400	2%	$80	1	LS	$4,000.00	$4,000	6%	$240	$4,720	$5,664
4	New Mechanical Room	10%	$2,760	2%	$552	800	SF	$48.00	$27,600	6%	$1,656	$32,568	$39,082
5	New Boiler Plant	10%	$10,800	2%	$2,160	1	LS	$108,000.00	$108,000	6%	$6,480	$127,440	$152,928
	TOTALS		$23,680		$4,736				$236,800		$14,208	$278,424	$334,309
230	**Deferred Maintenance**												
1	Replace rusted H.M. door and frame	10%	$50	2%	$10	1	Oy	$500.00	$500	6%	$30	$590	$708
2	Repaint roof access stairs	10%	$49	2%	$10	1	LS	$494.00	$494	6%	$30	$583	$700
3	Caulk stone coping joints	10%	$211	2%	$42	48	MH	$44.00	$2,112	6%	$127	$2,492	$2,991
4	Replace roofing system	10%	$4,550	2%	$910	5,500	SF	$7.00	$45,500	6%	$2,730	$53,690	$64,428
5	Install metal copings over horizontal EIFS	10%	$212	2%	$42	100	SF	$21.20	$2,120	6%	$127	$2,502	$3,002
6	Paint all exposed metal surfaces on roof	10%	$211	2%	$42	48	MH	$44.00	$2,112	6%	$127	$2,492	$2,991
7	Repair building caulking/sealants	10%	$70	2%	$14	1	LS	$700.00	$700	6%	$42	$826	$991
8	Entrance retaining wall appearance	10%	$2,000	2%	$400	4,000	SF	$5.00	$20,000	6%	$1,200	$23,600	$28,320
	TOTALS		$7,354		$1,471				$73,538		$4,412	$86,775	$104,130
240	**Building Demolition**												
1	Remove chain link fencing	10%	$128	2%	$26	500	LF	$2.55	$1,275	6%	$77	$1,505	$1,806
	TOTALS		$128		$26				$1,275		$77	$1,505	$1,806
	BUILDING TOTALS		$57,460		$11,492				$574,592		$34,476	$678,019	$813,623

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 21 — BUILDING 45 — 10,350 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
ITEMS													
250	Water												
1	Service-Domestic	10%	$270	2%	$54	1	LS	$2,704	$2,704	6%	$162	$3,191	$3,829
2	Service-Fire	10%	$325	2%	$65	1	LS	$3,245	$3,245	6%	$195	$3,829	$4,595
3	Main on A Street	10%	$70	2%	$14	1	LS	$697	$697	6%	$42	$822	$987
4	Existing Main Improvements	10%	$232	2%	$46	1	LS	$2,318	$2,318	6%	$139	$2,735	$3,282
	TOTALS		$898		$179				$8,964		$538	$10,578	$13,693
260	Waste Water												
1	Main on "A" Street and on property	10%	$2,246	2%	$449	1	LS	$22,460	$22,460	6%	$1,348	$26,503	$31,803
	TOTALS		$2,246		$449				$22,460		$1,348	$26,503	$31,803
270	Electric												
1	Decentralize Electrical Service	10%	$1,300	2%	$260	1	EA	$13,000	$13,000	6%	$780	$15,340	$18,408
2	"Add to construction-DP&L"					1	EA	$31,000	$31,000			$31,000	$31,000
	TOTALS		$1,300		$260				$44,000		$780	$46,340	$55,608
280	Gas												
1	Service to New Mech Room	10%	$248	2%	$50	1	LS	$2,484	$2,484	6%	$149	$2,931	$3,517
	TOTALS		$248		$50				$2,484		$149	$2,931	$3,517
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$711	2%	$142	1	LS	$7,107	$7,107	6%	$426	$8,386	$10,064
	TOTALS		$711		$142				$7,107		$426	$8,386	$10,064
310	Road Improvements												
1	Infrastructure-A Street	10%	$805	2%	$161	1	LS	$8,047	$8,047	6%	$483	$9,495	$11,395
2	Pavement Removal	10%	$380	2%	$76	1	LS	$3,802	$3,802	6%	$228	$4,486	$5,384
	TOTALS		$1,185		$237				$11,849		$711	$13,982	$16,778
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
1	Parking Lot	10%	$3,942	2%	$788	1	LS	$39,422	$39,422	6%	$2,365	$46,518	$55,822
	TOTALS		$3,942		$788				$39,422		$2,365	$46,518	$55,822
340	Parking Lighting												
1	Light & Pole Assembly	10%	$600	2%	$120	2	EA	$3,000	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$600		$120				$6,000		$360	$7,080	$8,496
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$420	2%	$84	12	EA	$350	$4,200	6%	$252	$4,956	$5,947
	TOTALS		$420		$84				$4,200		$252	$4,956	$5,947
380	Natural Landscaped Areas												
1	Native Grasses	10%	$534	2%	$107	0.5340	AC	$10,000	$5,340	6%	$320	$6,301	$7,561
2	Reforestation	10%	$179	2%	$36	0.1490	AC	$12,000	$1,788	6%	$107	$2,110	$2,532
	TOTALS		$713		$143				$7,128		$428	$8,411	$10,093
390	Telephone/Information Technology												
1	Site Distribution	10%	$351	2%	$70	117	LF	$30	$3,510	6%	$211	$4,142	$4,970
	TOTALS		$351		$70				$3,510		$211	$4,142	$4,970
SUBTOTALS		$70,072		$14,014					$731,716		$42,043	$857,845	$1,029,414
LOT TOTALS		$70,072		$14,014					$731,716		$42,043	$857,845	$1,029,414

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 22 BUILDING OSE — 89,290 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION		40 CA		ITEM	ITEM CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY UNIT	UNIT PRICE AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK											
BUILDING											
COST CODE STRUCTURE											
200	Building Modifications & Code										
1	Upgrade Restrooms to meet ADA	10%	$3,000	2%	$600	1 LS	$30,000.00 $30,000	6%	$1,800	$35,400	$42,480
2	Replace door knobs with ADA handles	10%	$2,800	2%	$560	160 EA	$175.00 $28,000	6%	$1,680	$33,040	$39,648
3	Insulate Restroom Piping	10%	$400	2%	$80	40 EA	$100.00 $4,000	6%	$240	$4,720	$5,664
4	Remove existing guard post in lobby	10%	$330	2%	$66	1 LS	$3,300.00 $3,300	6%	$198	$3,894	$4,673
5	Modify West Elevation @ A Building	10%	$5,000	2%	$1,000	1 LS	$50,000.00 50000	6%	3000	$59,000	$70,800
6	Remove entrance vestibule in lobby	10%	$250	2%	$50	1 LS	$2,500.00 2500	6%	150	$2,950	$3,540
7	New Lobby Entrance at West elevation	10%	$2,800	2%	$560	1 LS	$28,000.00 28000	6%	1680	$33,040	$39,648
8	Convert Auditorium to Office Space	10%	$24,500	2%	$4,900	3,500 SF	$70.00 245000	6%	14700	$289,100	$346,920
9	Improve dumpster padscreening	10%	$500	2%	$100	1 LS	$5,000.00 5000	6%	300	$5,900	$7,080
10	Tenant Improvements	10%	$200,000	2%	$40,000	80,000 SF	$25.00 2000000	6%	120000	$2,360,000	$2,832,000
	TOTALS		$239,580		$47,916		$2,395,800		$143,748	$2,827,044	$3,392,453
210	Plumbing/Mechanical/Electrical Upgrades										
1	Fire Alarm System	10%	$700	2%	$140	1 EA	$7,000.00 $7,000	6%	$420	$8,260	$9,912
2	Renovate Building Sprinkler Systems	10%	$54,043	2%	$10,809	90,072 SF	$6.00 $540,432	6%	$32,426	$637,710	$765,253
3	Add Back flow Preventer & Water Main	10%	$2,300	2%	$460	1 LS	$23,000.00 $23,000	6%	$1,380	$27,140	$32,568
4	Replace Water Heaters	10%	$2,600	2%	$520	2 EA	$13,000.00 $26,000	6%	$1,560	$30,680	$36,816
	TOTALS		$59,643		$11,929		$596,432		$35,786	$703,790	$844,548
220	HVAC Improvements										
1	Extend Natural Gas To Mech. Room	10%	$1,200	2%	$240	200 FT	$60.00 $12,000	6%	$720	$14,160	$16,992
2	New Mech Space for new equip	10%	$4,050	2%	$810	900 SF	$45.00 $40,500	6%	$2,430	$47,790	$57,348
3	New Boiler plant equipment	10%	$22,000	2%	$4,400	2 EA	$110,000.00 $220,000	6%	$13,200	$259,600	$311,520
4	New Chiller Plant	10%	$27,500	2%	$5,500	250 TN	$1,100.00 $275,000	6%	$16,500	$324,500	$389,400
5	New Controls/Compressed Air System	10%	$4,000	2%	$800	1 LS	$40,000.00 $40,000	6%	$2,400	$47,200	$56,640
6	Replace AHU-3	10%	$2,580	2%	$516	6,000 CFA	$4.30 $25,800	6%	$1,548	$30,444	$36,533
7	Renovate DDC Controls	10%	$10,500	2%	$2,100	70 PT	$1,500.00 $105,000	6%	$6,300	$123,900	$148,680
8	Calibrate AHU'S for Outside Air	10%	$1,600	2%	$320	4 EA	$4,000.00 $16,000	6%	$960	$18,880	$22,656
	TOTALS		$73,430		$14,686		$734,300		$44,058	$866,474	$1,039,769
230	Deferred Maintenance										
1	Repair water damaged ceramic tile in toilets	10%	$800	2%	$160	800 SF	$10.00 $8,000	6%	$480	$9,440	$11,328
2	Replace roof membrane and flashing	10%	$7,448	2%	$1,490	28,000 SF	$2.66 $74,480	6%	$4,469	$87,888	$105,464
3	Recaulk coping stone joints	10%	$192	2%	$38	48 MH	$40.00 $1,920	6%	$115	$2,266	$2,719
4	Tuckpoint masonry	10%	$5,440	2%	$1,088	22,000 SF	$1.70 $34,400	6%	$3,264	$64,192	$77,030
5	Recaulk Building Exp. Joints	10%	$6,000	2%	$1,200	1 LS	$60,000 $60,000	6%	$3,600	$70,800	$84,960
	TOTALS		$19,880		$3,976		$198,800		$11,928	$234,584	$281,501
240	Building Demolition										
1	Demolish Building GP-1	10%	$5,850	2%	$1,170	78,000 CF	$0.75 $58,500	6%	$3,510	$69,030	$82,836
	TOTALS		$5,850		$1,170		$58,500		$3,510	$69,030	$82,836
BUILDING TOTALS			$398,383		$79,677		$3,983,832		$239,030	$4,700,922	$5,641,107

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 22 — BUILDING OSE — 83,290 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT		UNIT					UNIT		CONTINGENCY
		PRICE	AMOUNT	PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK												
SITE												
250	Water											
1	Service	10%	$65	2%	$13	1 LS	$649	$649	6%	$39	$766	$919
2	Main, 8"	10%	$1,207	2%	$241	1 LS	$12,070	$12,070	6%	$724	$14,243	$17,091
3	Main, 12"	10%	$241	2%	$48	1 LS	$2,411	$2,411	6%	$145	$2,845	$3,414
4	Existing Main Improvements	10%	$869	2%	$174	1 LS	$8,691	$8,691	6%	$521	$10,255	$12,306
	TOTALS		$2,382		$476			$23,821		$1,429	$28,109	$33,731
260	Waste Water											
1	Lateral	10%	$70	2%	$14	1 LS	$701	$701	6%	$42	$827	$993
2	Main	10%	$505	2%	$101	1 LS	$5,047	$5,047	6%	$303	$5,955	$7,147
	TOTALS		$575		$115			$5,748		$345	$6,783	$8,139
270	Electric											
1	Decentralize Electrical Service	10%	$12,500	2%	$2,500	1 EA	$125,000	$125,000	6%	$7,500	$147,500	$177,000
	"Aid to Construction-OPAL"					1 EA	$50,000	$50,000			$50,000	$60,000
	TOTALS		$12,500		$2,500			$175,000		$7,500	$197,500	$237,000
280	Gas											
1	Service	10%	$321	2%	$64	1 LS	$3,209	$3,209	6%	$193	$3,787	$4,544
	TOTALS		$321		$64			$3,209		$193	$3,787	$4,544
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$3,542	2%	$708	1 LS	$35,422	$35,422	6%	$2,125	$41,798	$50,158
	TOTALS		$3,542		$708			$35,422		$2,125	$41,798	$50,158
310	Road Improvements											
1	Infrastructure-Capstone & B Street	10%	$9,356	2%	$1,871	1 LS	$93,562	$93,562	6%	$5,614	$110,403	$132,484
2	Renovate Courtyard	10%	$4,013	2%	$803	1 LS	$40,127	$40,127	6%	$2,408	$47,350	$56,820
3	Pavement Removal	10%	$1,975	2%	$395	1 LS	$19,755	$19,755	6%	$1,185	$23,311	$27,973
	TOTALS		$15,344		$3,069			$153,444		$9,207	$181,064	$217,277
320	Road Lighting											
1	Light & Pole Assembly	10%	$800	2%	$120	2 EA	$3,000	$8,000	6%	$360	$7,080	$8,496
	TOTALS		$800		$120			$8,000		$360	$7,080	$8,496
330	Parking											
1	Parking Lot	10%	$23,134	2%	$4,627	1 LS	$231,340	$231,340	6%	$13,880	$272,981	$327,577
	TOTALS		$23,134		$4,627			$231,340		$13,880	$272,981	$327,577
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350												
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Site Signage & Bollards	10%	$1,500	2%	$300	1 EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$735	2%	$147	21 EA	$350	$7,350	6%	$441	$8,673	$10,408
4	Evergreen	10%	$270	2%	$54	9 EA	$300	$2,700	6%	$162	$3,186	$3,823
5	Landscaping West Elevation	10%	$480	2%	$96	800 SF	$6.00	$4,800	6%	$288	$5,664	$6,797
	TOTALS		$3,985		$797			$39,850		$2,391	$47,023	$56,428
380	Natural Landscaped Areas											
	TOTALS		$0		$0			$0		$0	$0	$0
390	Telephone/Information Technology											
1	Install new phone service	10%	$7,500	2%	$1,500	1 SF	$75,000	$75,000	6%	$4,500	$88,500	$106,200
2	Site Distribution	10%	$2,160	2%	$432	720 LF	$30	$21,600	6%	$1,296	$25,488	$30,586
	TOTALS		$9,660		$1,932			$96,600		$5,796	$113,988	$136,786
SITE TOTALS			$72,043		$14,408			$720,434		$43,226	$849,912	$1,019,894
LOT TOTALS			$470,427		$94,085			$4,754,266		$282,256	$5,601,034	$6,721,243

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 23 BUILDING DEMOLISH 28

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A	ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS		$0		$0			$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS		$0		$0			$0	$0	$0	$0
220 HVAC Improvements										
TOTALS		$0		$0			$0	$0	$0	$0
230 Deferred Maintenance										
TOTALS		$0		$0			$0	$0	$0	$0
240 Building Demolition										
1 Demolish Building 28	10%	$10,170	2%	$2,034	135,600 CF	$0.75	$101,700	5% $5,102	$120,006	$144,007
TOTALS		$10,170		$2,034			$101,700	$5,102	$120,006	$144,007
BUILDING TOTALS		$10,170		$2,034			$101,700	$5,102	$120,006	$144,007

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 23 BUILDING DEMOLISH 28

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Main	10%	$70	2%	$14	1 LS	$697	$697	6% $42	$822	$987
2	Existing Main Improvements	10%	$782	2%	$156	1 LS	$7,822	$7,822	6% $469	$9,230	$11,076
3	Connect Bldg 28 Service	10%	$309	2%	$62	1 LS	$3,090	$3,090	6% $185	$3,646	$4,375
	TOTALS		$1,161		$232			$11,609	$697	$13,699	$16,438
260	Waste Water										
1	Lateral	10%	$35	2%	$7	1 LS	$351	$351	6% $21	$414	$497
2	Main	10%	$3,265	2%	$653	1 LS	$32,651	$32,651	6% $1,959	$38,528	$46,234
	TOTALS		$3,300		$660			$33,002	$1,980	$38,942	$46,731
270	Electric										
1	Site Distribution	10%	$1,230	2%	$246	246 LF	$50	$12,300	6% $738	$14,514	$17,417
	TOTALS		$1,230		$246			$12,300	$738	$14,514	$17,417
280	Gas										
	TOTALS		$0		$0			$0	$0	$0	$0
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
1	Infrastructure-A Street	10%	$805	2%	$161	1 LS	$8,047	$8,047	6% $483	$9,495	$11,395
	TOTALS		$805		$161			$8,047	$483	$9,495	$11,395
320	Road Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$350	2%	$70	10 EA	$350	$3,500	6% $210	$4,130	$4,956
2	Evergreen	10%	$390	2%	$78	13 EA	$300	$3,900	6% $234	$4,602	$5,522
	TOTALS		$740		$148			$7,400	$444	$8,732	$10,478
380	Natural Landscaped Areas										
1	Native Grasses	10%	$624	2%	$125	0.6240 AC	$10,000	$6,240	6% $374	$7,363	$8,836
	TOTALS		$624		$125			$6,240	$374	$7,363	$8,836
390	Telephone/Information Technology										
1	Site Distribution	10%	$278	2%	$56	185 LF	$15	$2,775	6% $167	$3,275	$3,929
	TOTALS		$278		$56			$2,775	$167	$3,275	$3,929
SITE TOTALS			$9,137		$1,827			$91,373	$5,482	$107,859	$129,431
LOT TOTALS			$10,307		$3,661			$103,073	$10,984	$216,028	$259,231

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 24 — BUILDING: COS — COS - 60,620 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		%	AMOUNT	%	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	AMOUNT	TOTAL	INCREMENT TOTAL
BUILDING/SITE RELATED WORK											
1 BUILDING											
COST CODE STRUCTURE											
200.	**Building Modifications & Code**										
1	Insulate Restroom Piping	10%	$240	2%	$48	24 SF	$100.00	$2,400	$144	$2,832	$3,398
2	Add Backflow Preventer	10%	$305	2%	$61	1 LS	$3,050.00	$3,050	$183	$3,599	$4,319
3	New Building Entrance	10%	$7,200	2%	$1,440	1,000 SF	$72.00	$72,000	$4,320	$84,960	$101,952
4	Fire alarm system	10%	$700	2%	$140	1 EA	$7,000.00	$7,000	$420	$8,260	$9,912
	TOTALS		$8,445		$1,689			$84,450	$5,067	$88,651	$119,581
210	**Plumbing/Mechanical/Electrical Upgrades**										
1	Relocate T Building sprinkler main outside COS building	10%	$500	2%	$100	1 LS	$5,000.00	$5,000	$300	$5,900	$7,080
2	Repair/replace sprinkler piping	10%	$39,000	2%	$7,800	65,000 SF	$6.00	$390,000	$23,400	$460,200	$552,240
3	Replace Domestic Water Heaters	10%	$1,300	2%	$260	1,000 GAL	$13.00	$13,000	$780	$15,340	$18,408
4	Additional Process Compressed Air	10%	$3,000	2%	$600	1 LS	$30,000	$30,000	$1,800	$33,400	$42,480
5	New potable water main and backflow preventer	10%	$3,400	2%	$680	1 LS	$34,000	$34,000	$2,040	$40,120	$48,144
6	Extend Natural to Mech. Room	10%	$1,200	2%	$240	200 FT	$60	$12,000	$720	$14,160	$16,992
7	Transformer for High Voltage Serv.	10%	$3,500	2%	$700	1 LS	$35,000	$35,000	$2,100	$41,300	$49,560
	TOTALS		$51,900		$10,380			$519,000	$31,140	$612,420	$734,904
220	**HVAC Improvements**										
1	Renovate clean room AHU System	10%	$4,800	2%	$820	1 LS	$46,000	$46,000	$2,760	$54,280	$65,136
2	Replace AHU-1,2,3	10%	$20,060	2%	$4,012	59,000 LS	$3.40	$200,600	$12,036	$236,708	$284,050
3	New Controls/Compressed Air	10%	$3,000	2%	$600	1 LS	$30,000	$30,000	$1,800	$35,400	$42,480
4	Renovate/replace DDC Controls	10%	$12,000	2%	$2,400	80 PT	$1,500	$120,000	$7,200	$141,600	$169,920
5	New Mech. Systems for Central Equip	10%	$2,900	2%	$580	1 LS	$29,000	$29,000	$1,740	$34,220	$41,064
6	New Boiler Plant	10%	$21,625	2%	$4,325	250 HP	$865	$216,250	$12,975	$255,175	$306,210
7	New Chiller Plant	10%	$24,400	2%	$4,880	200 TN	$1,220	$244,000	$14,640	$287,920	$345,504
	TOTALS		$88,585		$17,717			$885,850	$53,151	$1,045,303	$1,254,364
230	**Deferred Maintenance**										
1	Repair window caulking	10%	$868	2%	$200	57 EA	$175	$9,975	$599	$11,771	$14,125
2	Repair roof counter flashing	10%	$46	2%	$9	100 SF	$4.60	$460	$28	$543	$651
3	Replace door knobs with ADA compliant	10%	$3,010	2%	$602	172 EA	$175	$30,100	$1,806	$35,518	$42,622
4	Tuckpoint masonry	10%	$1,360	2%	$272	8,900 SF	$1.70	$13,600	$816	$16,048	$19,258
5	Recaulk Building Exp. Joints	10%	$8,000	2%	$1,200	1 LS	$60,000	$60,000	$3,600	$70,800	$84,960
	TOTALS		$11,414		$2,283			$114,135	$6,848	$134,679	$161,616
240	**Building Demolition**										
	TOTALS		$0		$0			$0	$0	$0	$0
	BUILDING TOTALS		$160,344		$32,069			$1,603,435	$96,206	$1,892,053	$2,270,464

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 24 — BUILDING COS — COS - 50,520 SF

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	INCORPORATED TOTAL
250	**Water**												
1	Service-COS	10%	$193	2%	$39	1	LS	$1,927	$1,927	6%	$116	$2,274	$2,729
	TOTALS		$193		$39				$1,927		$116	$2,274	$2,729
260	**Waste Water**												
1	Main-COS	10%	$2,514	2%	$503	1	LS	$25,135	$25,135	6%	$1,508	$29,659	$35,591
	TOTALS		$2,514		$503				$25,135		$1,508	$29,659	$35,591
270	**Electric**												
1	COS-Decentralize Electrical Service	10%	$16,800	2%	$3,360	1	EA	$168,000	$168,000	6%	$10,080	$198,240	$237,888
2	"COS-Add to construction-OP&L"					1	EA	$40,000	$40,000				$40,000
4	Site Distribution	10%	3630	2%	$726	726	LF	$50	$36,300	6%	2178	$42,834	$51401
	TOTALS		$20,430		$4,086				$244,300		$12,258	$241,074	$289,289
280	**Gas**												
1	COS Mechanical Room Service	10%	$1,481	2%	$296	1	LS	$14,807	$14,807	6%	$888	$17,472	$20,967
3	Main	10%	$2,854	2%	$571	1	LS	$28,539	$28,539	6%	$1,712	$33,676	$40,411
4	COS Ea. Service - Add Meter	10%	$31	2%	$6	1	LS	$309	$309	6%	$19	$365	$438
	TOTALS		$4,366		$873				$43,655		$2,619	$51,513	$61,816
290	**Stormwater-Detention**												
	TOTALS		$0		$0				$0		$0	$0	$0
300	**Stormwater-Sewer**												
1	Infrastructure	10%	$15,470	2%	$3,094	1	LS	$154,701	$154,701	6%	$9,282	$182,547	$219,057
	TOTALS		$15,470		$3,094				$154,701		$9,282	$182,547	$219,057
310	**Road Improvements**												
1	Infrastructure-All Adjacent Streets	10%	$9,413	2%	$1,883	1	LS	$94,126	$94,126	6%	$5,648	$111,069	$133,282
	TOTALS		$9,413		$1,883				$94,126		$5,648	$111,069	$133,282
320	**Road Lighting**												
1	Light & Pole Assembly	10%	$300	2%	$60	1	EA	$3,000	$3,000	6%	$180	$3,540	$4,248
	TOTALS		$300		$60				$3,000		$180	$3,540	$4,248
330	**Parking**												
1	Parking Lot	10%	$34,919	2%	$6,984	1	LS	$349,188	$349,188	6%	$20,951	$412,042	$494,450
	TOTALS		$34,919		$6,984				$349,188		$20,951	$412,042	$494,450
340	**Parking Lighting**												
1	Light & Pole Assembly	10%	$8,400	2%	$1,680	28	EA	$3,000	$84,000	6%	$5,040	$99,120	$118,944
	TOTALS		$8,400		$1,680				$84,000		$5,040	$99,120	$118,944
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	Landscape North Entrance	10%	$460	2%	$96	800	SF	$6.00	$4,800	6%	$288	$5,664	$6,797
2	Deciduous	10%	$1,435	2%	$287	41	EA	$350	$14,350	6%	$861	$16,933	$20,320
3	Evergreen	10%	$30	2%	$6	1	EA	$300	$300	5%	$18	$354	$425
	TOTALS		$1,945		$389				$19,450		$1,167	$22,951	$27,541
380	**Natural Landscaped Areas**												
1	Native Grasses	10%	$1,710	2%	$342	1.7100	AC	$10,000	$17,100	6%	$1,026	$20,178	$24,214
2	Reforestation	10%	$3,852	2%	$770	3.2100	AC	$12,000	$38,520	6%	$2,311	$45,454	$54,544
	TOTALS		$5,562		$1,112				$55,620		$3,337	$65,632	$78,758
390	**Telephone/Information Technology**												
1	Site Distribution	10%	$278	2%	$56	185	LF	$15	$2,775	6%	$167	$3,275	$3,929
2	Site Distribution	10%	$2,757	2%	$551	919	LF	$30	$27,570	6%	$1,654	$32,533	$39,039
3	Site Distribution	10%	$816	2%	163.2	272	LF	$30	$8,160	6%	$490	$9,628	$11,555
4	Telephone System	10%	$7,550	2%	1510	1	EA	$75,500	$75,500	6%	$4,530	$89,090	$106,908
	TOTALS		$11,401		$2,280				$114,005		$6,840	$134,526	$161,431
	SITE TOTALS		$114,911		$22,982				$1,149,107		$68,946	$1,356,046	$1,627,255
LOT TOTALS			$275,354		$55,051				$2,752,542		$165,153	$3,248,000	$3,897,599

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 24 — BUILDING T — T - 121,360 SF

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM INCORPORATED
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK													
1 BUILDING													
COST CODE STRUCTURE													
200	**Building Modifications & Code**												
1	Renovate/relocate Restrooms	10%	$8,000	2%	$1,200	1,000	SF	$80.00	$80,000	6%	$3,600	$70,800	**$84,960**
2	Replace wall and ceiling finishes	10%	$156,000	2%	$31,200	104,000	SF	$15.00	$1,560,000	6%	$93,600	$1,840,800	**$2,208,960**
3	Remove Guard Entrances Both Towers	10%	$1,750	2%	$350	1	LS	$17,500	$17,500	6%	$1,050	$20,650	**$24,780**
4	Renovate elevator lobbies	10%	$2,000	2%	$400	800	SF	$25.00	$20,000	6%	$1,200	$23,600	**$28,320**
5	Clad Retaining Wall/Tunnel Entrances	10%	$6,942	2%	$1,388	6,000	SF	$11.57	$69,420	6%	$4,165	$81,916	**$98,299**
6	Replace door knobs with ADA handles	10%	$1,000	2%	$200	100	EA	$100.00	$10,000	6%	$600	$11,800	**$14,160**
7	Fire alarm system	10%	$700	2%	$140	1	EA	$7,000.00	$7,000	6%	$420	$8,260	**$9,912**
8	Tenant Improvements	10%	$156,000	2%	$31,200	104,000	SF	$15.00	$1,560,000	6%	$93,600	$1,840,800	**$2,208,960**
	TOTALS		$330,392		$66,078				$3,303,920		$198,235	$3,899,826	$4,678,351
210	**Plumbing/Mechanical/Electrical Upgrades**												
1	New Mechanical Building	10%	$13,500	2%	$2,700	1,800	SF	$75.00	$135,000	6%	$8,100	$158,300	**$191,160**
2	Renovate Fire Protections System	10%	$58,240	2%	$11,648	104,000	SF	$5.60	$582,400	6%	$34,944	$687,232	**$824,678**
3	Add Backflow Preventer & Water Main	10%	$3,200	2%	$640	1	LS	$32,000	$32,000	6%	$1,920	$37,760	**$45,312**
	TOTALS		$74,940		$14,988				$749,400		$44,964	$884,292	$1,061,150
220	**HVAC Improvements**												
1	New Building Mech. Systems	10%	$3,800	2%	$760	1	LS	$38,000	$38,000	6%	$2,280	$44,840	**$53,808**
2	New Central Heat Plant	10%	$14,800	2%	$2,960	1	LS	$148,000	$148,000	6%	$8,880	$174,640	**$209,568**
3	New Central Cool Plant	10%	$33,000	2%	$6,600	300	TN	$1,100	$330,000	6%	$19,800	$389,400	**$467,280**
4	New HVAC Systems	10%	$93,800	2%	$18,720	104,000	SF	$9.00	$936,000	6%	$56,160	$1,104,480	**$1,325,376**
	TOTALS		$145,500		$29,040				$1,452,000		$87,120	$1,713,360	$2,056,032
230	**Deferred Maintenance**												
1	Repair masonry at entrance towers.	10%	$122	2%	$24	32	HR	$38.00	$1,216	6%	$73	$1,435	**$1,722**
2	Replace caulking at coping joints	10%	$64	2%	$13	16	HR	$40.00	$640	6%	$38	$755	**$906**
3	Paint window frames	10%	$25	2%	$5	1	LS	$250.00	$250	6%	$15	$295	**$354**
4	Repaint roof access ladders	10%	$30	2%	$6	8	MH	$38.00	$304	6%	$18	$359	**$430**
5	Tuckpoint brick at entrance towers	10%	$82	2%	$16	483	SF	$1.70	$816	6%	$49	$963	**$1,155**
9	Replace roof membrane	10%	$10,000	2%	$2,000	20,000	SF	$5.00	$100,000	6%	$6,000	$118,000	**$141,600**
7	Repair drainage behind tunnel entrances	10%	$500	2%	$100	1	LS	$5,000.00	$5,000	6%	$300	$5,900	**$7,080**
10	Repair concrete at tunnel entrances	10%	$938	2%	$188	750	SF	$12.50	$9,375	6%	$563	$11,063	**$13,275**
11	T Building Ext. wall enhancements	10%	$4,000	2%	$800	8,000	SF	$5.00	$40,000	6%	$2,400	$47,200	**$56,640**
	TOTALS		$15,760		$3,152				$157,601		$9,456	$185,969	$223,163
240	**Building Demolition**												
	TOTALS		$0		$0				$0		$0	$0	$0
	BUILDING TOTALS		$664,392		$113,258				$5,663,321		$339,775	$6,683,247	$8,018,696

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM
24	T	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	INCL CONTINGENCY TOTAL
	T - 121,960 SF												
200	INDUSTRIAL WASTE												
210	SITE												
250	Water												
2	Service-T, Two Domestic Services	10%	$748	2%	$150	1	LS	$7,478	$7,478	6%	$449	$8,824	$10,589
3	Main	10%	$1,168	2%	$234	1	LS	$11,677	$11,677	6%	$701	$13,779	$16,535
4	Existing Main Improvements	10%	$985	2%	$197	1	LS	$9,850	$9,850	6%	$591	$11,623	$13,948
	TOTALS		$2,901		$580				$29,005		$1,740	$34,226	$41,071
260	Waste Water												
2	Main-T	10%	2548.8	2%	509.76	1	LS	$25,488	$25,488	6%	1529.28	$30,076	$36,091
	TOTALS		$2,549		$510				$25,488		$1,529	$30,076	$36,091
270	Electric												
3	"T-Ad to construction-OP&L"					1	EA	$45,000	$45,000				$45,000
	TOTALS		$0		$0				$45,000		$0	$0	$0
280	Gas												
2	T Service	10%	$538	2%	$108	1	LS	$5,384	$5,384	6%	$323	$6,353	$7,624
	TOTALS		$538		$108				$5,384		$323	$6,353	$7,624
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
	TOTALS		$0		$0				$0		$0	$0	$0
310	Road Improvements												
1	Dumpster Screening For T Building	10%	$103	2%	$21	1	LS	$1,030	$1,030	6%	$62	$1,215	$1,458
	TOTALS		$103		$21				$1,030		$62	$1,215	$1,458
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
	TOTALS		$0		$0				$0		$0	$0	$0
380	Natural Landscaped Areas												
	TOTALS		$0		$0				$0		$0	$0	$0
390	Telephone/Information Technology												
1	Install new phone service	10%	$900	2%	$180	1	EA	$8,000	$8,000	6%	$540	$10,820	$12,744
	TOTALS		$900		$180				$8,000		$540	$10,820	$12,744
	SITE TOTALS		$7,991		$1,599				$71,907		$4,854	$96,391	$113,496
LOT TOTALS			$573,283		$114,657				$5,777,828		$343,970	$6,764,737	$8,117,684

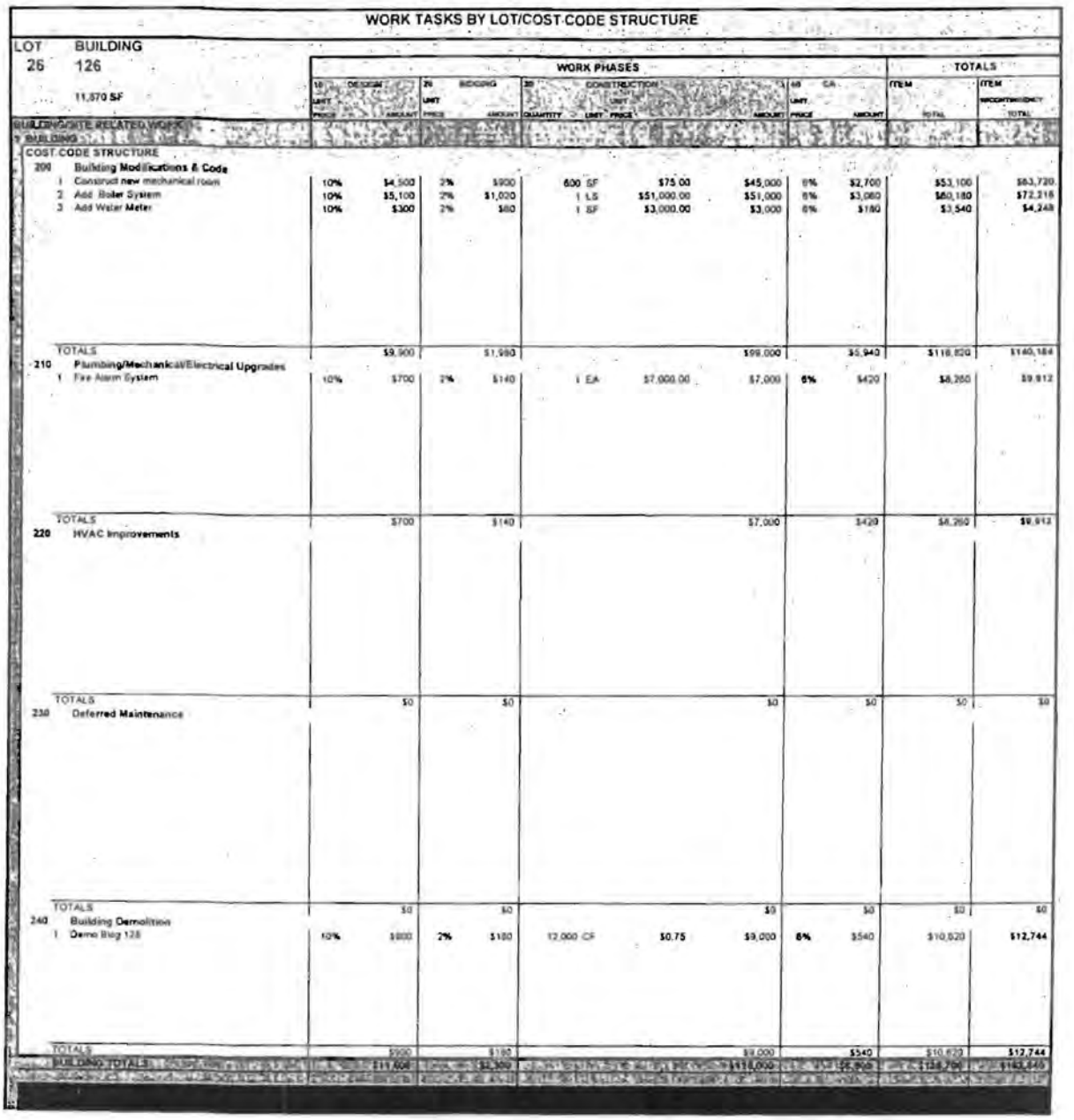
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING		WORK PHASES								TOTALS	
			10 DESIGN		20 BIDDING		30 CONSTRUCTION				ITEM	ITEM
25	OSW		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
	52,963 SF											
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200	Building Modifications & Code											
1	Replace door knobs with ADA handles	10%	$2,640	2%	$728	208	EA	$175.00	$36,400	6%	$2,184	$42,952	$51,542
2	Change door swing @ roof to east stair	10%	$50	2%	$10	1	EA	$500.00	$500	6%	$30	$590	$708
3	Modify Sprinkler System	10%	$31,368	2%	$8,374	52,280	SF	$6.00	$313,680	6%	$18,821	$370,143	$444,171
4	Add Backflow Preventer	10%	$1,000	2%	$200	1	LS	$10,000.00	$10,000	6%	$600	$11,800	$14,160
5	Replace metal siding in former "B" building with brick	10%	$1,920	2%	$384	1,600	SF	$12.00	$19,200	6%	$1,152	$22,656	$27,187
6	Modify East Elevation	10%	$6,000	2%	$1,200	1	LS	$60,000.00	$60,000	6%	$3,600	$70,800	$84,960
7	Modify South Elevation	10%	$13,628	2%	$2,726	1	LS	$136,275.00	$136,275	6%	$8,177	$160,805	$192,965
8	Remove ramp @ 1st floor rear elevator	10%	$700	2%	$140	200	SF	$35.00	$7,000	6%	$420	$8,260	$9,912
9	Improve dumpster pad/screening	10%	$500	2%	$100	1	LS	$5,000.00	$5,000	6%	$300	$5,900	$7,080
10	Renovate Toilets	10%	$5,600	2%	$1,120	1,600	SF	$35.00	$56,000	6%	$3,360	$66,080	$79,296
11	Tenant Improvements	10%	$130,700	2%	$26,140	52,280	SF	$25.00	$1,307,000	6%	$78,420	$1,542,260	$1,850,712
	TOTALS		$195,106		$39,021				$1,951,055		$117,063	$2,302,245	$2,762,694
210	Plumbing/Mechanical/Electrical Upgrades												
1	Fire Alarm System	10%	$700	2%	$140	1	EA	$7,000.00	$7,000	6%	$420	$8,260	$9,912
2	Relocate Toilet Rooms	10%	$16,720	2%	$3,344	44	SF	$3,800.00	$167,200	6%	$10,032	$197,296	$236,755
	TOTALS		$17,420		$3,484				$174,200		$10,452	$205,556	$246,667
220	HVAC Improvements												
1	Provide new DDC System	10%	$7,500	2%	$1,500	50	PT	$1,500.00	$75,000	6%	$4,500	$88,500	$106,200
2	Renovate Compressed Air Controls	10%	$2,000	2%	$400	1	LS	$20,000.00	$20,000	6%	$1,200	$23,600	$28,320
3	Replace AHU-1	10%	$15,460	2%	$3,096	43,000	SF	$3.60	$154,800	6%	$9,288	$182,584	$219,197
4	Add HVAC - New Window Loads	10%	$11,200	2%	$2,240	8,000	SF	$14.00	$112,000	6%	$6,720	$132,160	$158,592
	TOTALS		$36,160		$7,236				$361,800		$21,708	$426,824	$512,309
230	Deferred Maintenance												
1	Replace window caulk and glazing gaskets	10%	$1,208	2%	$242	69	Op	$175.00	$12,075	6%	$725	$14,249	$17,098
2	Repair coping flashing	10%	$212	2%	$42	100	SF	$21.20	$2,120	6%	$127	$2,502	$3,002
3	Remove carpet tiles from walls	10%	$64	2%	$13	16	MH	$40.00	$640	6%	$38	$755	$906
4	Tuckpoint masonry	10%	$4,760	2%	$952	28,000	SF	$1.70	$47,600	6%	$2,856	$56,168	$67,402
5	Replace roof membrane and flashing	10%	$6,000	2%	$1,200	12,000	SF	$5.00	$60,000	6%	$3,600	$70,800	$84,960
6	Reseal coping stone joints	10%	$192	2%	$38	48	MH	$40.00	$1,920	6%	$115	$2,266	$2,719
7	Reseal Building Exp. Joints	10%	$6,000	2%	$1,200	1	LS	$60,000	$60,000	6%	$3,600	$70,800	$84,960
	TOTALS		$18,436		$3,687				$184,355		$11,061	$217,539	$261,047
240	Building Demolition												
	TOTALS		$0		$0				$0		$0	$0	$0
	BUILDING TOTALS		$267,141		$53,428				$2,671,410		$160,288	$3,152,264	$3,782,717

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 25 BUILDING OSW
52,569 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
		UNIT %	AMOUNT	UNIT %	AMOUNT	QUANTITY UNIT	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service-Domestic	10%	$378	2%	$76	1 LS	$3,791	$3,791	6% $227	$4,473	$5,368
2	Main	10%	$1,826	2%	$365	1 LS	$18,264	$18,264	6% $1,096	$21,552	$25,862
3	Existing Main Improvements	10%	$695	2%	$139	1 LS	$6,953	$6,953	6% $417	$8,205	$9,845
	TOTALS		$2,901		$580			$29,008		$1,740	$34,229	$41,075
260	Waste Water										
1	Main	10%	$1,666	2%	$333	1 LS	$16,656	$16,656	6% $999	$19,654	$23,585
2	Remove Ex. Pump Station	10%	$515	2%	$103	1 LS	$5,150	$5,150	6% $309	$6,077	$7,292
	TOTALS		$2,181		$436			$21,806		$1,308	$25,731	$30,877
270	Electric										
1	Decentralize Electrical Service	10%	$8,400	2%	$1,680	1 EA	$84,000	$84,000	6% $5,040	$99,120	$118,944
2	"Aid to construction-OP&L"					1 EA	$46,500	$46,500	6% $2,790	$49,290	$59,148
	TOTALS		$8,400		$1,680			$130,500		$7,830	$148,410	$178,092
280	Gas										
	TOTALS		$0		$0			$0		$0	$0	$0
290	Stormwater-Detention										
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer										
1	Infrastructure	10%	$7,540	2%	$1,508	1 LS	$75,396	$75,396	6% $4,524	$88,967	$106,761
	TOTALS		$7,540		$1,508			$75,396		$4,524	$88,967	$106,761
310	Road Improvements										
1	Infrastructure-Capstone & B Street	10%	$24,058	2%	$4,812	1 LS	$240,581	$240,581	6% $14,435	$283,886	$340,663
3	Pavement Removal	10%	$141	2%	$28	1 LS	$1,407	$1,407	6% $84	$1,660	$1,992
	TOTALS		$24,199		$4,840			$241,988		$14,519	$285,546	$342,655
320	Road Lighting										
1	Light & Pole Assembly	10%	$2,700	2%	$540	9 EA	$3,000	$27,000	6% $1,620	$31,860	$38,232
	TOTALS		$2,700		$540			$27,000		$1,620	$31,860	$38,232
330	Parking										
1	Parking Lot	10%	$19,434	2%	$3,887	1 Lot	$194,342	$194,342	6% $11,661	$229,324	$275,188
	TOTALS		$19,434		$3,887			$194,342		$11,661	$229,324	$275,188
340	Parking Lighting										
1	Light & Pole Assembly	10%	$1,500	2%	$300	5 EA	$3,000	$15,000	6% $900	$17,700	$21,240
	TOTALS		$1,500		$300			$15,000		$900	$17,700	$21,240
350	Site Lighting										
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas										
1	Landscape new entrances	10%	$720	2%	$144	1,200 SF	$6.00	$7,200	6% $432	$8,496	$10,195
2	Deciduous	10%	$565	2%	$113	17 EA	$350	$5,950	6% $357	$7,021	$8,425
3	Evergreen	10%	$300	2%	$60	10 EA	$300	$3,000	6% $180	$3,540	$4,248
	TOTALS		$1,615		$323			$16,150		$969	$19,057	$22,868
380	Natural Landscaped Areas										
	TOTALS		$0		$0			$0		$0	$0	$0
390	Telephone/Information Technology										
1	Install new phone service	10%	$7,000	2%	$1,400	1 EA	$70,000	$70,000	6% $4,200	$82,600	$99,120
2	Site Distribution	10%	$759	2%	$152	253 LF	$30	$7,590	6% $455	$8,956	$10,747
	TOTALS		$7,759		$1,552			$77,590		$4,655	$91,556	$109,867
SITE TOTALS			$79,229		$15,845			$792,290		$47,537	$934,660	$1,121,592
LOT TOTALS			$345,369		$69,074			$3,500,190		$210,011	$4,124,644	$4,949,572



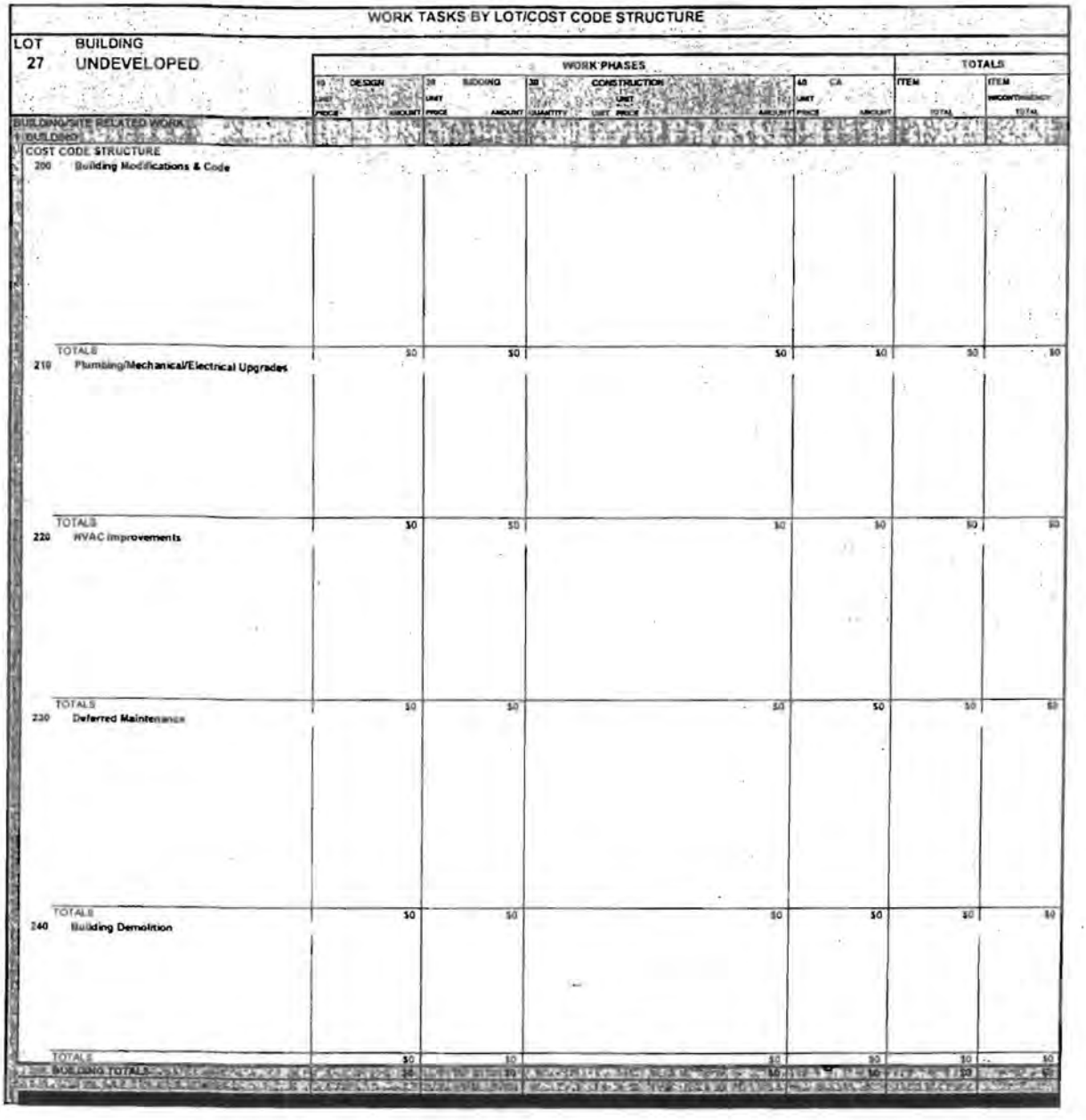
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES										TOTALS	
		10 DESIGN		25 BIDDING		30 CONSTRUCTION				60 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
26	126												
	11,570 SF												
BUILDING/SITE RELATED WORK													
1 BUILDING													
COST CODE STRUCTURE													
200	**Building Modifications & Code**												
1	Construct new mechanical room	10%	$4,500	2%	$900	600	SF	$75.00	$45,000	6%	$2,700	$53,100	$63,720
2	Add Boiler System	10%	$5,100	2%	$1,020	1	LS	$51,000.00	$51,000	6%	$3,060	$60,180	$72,216
3	Add Water Meter	10%	$300	2%	$60	1	SF	$3,000.00	$3,000	6%	$180	$3,540	$4,248
	TOTALS		$9,900		$1,980				$99,000		$5,940	$116,820	$140,184
210	**Plumbing/Mechanical/Electrical Upgrades**												
1	Fire Alarm System	10%	$700	2%	$140	1	EA	$7,000.00	$7,000	6%	$420	$8,260	$9,912
	TOTALS		$700		$140				$7,000		$420	$8,260	$9,912
220	**HVAC Improvements**												
	TOTALS		$0		$0				$0		$0	$0	$0
230	**Deferred Maintenance**												
	TOTALS		$0		$0				$0		$0	$0	$0
240	**Building Demolition**												
1	Demo Bldg 126	10%	$800	2%	$160	12,000	CF	$0.75	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$800		$160				$9,000		$540	$10,620	$12,744
	BUILDING TOTALS		$11,400		$2,280				$115,000		$6,900	$134,700	$161,640

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 26 — BUILDING 126 — 11,570 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	(CONTINGENCY) TOTAL
250	**Water**										
1	Service-Domestic	10%	$113	2%	$23	1 LS	$1,133	$1,133	6% $68	$1,337	$1,604
2	Service-Fire	10%	$569	2%	$118	1 LS	$5,692	$5,692	6% $354	$6,953	$8,343
3	Main on Vanguard	10%	$1,246	2%	$249	1 LS	$12,459	$12,459	6% $748	$14,702	$17,642
	TOTALS		$1,948		$390			$19,484	$1,169	$22,991	$27,589
260	**Waste Water**										
	TOTALS		$0		$0			$0	$0	$0	$0
270	**Electric**										
1	Decentralize Electrical Service	10%	$1,250	2%	$250	1 EA	$12,500	$12,500	6% $750	$14,750	$17,700
2	"As is construction-DPEL"					1 EA	$34,000	$34,000	6% $2,040	$36,040	$43,248
3	Site Distribution	10%	$1,715	2%	$343	343 LF	$50	$17,150	6% $1,029	$20,237	$24,284
	TOTALS		$2,965		$593			$63,650	$3,819	$71,027	$85,232
280	**Gas**										
	TOTALS		$0		$0			$0	$0	$0	$0
290	**Stormwater-Detention**										
	TOTALS		$0		$0			$0	$0	$0	$0
300	**Stormwater-Sewer**										
1	Infrastructure	10%	$3,329	2%	$666	1 LS	$33,290	$33,290	6% $1,997	$39,282	$47,139
	TOTALS		$3,329		$666			$33,290	$1,997	$39,282	$47,139
310	**Road Improvements**										
1	Infrastructure-Vanguard	10%	$3,811	2%	$762	1 LS	$38,107	$38,107	6% $2,286	$44,966	$53,960
2	Pavement Removal	10%	$312	2%	$62	1 LS	$3,122	$3,122	6% $187	$3,684	$4,421
	TOTALS		$4,123		$825			$41,229	$2,474	$48,650	$58,380
320	**Road Lighting**										
1	Light & Pole Assembly	10%	$900	2%	$180	3 EA	$3,000	$9,000	6% $540	$10,620	$12,744
	TOTALS		$900		$180			$9,000	$540	$10,620	$12,744
330	**Parking**										
1	Parking Lot	10%	$6,726	2%	$1,345	1 Lot	$67,264	$67,264	6% $4,036	$79,372	$95,246
	TOTALS		$6,726		$1,345			$67,264	$4,036	$79,372	$95,246
340	**Parking Lighting**										
1	Light & Pole Assembly	10%	$600	2%	$120	2 EA	$3,000	$6,000	6% $360	$7,080	$8,496
	TOTALS		$600		$120			$6,000	$360	$7,080	$8,496
350	**Site Lighting**										
	TOTALS		$0		$0			$0	$0	$0	$0
360	**Demolition of Stanchions**										
	TOTALS		$0		$0			$0	$0	$0	$0
370	**Formal Landscaped Areas**										
1	Deciduous	10%	$350	2%	$70	10 EA	$350	$3,500	6% $210	$4,130	$4,956
2	Evergreen	10%	$120	2%	$24	4 EA	$300	$1,200	6% $72	$1,416	$1,699
	TOTALS		$470		$94			$4,700	$282	$5,546	$6,655
380	**Natural Landscaped Areas**										
1	Native Grasses	10%	$829	2%	$166	0.8290 AC	$10,000	$8,290	6% $497	$9,782	$11,738
2	Reforestation	10%	$2,220	2%	$444	1.8500 AC	$12,000	$22,200	6% $1,332	$26,196	$31,435
	TOTALS		$3,049		$610			$30,490	$1,829	$35,978	$43,174
390	**Telephone/Information Technology**										
	TOTALS		$0		$0			$0	$0	$0	$0
	SUBTOTALS		$25,611		$5,122			$390,107	$23,406	$456,246	$547,495
LOT TOTALS			$25,611		$5,122			$390,107	$23,406	$456,246	$547,495



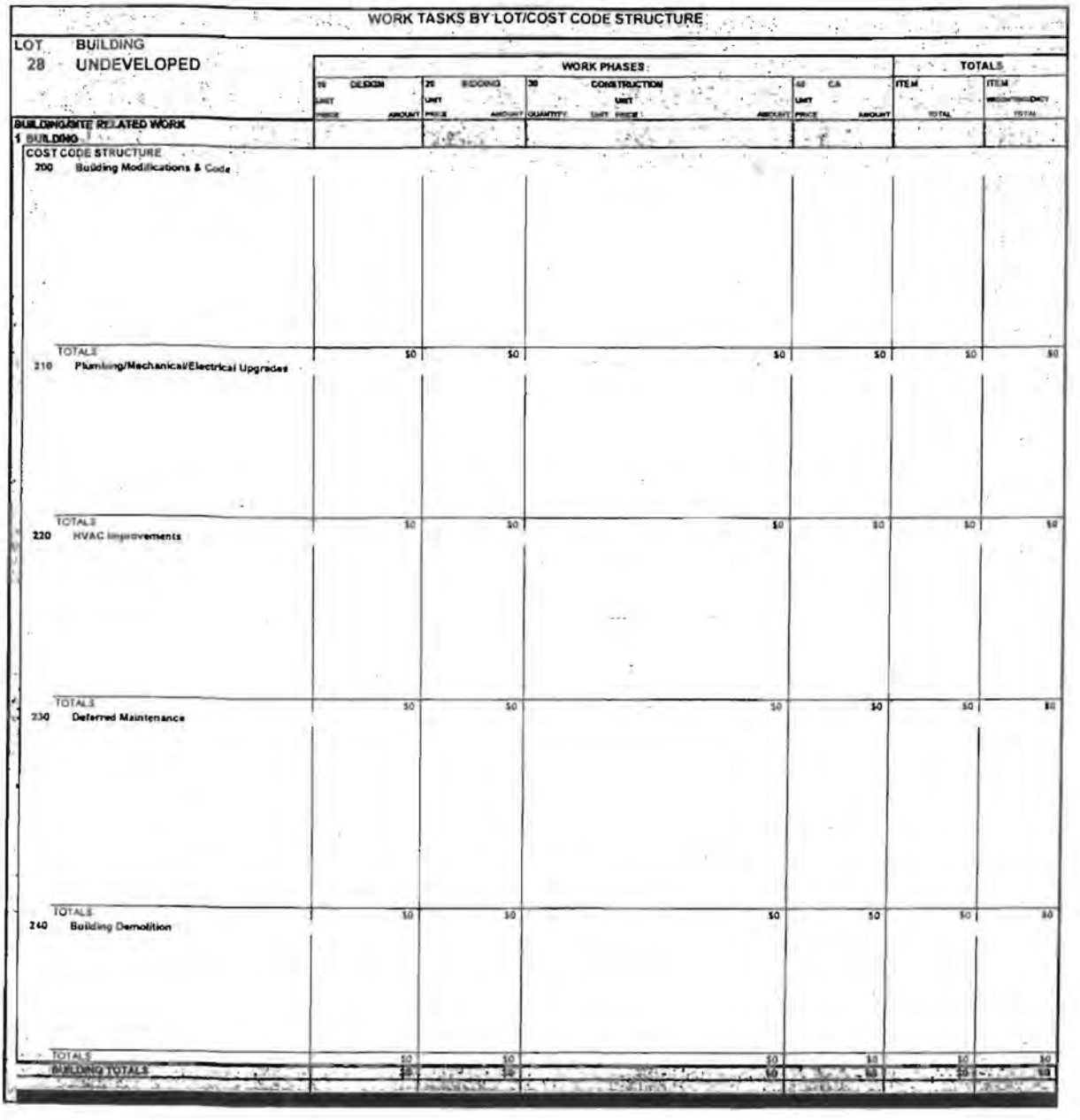
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES				TOTALS	
		10 DESIGN	20 BIDDING	30 CONSTRUCTION	40 CA	ITEM	ITEM
		UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	W/CONTINGENCY TOTAL
27	UNDEVELOPED						
BUILDING/SITE RELATED WORK							
1 BUILDING							
COST CODE STRUCTURE							
200 Building Modifications & Code							
TOTALS		$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades							
TOTALS		$0	$0	$0	$0	$0	$0
220 HVAC Improvements							
TOTALS		$0	$0	$0	$0	$0	$0
230 Deferred Maintenance							
TOTALS		$0	$0	$0	$0	$0	$0
240 Building Demolition							
TOTALS		$0	$0	$0	$0	$0	$0
1 BUILDING TOTALS		$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 27 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service	10%	$438	2%	$88	1 LS	$4,378	$4,378	6% $263	$5,166	$6,199
2	Main on Vanguard	10%	$2,693	2%	$539	1 LS	$1,393	$26,932	6% $1,616	$31,780	$38,136
	TOTALS		$3,131		$626			$31,310	$1,879	$36,946	$44,335
260	Waste Water										
1	Lateral	10%	$61	2%	$12	1 LS	$613	$613	6% $37	$723	$868
2	Main	10%	$454	2%	$91	1 LS	$4,543	$4,543	6% $273	$5,361	$6,433
	TOTALS		$516		$103			$5,156	$309	$6,084	$7,301
270	Electric										
1	Site Distribution	10%	$1,520	2%	$304	304 LF	$50	$15,200	6% $912	$17,936	$21,523
	TOTALS		$1,520		$304			$15,200	$912	$17,936	$21,523
280	Gas										
1	Service	10%	$145	2%	$29	1 LS	$1,450	$1,450	6% $87	$1,711	$2,053
	TOTALS		$145		$29			$1,450	$87	$1,711	$2,053
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
1	Infrastructure	10%	$2,497	2%	$499	1 LS	$24,968	$24,968	6% $1,498	$29,462	$35,355
	TOTALS		$2,497		$499			$24,968	$1,498	$29,462	$35,355
310	Road Improvements										
1	Infrastructure-Vanguard	10%	$736	2%	$148	1 LS	$7,391	$7,391	6% $443	$8,721	$10,466
2	Pavement Removal	10%	$327	2%	$65	1 LS	$3,265	$3,265	6% $196	$3,853	$4,623
	TOTALS		$1,066		$213			$10,656	$639	$12,574	$15,089
320	Road Lighting										
1	Light & Pole Assembly	10%	$600	2%	$120	2 EA	$3,000	$6,000	6% $360	$7,080	$8,496
	TOTALS		$600		$120			$6,000	$360	$7,080	$8,496
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$175	2%	$33	5 EA	$350	$1,750	6% $105	$2,065	$2,478
2	Evergreen	10%	$270	2%	$54	9 EA	$300	$2,700	6% $162	$3,186	$3,823
	TOTALS		$445		$89			$4,450	$267	$5,251	$6,301
380	Natural Landscaped Areas										
1	Native Grasses	10%	$62	2%	$12	0.0620 AC	$10,000	$620	6% $37	$732	$878
2	Reforestation	10%	$485	2%	$97	0.4040 AC	$12,000	$4,848	6% $291	$5,721	$6,866
	TOTALS		$547		$109			$5,468	$328	$6,452	$7,743
390	Telephone/Information Technology										
	TOTALS		$0		$0			$0	$0	$0	$0
SITE TOTALS			$10,466		$2,093			$104,658	$6,279	$123,496	$148,196
LOT TOTALS			$10,466		$2,093			$104,658	$6,279	$123,496	$148,196



WORK TASKS BY LOT/COST CODE STRUCTURE

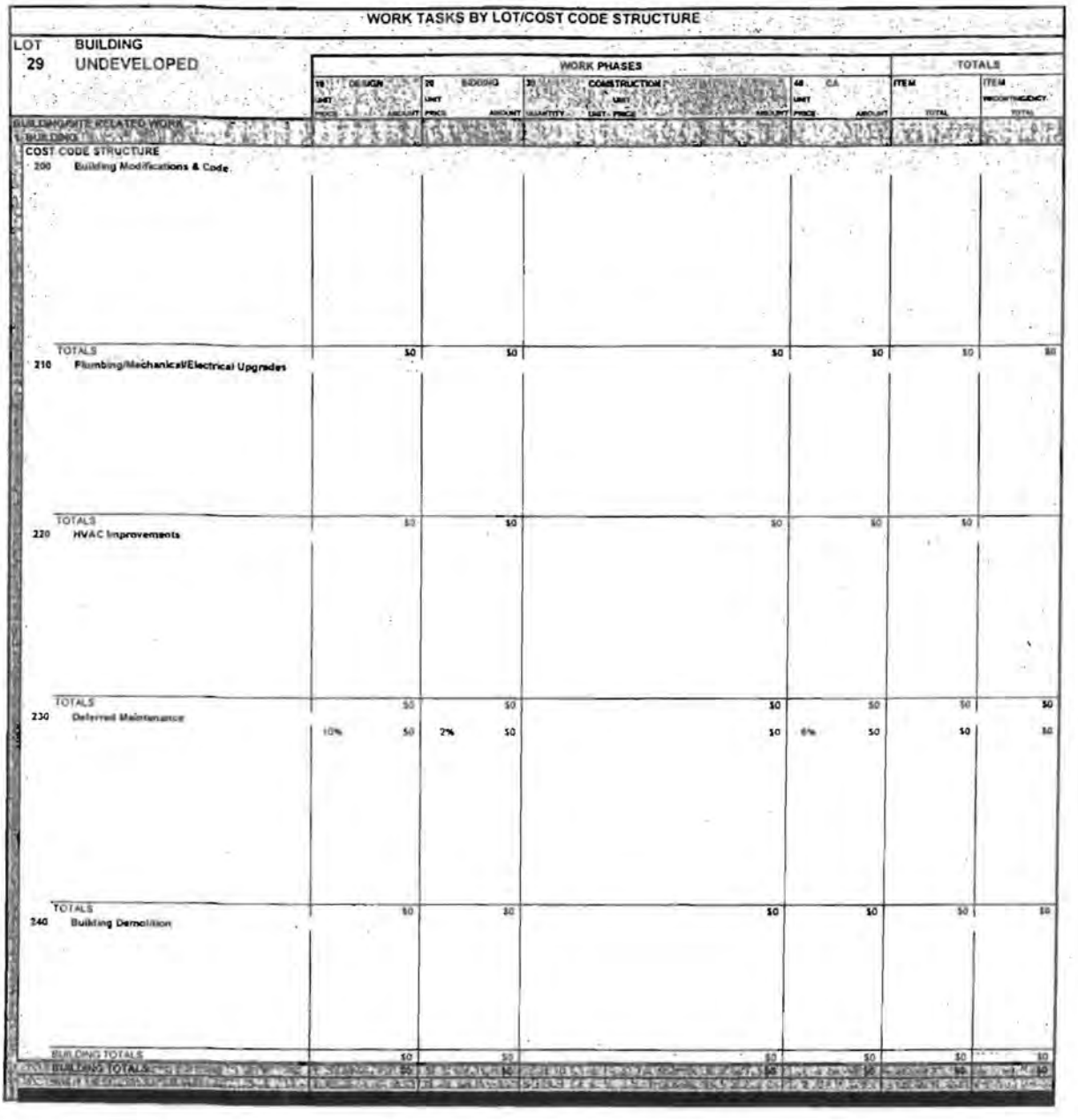
LOT 28 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	25 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	60 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 28 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION		40 CA		ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service	10%	$438	2%	$88	1 LS $4,378	$4,378	6%	$263	$5,168	$6,199
	TOTALS		$438		$88		$4,378		$263	$5,168	$6,199
260	Waste Water										
1	Lateral	10%	$88	2%	$18	1 LS $878	$878	6%	$53	$1,034	$1,240
	TOTALS		$88		$18		$878		$53	$1,034	$1,240
270	Electric										
	TOTALS		$0		$0		$0		$0	$0	$0
280	Gas										
1	Service	10%	$145	2%	$29	1 LS $1,450	$1,450	6%	$87	$1,711	$2,053
	TOTALS		$145		$29		$1,450		$87	$1,711	$2,053
290	Stormwater-Detention										
	TOTALS		$0		$0		$0		$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0		$0		$0	$0	$0
310	Road Improvements										
	TOTALS		$0		$0		$0		$0	$0	$0
320	Road Lighting										
	TOTALS		$0		$0		$0		$0	$0	$0
330	Parking										
	TOTALS		$0		$0		$0		$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0		$0		$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0		$0		$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0		$0		$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$105	2%	$21	3 EA $350	$1,050	6%	$63	$1,239	$1,487
2	Evergreen	10%	$180	2%	$36	6 EA $300	$1,800	6%	$108	$2,124	$2,549
	TOTALS		$285		$57		$2,850		$171	$3,363	$4,036
380	Natural Landscaped Areas										
	TOTALS		$0		$0		$0		$0	$0	$0
390	Telephone/Information Technology										
	TOTALS		$0		$0		$0		$0	$0	$0
	SITE TOTALS		$955		$191		$9,554		$573	$11,274	$13,528
LOT TOTALS			$955		$191		$9,554		$573	$11,274	$13,528



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 29 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION		40 CA		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY / UNIT / UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS		$0		$0		$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS		$0		$0		$0		$0	$0	
220 HVAC Improvements										
TOTALS		$0		$0		$0		$0	$0	$0
230 Deferred Maintenance	10%	$0	2%	$0		$0	6%	$0	$0	$0
TOTALS		$0		$0		$0		$0	$0	$0
240 Building Demolition										
BUILDING TOTALS		$0		$0		$0		$0	$0	$0
BUILDING TOTALS		$0		$0		$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 29 BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
2													
SITE													
250	Water												
1	Service	10%	$438	2%	$88	1	LS	$4,378	$4,378	6%	$263	$5,166	$6,199
	TOTALS		$438		$88				$4,378		$263	$5,166	$6,199
260	Waste Water												
1	Lateral	10%	$35	2%	$7	1	LS	$351	$351	6%	$21	$414	$497
	TOTALS		$35		$7				$351		$21	$414	$497
270	Electric												
									$0	6%	$0	$0	$0
									$0	6%	$0	$0	$0
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
1	Service	10%	$145	2%	$29	1	LS	$1,450	$1,450	6%	$87	$1,711	$2,053
									$0	6%	$0	$0	$0
									$0	6%	$0	$0	$0
									$0	6%	$0	$0	$0
	TOTALS		$145		$29				$1,450		$87	$1,711	$2,053
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
	TOTALS		$0		$0				$0		$0	$0	$0
310	Road Improvements												
	TOTALS		$0		$0				$0		$0	$0	$0
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
										6%	$0	$0	$0
										6%	$0	$0	$0
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$140	2%	$28	4	EA	$350	$1,400	6%	$84	$1,652	$1,982
2	Evergreen	10%	$120	2%	$24	4	EA	$300	$1,200	6%	$72	$1,416	$1,699
	TOTALS		$260		$52				$2,600		$156	$3,068	$3,682
380	Natural Landscaped Areas												
	TOTALS		$0		$0				$0		$0	$0	$0
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$878		$176				$8,779		$527	$10,359	$12,431
LOT TOTALS			$878		$176				$8,779		$527	$10,359	$12,431

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING		WORK PHASES								TOTALS	
			10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
30	102											
	10,320 SF											
BUILDING/SITE RELATED WORK												
1	BUILDING											
COST CODE STRUCTURE												
200	Building Modifications & Code											
1	Insulate Restroom Piping	10%	$40	2%	$8	4	EA	$100.00	$400	6%	$24	$472	$568
2	Renovate AHU system outdoor air to meet current code	10%	$300	2%	$60	1	LS	$3,000.00	$3,000	6%	$180	$3,540	$4,248
3	Add Backflow Preventer	10%	$450	2%	$90	1	EA	$4,500.00	$4,500	6%	$270	$5,310	$6,372
4	Remove security booth at entrance	10%	$330	2%	$66	1	LS	$3,300.00	$3,300	6%	$198	$3,894	$4,673
5	Renovate main entrance	10%	$750	2%	$150	1	LS	$7,500.00	$7,500	6%	$450	$8,850	$10,620
6	Add Toilet Room to Second Floor	10%	$4,000	2%	$800	800	SF	$50.00	$40,000	6%	$2,400	$47,200	$56,640
7	Replace door hardware with ADA handles	10%	$1,155	2%	$231	66	EA	$175.00	$11,550	6%	$693	$13,629	$16,355
8	Tenant Improvements	10%	$25,800	2%	$5,160	10,320	SF	$25.00	$258,000	6%	$15,480	$304,440	$365,328
9	Improve dumpster pad/screening	10%	$500	2%	$100	1	LS	$5,000.00	$5,000	6%	$300	$5,900	$7,080
10	Add Water Meter	10%	$400	2%	$80	1	EA	$4,000.00	$4,000	6%	$240	$4,720	$5,664
													$0
	TOTALS		$33,725		$6,745				$337,250		$20,235	$397,955	$477,548
210	Plumbing/Mechanical/Electrical Upgrades												
1	Fire Alarm System	10%	$700	2%	$140	1	LS	$7,000.00	$7,000	6%	$420	$8,260	$9,912
2	Renovate Fire Protection System	10%	$3,457	2%	$691	10,320	SF	$3.35	$34,572	6%	$2,074	$40,795	$48,954
3	Plumbing for Second Floor Toilets	10%	$4,200	2%	$840	1	LS	$42,000.00	$42,000	6%	$2,520	$49,560	$59,472
	TOTALS		$8,357		$1,671				$83,572		$5,014	$98,615	$118,338
220	HVAC Improvements												
1	Update mechanical controls system	10%	$500	2%	$100	1	LS	$5,000.00	$5,000	6%	$300	$5,900	$7,080
2	Chilled Water Pumps	10%	$600	2%	$120	1	LS	$6,000.00	$6,000	6%	$360	$7,080	$8,496
	TOTALS		$1,100		$220				$11,000		$660	$12,980	$16,368
230	Deferred Maintenance												
1	Replace window sills because of water damage	10%	$300	2%	$60	60	EA	$50.00	$3,000	6%	$180	$3,540	$4,248
2	Repair/repaint interior perimeter walls	10%	$340	2%	$68	4,000	SF	$0.85	$3,400	6%	$204	$4,012	$4,814
3	Replace caulking at precast wall panel joints	10%	$200	2%	$40	500	LF	$4.00	$2,000	6%	$120	$2,360	$2,832
4	Repaint metal facing on canopies	10%	$44	2%	$9	200	SF	$2.20	$440	6%	$26	$519	$623
5	Clean aluminum storefront framing	10%	$32	2%	$6	8	MH	$40.00	$320	6%	$19	$378	$453
6	Recaulk windows and install flashing at heads and sills	10%	$1,248	2%	$250	60	EA	$208.00	$12,480	6%	$749	$14,728	$17,673
7	Replace window glazing gaskets	10%	$300	2%	$60	60	EA	$50.00	$3,000	6%	$180	$3,540	$4,248
8	Repair flashing at entrance canopy	10%	$168	2%	$32	32	MH	$50.00	$1,600	6%	$96	$1,888	$2,266
9	Replace VCT tile in elevator	10%	$111	2%	$22	100	SF	$11.10	$1,110	6%	$67	$1,310	$1,572
10	Repaint Roof	10%	$1,144	2%	$229	5,200	SF	$2.20	$11,440	6%	$686	$13,499	$16,199
11	Re-clamp standing seam roof	10%	$161	2%	$32	5,200	SF	$0.31	$1,612	6%	$97	$1,902	$2,283
	TOTALS		$4,040		$808				$40,402		$2,424	$47,674	$57,209
240	Building Demolition												
	TOTALS		$0		$0				$0		$0	$0	$0
	BUILDING TOTALS		$46,122		$9,224				$461,224		$27,673	$556,244	$669,461

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 30 — BUILDING 102 — 10,320 SF

		WORK PHASES								TOTALS	
		10 DESIGN		30 CONSTRUCTION				40 C.A.		ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING/SITE/RELATED WORK											
SITE											
250 Water											
1 Service	10%	$288	2%	$58	1 LS	$2,884	$2,884	6%	$173	$3,403	$4,084
2 Existing Main Improvements	10%	$406	2%	$81	1 LS	$4,058	$4,058	6%	$243	$4,788	$5,743
TOTALS		$694		$139			$6,940		$416	$8,189	$9,827
260 Waste Water											
TOTALS		$0		$0			$0		$0	$0	$0
270 Electric											
1 Decentralize Electrical Service	10%	$1,600	2%	$320	1 EA	$16,000	$16,000	6%	$960	$18,880	$22,656
2 "Add to construction-OP&L"					1 EA	$36,000	$36,000	6%	$2,280	$40,280	$48,336
3 Site Distribution	10%	$1,320	2%	$264	264 LF	$50	$13,200	6%	$792	$15,576	$18,691
TOTALS		$2,920		$584			$67,200		$4,032	$74,736	$87,027
280 Gas											
TOTALS		$0		$0			$0		$0	$0	$0
290 Stormwater-Detention											
TOTALS		$0		$0			$0		$0	$0	$0
300 Stormwater-Sewer											
TOTALS		$0		$0			$0		$0	$0	$0
310 Road Improvements											
TOTALS		$0		$0			$0		$0	$0	$0
320 Road Lighting											
TOTALS		$0		$0			$0		$0	$0	$0
330 Parking											
1 Parking Lot	10%	$6,643	2%	$1,380	1 LS	$69,427	$69,427	6%	$4,166	$81,924	$98,309
TOTALS		$6,643		$1,380			$69,427		$4,166	$81,924	$98,309
340 Parking Lighting											
1 Light & Pole Assembly	10%	$900	2%	$180	3 EA	$3,000	$9,000	6%	$540	$10,620	$12,744
TOTALS		$900		$180			$9,000		$540	$10,620	$12,744
350 Site Lighting											
TOTALS		$0		$0			$0		$0	$0	$0
360 Demolition of Stanchions											
TOTALS		$0		$0			$0		$0	$0	$0
370 Formal Landscaped Areas											
1 Site Signage & Bollards	10%	$1,300	2%	$300	1 EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2 Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3 Deciduous	10%	$105	2%	$21	3 EA	$350	$1,050	6%	$63	$1,239	$1,487
4 Evergreen	10%	$30	2%	$6	1 EA	$300	$300	6%	$18	$354	$425
TOTALS		$2,635		$527			$26,350		$1,581	$31,093	$37,312
380 Natural Landscaped Areas											
TOTALS		$0		$0			$0		$0	$0	$0
390 Telephone/Information Technology											
1 Site Distribution	10%	$738	2%	$148	246 LF	$30	$7,380	6%	$443	$8,708	$10,450
TOTALS		$738		$148			$7,380		$443	$8,708	$10,450
SITE TOTALS		$14,530		$2,908			$136,257		$8,176	$160,770	$192,924
LOT TOTALS		$69,952		$12,190			$647,521		$38,851	$759,515	$905,130

WORK TASKS BY LOT/COST CODE STRUCTURE

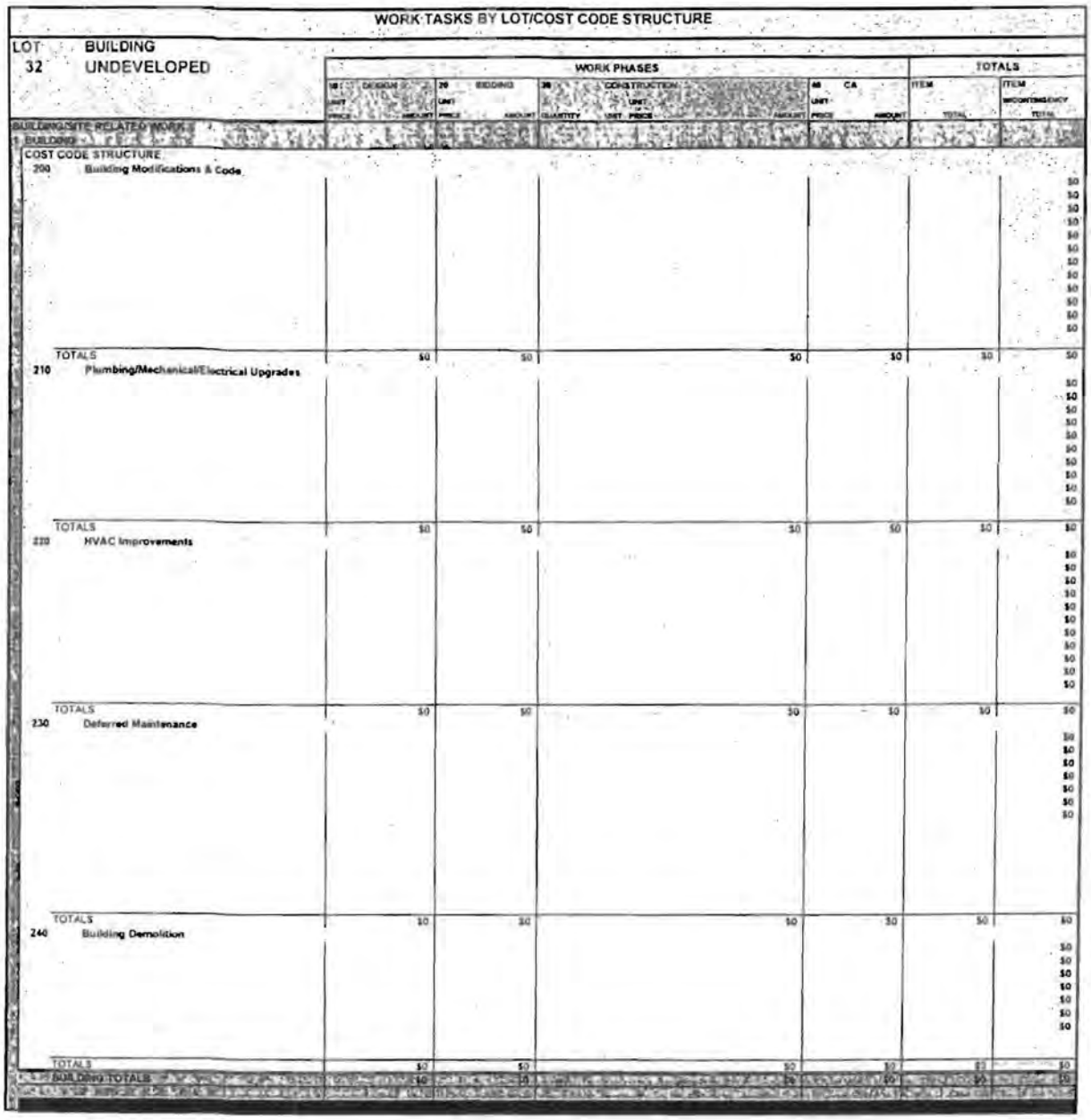
LOT 31 — BUILDING: 105 — 31,500 SF

	WORK PHASES										TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT - PRICE	AMOUNT	UNIT PRICE	AMOUNT		TOTAL	WITH CONTINGENCY TOTAL
BUILDING RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0			$0		$0		$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												
1 Renovate Building Sprinkler Systems	10%	$18,900	2%	$3,780	31,500 SF	$6.00	$189,000	6%	$11,340		$223,020	$267,624
2 Add Back flow Preventer * Water Main	10%	$1,200	2%	$240	1 LS	$12,000.00	$12,000	6%	$720		$14,160	$16,992
TOTALS		$20,100		$4,020			$201,000		$12,060		$237,180	$284,616
220 HVAC Improvements												$0
TOTALS		$0		$0			$0		$0		$0	$0
230 Deferred Maintenance												
1 Repaint Roof	10%	$8,380	2%	$1,276	29,000 SF	$2.20	$63,800	6%	$3,828		$75,284	$90,341
2 Re-crimp standing seam roof	10%	$899	2%	$180	29,000 SF	$0.31	$8,990	6%	$539		$10,608	$12,730
TOTALS		$7,279		$1,456			$72,790		$4,367		$85,892	$103,071
240 Building Demolition												
1 Remove chain link fencing	10%	$178	2%	$36	700 LF	$2.55	$1,785	6%	$107		$2,106	$2,528
TOTALS		$178		$36			$1,785		$107		$2,106	$2,528
BUILDING TOTALS		$27,558		$5,512			$275,575		$16,534		$325,179	$390,215

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 31 — BUILDING 105 — 31,500 SF

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING SITE RELATED WORK											
210											
250	**Water**										
1	Add Fire Hydrant, near PIV	10%	$190	2%	$38	1	LS	$1,957	$1,957	$2,309	$2,771
2	Existing Main Improvements	10%	$695	2%	$139	1	LS	$6,953	$6,953	$8,205	$9,845
	TOTALS		$885		$178				$8,910	$10,514	$12,617
260	**Waste Water**										
	TOTALS		$0		$0				$0	$0	$0
270	**Electric**										
	TOTALS		$0		$0				$0	$0	$0
280	**Gas**										
	TOTALS		$0		$0				$0	$0	$0
290	**Stormwater-Detention**										
	TOTALS		$0		$0				$0	$0	$0
300	**Stormwater-Sewer**										
1	Infrastructure	10%	$633	2%	$127	1	LS	$6,326	$6,326	$7,485	$8,856
	TOTALS		$633		$127				$6,326	$7,485	$8,856
310	**Road Improvements**										
1	Site Improvements for Fire Dept Connection	10%	$421	2%	$84	1	LS	$4,212	$4,212	$4,970	$5,964
	TOTALS		$421		$84				$4,212	$4,970	$5,964
320	**Road Lighting**										
	TOTALS		$0		$0				$0	$0	$0
330	**Parking**										
	TOTALS		$0		$0				$0	$0	$0
340	**Parking Lighting**										
	TOTALS		$0		$0				$0	$0	$0
350	**Site Lighting**										
	TOTALS		$0		$0				$0	$0	$0
360	**Demolition of Stanchions**										
	TOTALS		$0		$0				$0	$0	$0
370	**Formal Landscaped Areas**										
1	Site Signage & Bollards	10%	$1,500	2%	$300	1	EA	$15,000	$15,000	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1	LS	$10,000	$10,000	$11,800	$14,160
3	Deciduous	10%	$140	2%	$28	4	EA	$350	$1,400	$1,652	$1,982
4	Evergreen	10%	$990	2%	$198	33	EA	$300	$9,900	$11,682	$14,018
	TOTALS		$3,630		$726				$36,300	$42,834	$51,401
380	**Natural Landscaped Areas**										
	TOTALS		$0		$0				$0	$0	$0
390	**Telephone/Information Technology**										
	TOTALS		$0		$0				$0	$0	$0
	TOTALS		$5,569		$1,113				$55,748	$65,803	$78,987
LOT TOTALS			$33,132		$6,626				$331,323	$390,961	$469,156



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES				TOTALS	
32	UNDEVELOPED	10 DESIGN UNIT PRICE AMOUNT	20 BIDDING UNIT PRICE AMOUNT	30 CONSTRUCTION QUANTITY UNIT UNIT PRICE AMOUNT	40 CA UNIT PRICE AMOUNT	ITEM TOTAL	ITEM W/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK							
1 BUILDING		$0	$0				
COST CODE STRUCTURE							
200 Building Modifications & Code							$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS		$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades							$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS		$0	$0	$0	$0	$0	$0
220 HVAC Improvements							$0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0
TOTALS		$0	$0	$0	$0	$0	$0
230 Deferred Maintenance							$0 $0 $0 $0 $0 $0 $0 $0
TOTALS		$0	$0	$0	$0	$0	$0
240 Building Demolition							$0 $0 $0 $0 $0 $0 $0 $0
TOTALS		$0	$0	$0	$0	$0	$0
BUILDING TOTALS		$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 32 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING SITE RELATED WORK													
SITE													
250	**Water**												
1	Main on Vanguard	10%	$1,574	2%	$315	1	LS	$15,742	$15,742	6%	$945	$18,576	$22,291
2	Existing Main Improvements	10%	$579	2%	$116	1	LS	$5,794	$5,794	6%	$348	$6,837	$8,204
	TOTALS		$2,154		$431				$21,536		$1,292	$25,412	$30,495
260	**Waste Water**												
1	Main, 8" Replace	10%	$307	2%	$61	1	LS	$3,065	$3,065	6%	$184	$3,617	$4,340
2	Main, 8"	10%	$3,114	2%	$623	1	LS	$31,140	$31,140	6%	$1,868	$36,745	$44,094
	TOTALS		$3,421		$684				$34,205		$2,052	$40,362	$48,434
270	**Electric**												
1	Site Distribution	10%	$705	2%	$141	141	LF	$50	$7,050	6%	$423	$8,319	$9,983
	TOTALS		$705		$141				$7,050		$423	$8,319	$9,983
280	**Gas**												
1	Service	10%	$188	2%	$38	1	LS	$1,885	$1,885	6%	$113	$2,224	$2,668
2	Main	10%	$232	2%	$46	1	LS	$2,320	$2,320	6%	$139	$2,736	$3,283
	TOTALS		$421		$84				$4,205		$252	$4,962	$5,954
290	**Stormwater-Detention**												
1	Detention Basin	10%	$1,133	2%	$227	1	LS	$11,330	$11,330	6%	$680	$13,369	$16,043
	TOTALS		$1,133		$227				$11,330		$680	$13,369	$16,043
300	**Stormwater-Sewer**												
1	Infrastructure	10%	$5,475	2%	$1,095	1	LS	$54,745	$54,745	6%	$3,285	$64,599	$77,519
	TOTALS		$5,475		$1,095				$54,745		$3,285	$64,599	$77,519
310	**Road Improvements**												
1	Infrastructure-Vanguard	10%	$8,742	2%	$1,748	1	LS	$87,421	$87,421	6%	$5,245	$78,557	$95,468
2	Pavement Removal	10%	$313	2%	$63	1	LS	$3,132	$3,132	6%	$188	$3,696	$4,435
	TOTALS		$7,055		$1,411				$70,553		$4,233	$83,253	$99,903
320	**Road Lighting**												
1	Light & Pole Assembly	10%	$1,200	2%	$240	4	EA	$3,000	$12,000	6%	$720	$14,160	$16,992
	TOTALS		$1,200		$240				$12,000		$720	$14,160	$16,992
330	**Parking**												
	TOTALS		$0		$0				$0		$0	$0	$0
340	**Parking Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	Deciduous	10%	$245	2%	$49	7	EA	$350	$2,450	6%	$147	$2,891	$3,469
2	Evergreen	10%	$30	2%	$6	1	EA	$300	$300	6%	$18	$354	$425
	TOTALS		$275		$55				$2,750		$165	$3,245	$3,894
380	**Natural Landscaped Areas**												
1	Native Grasses	10%	$165	2%	$33	0.1650	AC	$10,000	$1,650	6%	$99	$1,947	$2,338
2	Reforestation	10%	$1,428	2%	$286	1.1900	AC	$12,000	$14,280	6%	$857	$16,850	$20,220
	TOTALS		$1,593		$319				$15,930		$956	$18,797	$22,557
390	**Telephone/Information Technology**												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$23,430		$4,686				$234,304		$14,058	$276,479	$331,774
LOT TOTALS			$23,430		$4,686				$234,304		$14,058	$276,479	$331,774

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 33 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN	20 BIDDING	30 CONSTRUCTION	50 CA	ITEM	ITEM
	UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 33 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A.	ITEM	ITEM
		UNIT % PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	WEIGHTING/CONTINGENCY TOTAL
BUILDING/SITE/RELATED WORK													
SITE													
250	Water												
1	Service	10%	$517	2%	$103	1	LS	$5,171	$5,171	6%	$310	$6,102	$7,322
2	Main on Enterprise	10%	$1,403	2%	$281	1	LS	$14,025	$14,025	6%	$842	$16,550	$19,859
3	Existing Main Improvements	10%	$203	2%	$41	1	LS	$2,028	$2,028	6%	$122	$2,393	$2,871
	TOTALS		$2,122		$424				$21,224		$1,273	$25,044	$30,053
260	Waste Water												
1	Lateral	10%	$53	2%	$11	1	LS	$526	$526	6%	$32	$621	$745
2	Main	10%	$1,025	2%	$205	1	LS	$10,246	$10,246	6%	$615	$12,090	$14,508
	TOTALS		$1,077		$215				$10,772		$648	$12,711	$15,253
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
1	Service	10%	$37	2%	$7	1	LS	$370	$370	6%	$22	$437	$524
2	Main	10%	$797	2%	$159	1	LS	$7,967	$7,967	6%	$478	$9,401	$11,281
	TOTALS		$834		$167				$8,337		$500	$9,838	$11,805
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$1,390	2%	$278	1	LS	$13,898	$13,898	6%	$834	$16,400	$19,680
	TOTALS		$1,390		$278				$13,898		$834	$16,400	$19,680
310	Road Improvements												
1	Infrastructure-Enterprise Court	10%	$3,218	2%	$644	1	LS	$32,177	$32,177	6%	$1,931	$37,969	$45,563
2	Pavement Removal	10%	$487	2%	$97	1	LS	$4,871	$4,871	6%	$292	$5,748	$6,897
	TOTALS		$3,705		$741				$37,048		$2,223	$43,717	$52,460
320	Road Lighting												
1	Light & Pole Assembly	10%	$900	2%	$180	3	EA	$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180				$9,000		$540	$10,620	$12,744
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Evergreen	10%	$240	2%	$48	8	EA	$300	$2,400	6%	$144	$2,832	$3,398
	TOTALS		$240		$48				$2,400		$144	$2,832	$3,398
380	Natural Landscaped Areas												
1	Reforestation	10%	$606	2%	$121	0.5050	AC	$12,000	$6,060	6%	$364	$7,151	$8,581
	TOTALS		$606		$121				$6,060		$364	$7,151	$8,581
390	Telephone/Information Technology												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$10,874		$2,175				$108,739		$6,524	$128,312	$153,974
LOT TOTALS			$10,874		$2,175				$108,739		$6,524	$128,312	$153,974

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 34 BUILDING UNDEVELOPED

	WORK PHASES						TOTALS	
	10 DESIGN UNIT PRICE	AMOUNT	30 BIDDING UNIT PRICE	AMOUNT	20 CONSTRUCTION QUANTITY	UNIT PRICE AMOUNT	40 CA UNIT PRICE	AMOUNT	ITEM TOTAL	ITEM MONTHS/QTY TOTAL
BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS	$0		$0			$0	$0		$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS	$0		$0			$0	$0		$0	$0
220 HVAC Improvements										
TOTALS	$0		$0			$0	$0		$0	$0
230 Deferred Maintanance										
TOTALS	$0		$0			$0	$0		$0	$0
240 Building Demolition										
TOTALS	$0		$0			$0	$0		$0	$0
BUILDING TOTALS	$0		$0			$0	$0		$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 34 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	AMOUNT/CONTINGENCY TOTAL
CODE													
250	**Water**												
1	Service	10%	$55	2%	$11	1	LS	$552	$552	6%	$33	$651	$782
2	Main on Enterprise	10%	$270	2%	$54	1	LS	$2,701	$2,701	6%	$162	$3,167	$3,800
3	Existing Main Improvements	10%	$116	2%	$23	1	LS	$1,159	$1,159	6%	$70	$1,368	$1,641
	TOTALS		$441		$88				$4,412		$265	$5,206	$6,247
260	**Waste Water**												
1	Lateral	10%	$35	2%	$7	1	LS	$351	$351	6%	$21	$414	$497
2	Main	10%	$3,533	2%	$707	1	LS	$35,329	$35,329	6%	$2,120	$41,688	$50,026
	TOTALS		$3,568		$714				$35,680		$2,141	$42,102	$50,523
270	**Electric**												
	TOTALS		$0		$0				$0		$0	$0	$0
280	**Gas**												
1	Service	10%	$37	2%	$7	1	LS	$370	$370	6%	$22	$437	$524
2	Main	10%	$124	2%	$25	1	LS	$1,240	$1,240	6%	$74	$1,463	$1,756
	TOTALS		$161		$32				$1,610		$97	$1,900	$2,280
290	**Stormwater-Detention**												
	TOTALS		$0		$0				$0		$0	$0	$0
300	**Stormwater-Sewer**												
	TOTALS		$0		$0				$0		$0	$0	$0
310	**Road Improvements**												
1	Infrastructure-Enterprise Court	10%	$394	2%	$79	1	LS	$3,942	$3,942	6%	$237	$4,652	$5,583
2	Pavement Removal	10%	$100	2%	$20	1	LS	$999	$999	6%	$60	$1,179	$1,415
	TOTALS		$494		$99				$4,941		$296	$5,830	$6,998
320	**Road Lighting**												
1	Light & Pole Assembly	10%	$300	2%	$60	1	EA	$3,000	$3,000	5%	$180	$3,540	$4,248
	TOTALS		$300		$60				$3,000		$180	$3,540	$4,248
330	**Parking**												
	TOTALS		$0		$0				$0		$0	$0	$0
340	**Parking Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	Deciduous	10%	$105	2%	$21	3	EA	$350	$1,050	6%	$63	$1,239	$1,487
	TOTALS		$105		$21				$1,050		$63	$1,239	$1,487
380	**Natural Landscaped Areas**												
1	Reforestation	10%	$502	2%	$100	0.4180	AC	$12,000	$5,016	6%	$301	$5,919	$7,103
	TOTALS		$502		$100				$5,016		$301	$5,919	$7,103
390	**Telephone/Information Technology**												
	TOTALS		$0		$0				$0		$0	$0	$0
SUBTOTALS		$5,571		$1,114					$55,709		$3,343	$65,737	$78,884
LOT TOTALS		$5,571		$1,114					$55,709		$3,343	$65,737	$78,884

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 35 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS		$0		$0			$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										
TOTALS		$0		$0			$0	$0	$0	$0
220 HVAC Improvements										
TOTALS		$0		$0			$0	$0	$0	$0
230 Deferred Maintenance										
TOTALS		$0		$0			$0	$0	$0	$0
240 Building Demolition										
TOTALS		$0		$0			$0	$0	$0	$0
BUILDING TOTALS		$0		$0			$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 35 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY UNIT PRICE		AMOUNT	UNIT PRICE AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK											
250	Water										
1	Service	10%	$55	2%	$11	1 LS	$552	$552	6% $33	$681	$782
2	Main on Enterprise	10%	$270	2%	$54	1 LS	$2,701	$2,701	6% $162	$3,187	$3,835
	TOTALS		$325		$65			$3,253	$195	$3,939	$4,606
260	Waste Water										
1	Lateral	10%	$53	2%	$11	1 LS	$526	$526	6% $32	$621	$745
2	Main	10%	$162	2%	$32	1 LS	$1,616	$1,616	6% $97	$1,907	$2,288
	TOTALS		$214		$43			$2,142	$129	$2,528	$3,033
270	Electric										
	TOTALS		$0		$0			$0	$0	$0	$0
280	Gas										
1	Service	10%	$37	2%	$7	1 LS	$370	$370	6% $22	$437	$524
2	Main	10%	$124	2%	$25	1 LS	$1,240	$1,240	6% $74	$1,463	$1,756
	TOTALS		$161		$32			$1,610	$97	$1,900	$2,280
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
1	Infrastructure-Enterprise Coun	10%	$394	2%	$79	1 LS	$3,942	$3,942	6% $237	$4,652	$5,583
2	Pavement Removal	10%	$449	2%	$90	1 LS	$4,486	$4,486	6% $269	$5,293	$6,352
	TOTALS		$843		$169			$8,428	$506	$9,945	$11,934
320	Road Lighting										
1	Light & Pole Assembly	10%	$300	2%	$60	1 EA	$3,000	$3,000	6% $180	$3,540	$4,248
	TOTALS		$300		$60			$3,000	$180	$3,540	$4,248
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$105	2%	$21	3 EA	$350	$1,050	6% $63	$1,239	$1,487
	TOTALS		$105		$21			$1,050	$63	$1,239	$1,487
380	Natural Landscaped Areas										
1	Native Grasses	10%	$298	2%	$60	0.2980 AC	$10,000	$2,980	6% $179	$3,516	$4,220
2	Reforestation	10%	$2,448	2%	$490	2.0400 AC	$12,000	$24,480	6% $1,469	$28,886	$34,664
	TOTALS		$2,746		$549			$27,460	$1,648	$32,403	$38,883
390	Telephone/Information Technology										
	TOTALS		$0		$0			$0	$0	$0	$0
SITE TOTALS			$4,694		$939			$46,943	$2,817	$55,393	$66,471
LOT TOTALS			$4,694		$939			$46,943	$2,817	$55,393	$66,471

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 36 BUILDING UNDEVELOPED

	WORK PHASES								TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	WORK/THROUGHPUT TOTAL
BUILDING/SITE RELATED WORK										
1 BUILDING										
COST CODE STRUCTURE										
200 Building Modifications & Code										
TOTALS	$0	$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades										$0
TOTALS	$0	$0				$0		$0	$0	$0
220 HVAC Improvements										
TOTALS	$0	$0				$0		$0	$0	$0
230 Deferred Maintenance										
TOTALS	$0	$0				$0		$0	$0	$0
240 Building Demolition										
TOTALS	$0	$0				$0		$0	$0	$0
BUILDING TOTALS	$0	$0				$0		$0	$0	$0

LOT 36 BUILDING UNDEVELOPED

		WORK PHASES									TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			AP CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
SITE												
250	Water											
1	Service	10%	$55	2%	$11	1 LS	$552	$552	6%	$33	$651	$782
2	Main on Enterprise	10%	$1,950	2%	$390	1 LS	$19,497	$19,497	6%	$1,170	$23,006	$27,608
	TOTALS		$2,005		$401			$20,049		$1,203	$23,656	$28,389
260	Waste Water											
1	Lateral	10%	$53	2%	$11	1 LS	$526	$526	6%	$32	$621	$745
2	Main	10%	$1,282	2%	$256	1 LS	$12,820	$12,820	6%	$769	$15,128	$18,153
	TOTALS		$1,335		$267			$13,346		$801	$15,748	$18,898
270	Electric											
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
1	Service	10%	$37	2%	$7	1 LS	$370	$370	6%	$22	$437	$524
2	Main	10%	$660	2%	$132	1 LS	$6,604	$6,604	6%	$396	$7,793	$9,351
	TOTALS		$697		$139			$6,974		$418	$8,229	$9,875
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$767	2%	$153	1 LS	$7,668	$7,668	6%	$460	$9,048	$10,858
	TOTALS		$767		$153			$7,668		$460	$9,048	$10,858
310	Road Improvements											
1	Infrastructure-Enterprise Court	10%	$3,642	2%	$728	1 LS	$36,419	$36,419	6%	$2,185	$42,974	$51,569
2	Pavement Removal	10%	$265	2%	$53	1 LS	$2,650	$2,650	6%	$159	$3,127	$3,752
	TOTALS		$3,907		$781			$39,069		$2,344	$46,101	$55,322
320	Road Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$315	2%	$63	3 EA	$350	$3,150	6%	$189	$3,717	$4,460
	TOTALS		$315		$63			$3,150		$189	$3,717	$4,460
380	Natural Landscaped Areas											
1	Native Grasses	10%	$647	2%	$129	0.6470 AC	$10,000	$6,470	6%	$388	$7,635	$9,162
	TOTALS		$647		$129			$6,470		$388	$7,635	$9,162
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
	[illegible]		[illegible]		[illegible]			[illegible]		[illegible]	[illegible]	[illegible]
LOT TOTALS			$9,673		$1,935			$96,726		$5,804	$114,137	$136,964

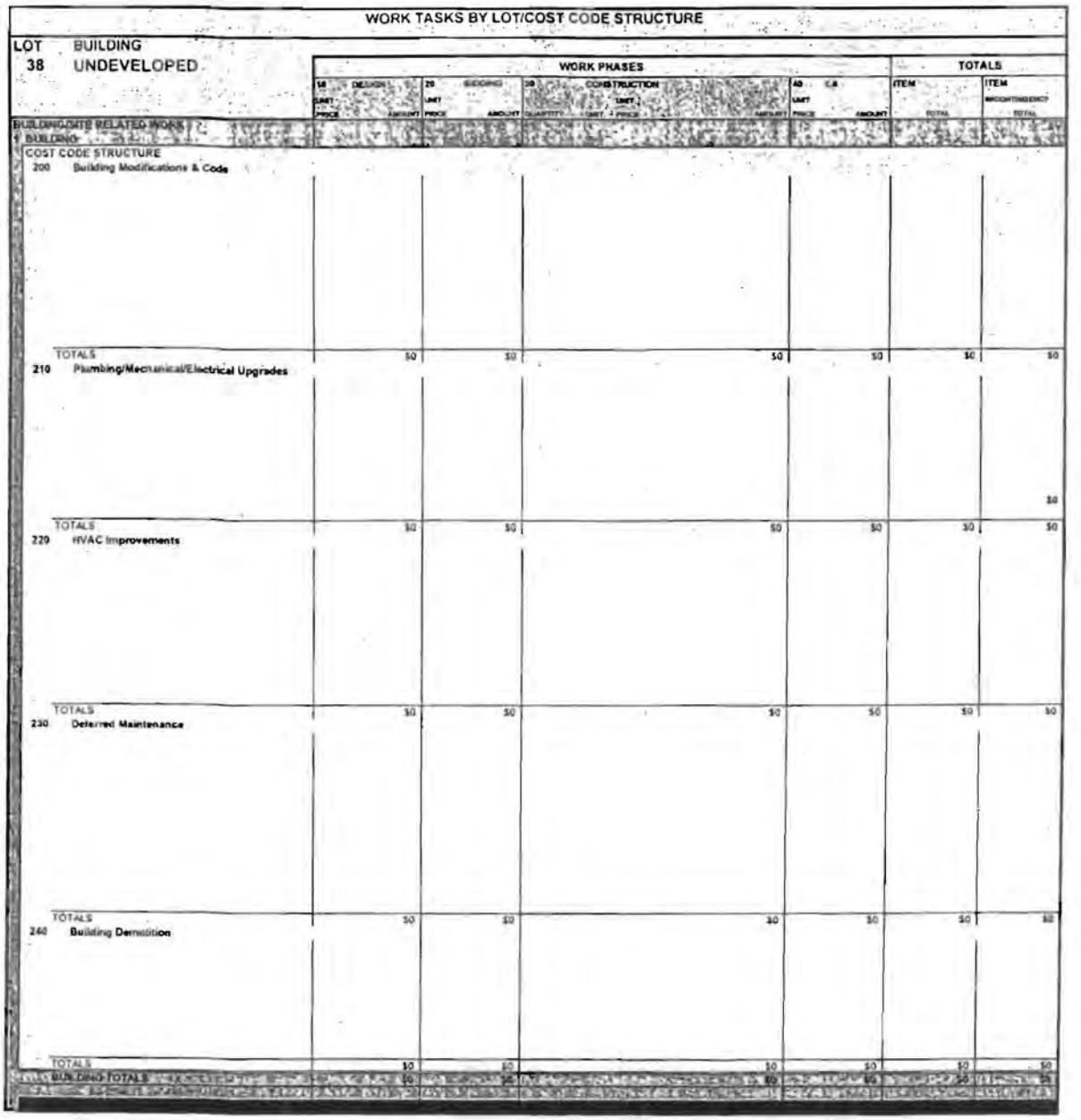
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING		WORK PHASES								TOTALS	
			10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
37	100		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
	5,800 SF													
BUILDING/SITE RELATED WORK														
1 BUILDING														
COST CODE STRUCTURE														
200	**Building Modifications & Code**													
1	Tenant Improvements		10%	$14,500	2%	$2,900	5,800 SF		$25.00	$145,000	6%	$8,700	$171,100	$205,320
2	Improve dumpster pad/screening		10%	$500	2%	$100	1 LS		$5,000	$5,000	6%	$300	$5,900	$7,080
	TOTALS			$15,000		$3,000				$150,000		$9,000	$177,000	$212,400
210	**Plumbing/Mechanical/Electrical Upgrades**													
1	Renovate Building Sprinkler Systems		10%	$2,480	2%	$696	5,800 SF		$6.00	$34,800	6%	$2,088	$41,064	$49,277
2	Add Back flow Preventer @ Water Main		10%	$1,200	2%	$240	1 LS		$12,000	$12,000	6%	$720	$14,160	$16,992
	TOTALS			$4,680		$936				$46,800		$2,808	$55,224	$66,269
220	**HVAC Improvements**													
	TOTALS			$0		$0				$0		$0	$0	$0
230	**Deferred Maintenance**													
	TOTALS			$0		$0				$0		$0	$0	$0
240	**Building Demolition**													
1	Replace roof membrane and flashing		10%	$2,900	2%	$580	5,800 SF		$5.00	$29,000	6%	$1,740	$34,220	$41,064
	TOTALS			$2,900		$580				$29,000		$1,740	$34,220	$41,064
	BUILDING TOTALS			$22,580		$4,516				$225,800		$13,548	$266,444	$319,733

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING
37	100
	5,800 SF

		WORK PHASES										TOTALS	
		10 DESIGN		25 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
BUILDING SITE RELATED WORK													
SITE													
250	**Water**												
1	Main on Enterprise	10%	$10,508	2%	$2,101	1	LS	$105,059	$105,059	8%	$8,304	$123,970	$148,764
2	Existing Main Improvements	10%	$70	2%	$14	1	LS	$696	$696	6%	$42	$821	$986
	TOTALS		$10,578		$2,115				$105,755		$8,345	$124,791	$149,749
260	**Waste Water**												
1	Main	10%	$1,009	2%	$202	1	LS	$10,094	$10,094	6%	$606	$11,911	$14,293
2	Remove Pump Station	10%	$500	2%	$100	1	LS	$5,000	$5,000	6%	$300	$5,900	$7,080
	TOTALS		$1,509		$302				$15,094		$906	$17,811	$21,373
270	**Electric**												
	TOTALS		$0		$0				$0		$0	$0	$0
280	**Gas**												
1	Service	10%	$466	2%	$93	1	LS	$4,659	$4,659	6%	$280	$5,498	$6,597
2	Main	10%	$802	2%	$120	1	LS	$8,021	$8,021	6%	$481	$9,105	$8,526
	TOTALS		$1,068		$214				$10,680		$641	$12,602	$15,123
290	**Stormwater-Detention**												
	TOTALS		$0		$0				$0		$0	$0	$0
300	**Stormwater-Sewer**												
1	Infrastructure	10%	$596	2%	$119	1	LS	$5959	$5959	6%	$358	$1,132	$1,358
	TOTALS		$596		$119				$5959		$358	$1,132	$1,358
310	**Road Improvements**												
1	Pavement Removal	10%	$848	2%	$130	1	LS	$8,479	$8,479	6%	$389	$7,845	$9,174
	TOTALS		$848		$130				$8,479		$389	$7,845	$9,174
320	**Road Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
330	**Parking**												
	TOTALS		$0		$0				$0		$0	$0	$0
340	**Parking Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
350	**Site Lighting**												
	TOTALS		$0		$0				$0		$0	$0	$0
360	**Demolition of Stanchions**												
	TOTALS		$0		$0				$0		$0	$0	$0
370	**Formal Landscaped Areas**												
1	Deciduous	10%	$1,180	2%	$236	34	EA	$350	$11,900	6%	$714	$14,042	$16,850
2	Evergreen	10%	$1,620	2%	$324	54	EA	$300	$16,200	6%	$972	$19,116	$22,939
	TOTALS		$2,810		$562				$28,100		$1,686	$33,158	$39,790
380	**Natural Landscaped Areas**												
1	Native Grasses	10%	$2,400	2%	$480	2.4000	AC	$10,000	$24,000	6%	$1,440	$28,320	$33,984
	TOTALS		$2,400		$480				$24,000		$1,440	$28,320	$33,984
390	**Telephone/Information Technology**												
	TOTALS		$0		$0				$0		$0	$0	$0
SITE TOTALS			$19,987		$3,997				$211,067		$13,464	$278,451	$334,141
LOT TOTALS			$41,667		$8,337				$416,867		$25,012	$491,903	$590,284



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 38 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 C.A UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 38 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	INCONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6% $78	$1,532	$1,636
2	Main	10%	$3,643	2%	$729	1 LS	$36,427	$36,427	6% $2,186	$42,984	$51,581
	TOTALS		$3,773		$755			$37,725	$2,264	$44,516	$53,419
260	Waste Water										
1	Lateral	10%	$88	2%	$18	1 LS	$876	$876	6% $53	$1,034	$1,240
	TOTALS		$88		$18			$876	$53	$1,034	$1,240
270	Electric										
1	Site Distribution	10%	$955	2%	$191	191 LF	$50	$9,550	6% $573	$11,269	$13,523
	TOTALS		$955		$191			$9,550	$573	$11,269	$13,523
280	Gas										
1	Main	10%	$41	2%	$8	1 LS	$406	$406	6% $24	$479	$575
	TOTALS		$41		$8			$406	$24	$479	$575
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
1	Infrastructure-C Street	10%	$738	2%	$148	1 LS	$7,383	$7,383	6% $443	$8,712	$10,454
2	Pavement Removal	10%	$1,187	2%	$237	1 LS	$11,870	$11,870	6% $712	$14,007	$16,808
	TOTALS		$1,925		$385			$19,253	$1,155	$22,719	$27,262
320	Road Lighting										
1	Light & Pole Assembly	10%	$300	2%	$60	1 EA	$3,000	$3,000	6% $180	$3,540	$4,248
	TOTALS		$300		$60			$3,000	$180	$3,540	$4,248
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$805	2%	$161	23 EA	$350	$8,050	6% $483	$9,499	$11,399
2	Evergreen	10%	$720	2%	$144	24 EA	$300	$7,200	6% $432	$8,496	$10,195
	TOTALS		$1,525		$305			$15,250	$915	$17,995	$21,594
380	Natural Landscaped Areas										
1	Native Grasses	10%	$269	2%	$54	0.2690 AC	$10,000	$2,690	6% $161	$3,174	$3,809
2	Reforestation	10%	$62	2%	$12	0.0619 AC	$12,000	$623	6% $37	$735	$882
	TOTALS		$331		$66			$3,313	$199	$3,909	$4,691
390	Telephone/Information Technology										
1	Site Distribution	10%	$900	2%	$180	300 LF	$30	$9,000	6% $540	$10,620	$12,744
	TOTALS		$900		$180			$9,000	$540	$10,620	$12,744
	SITE TOTALS		$9,837		$1,967			$98,373	$5,902	$116,080	$139,296
LOT TOTALS			$9,837		$1,967			$98,373	$5,902	$116,080	$139,296

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 39 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN	20 BIDDING	30 CONSTRUCTION	40 CA	ITEM	ITEM
	UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	INCONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 39 BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM W/CONTINGENCY
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT		TOTAL	TOTAL
BUILDING/SITE RELATED WORK													
SITE													
250	Water												
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6%	$78		$1,532	$1,838
2	Main	10%	$4,404	2%	$881	1 LS	$44,039	$44,039	6%	$2,642		$51,966	$62,359
TOTALS			$4,534		$907			$45,337		$2,720		$53,498	$64,197
260	Waste Water												
1	Lateral	10%	$88	2%	$18	1 LS	$878	$878	6%	$53		$1,034	$1,240
TOTALS			$88		$18			$878		$53		$1,034	$1,240
270	Electric												
TOTALS			$0		$0			$0		$0		$0	$0
280	Gas												
1	Main	10%	$41	2%	$8	1 LS	$406	$406	6%	$24		$479	$575
TOTALS			$41		$8			$406		$24		$479	$575
290	Stormwater-Detention												
TOTALS			$0		$0			$0		$0		$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$2,727	2%	$545	1 LS	$27,267	$27,267	6%	$1,636		$32,175	$38,610
TOTALS			$2,727		$545			$27,267		$1,636		$32,175	$38,610
310	Road Improvements												
1	Infrastructure-Benner & C Street	10%	$13,414	2%	$2,683	1 LS	$134,142	$134,142	6%	$8,049		$158,288	$189,946
2	Pavement Removal	10%	$2,501	2%	$500	1 LS	$25,009	$25,009	6%	$1,501		$29,511	$35,413
TOTALS			$15,915		$3,183			$159,151		$9,549		$187,798	$225,358
320	Road Lighting												
1	Light & Pole Assembly	10%	$1,500	2%	$300	5 EA	$3,000	$15,000	6%	$900		$17,700	$21,240
TOTALS			$1,500		$300			$15,000		$900		$17,700	$21,240
330	Parking												
TOTALS			$0		$0			$0		$0		$0	$0
340	Parking Lighting												
TOTALS			$0		$0			$0		$0		$0	$0
350	Site Lighting												
TOTALS			$0		$0			$0		$0		$0	$0
360	Demolition of Stanchions												
TOTALS			$0		$0			$0		$0		$0	$0
370	Formal Landscaped Areas												
1	Site Signage & Bollards	10%	$1,500	2%	$300	1 EA	$15,000	$15,000	6%	$900		$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600		$11,800	$14,160
3	Deciduous	10%	$1,015	2%	$203	29 EA	$350	$10,150	6%	$609		$11,977	$14,372
4	Evergreen	10%	$720	2%	$144	24 EA	$300	$7,200	6%	$432		$8,496	$10,195
TOTALS			$4,235		$847			$42,350		$2,541		$49,973	$59,968
380	Natural Landscaped Areas												
1	Native Grasses	10%	$1,180	2%	$236	1.1800 AC	$10,000	$11,800	6%	$708		$13,924	$16,709
TOTALS			$1,180		$236			$11,800		$708		$13,924	$16,709
390	Telephone/Information Technology												
1	Site Distribution	10%	$3,750	2%	$750	1,250 LF	$30	$37,500	6%	$2,250		$44,250	$53,100
TOTALS			$3,750		$750			$37,500		$2,250		$44,250	$53,100
SITE TOTALS			$33,969		$6,794			$339,687		$20,381		$400,831	$480,997
LOT TOTALS			$33,969		$6,794			$339,687		$20,381		$400,831	$480,997

WORK TASKS BY LOT/COST CODE STRUCTURE

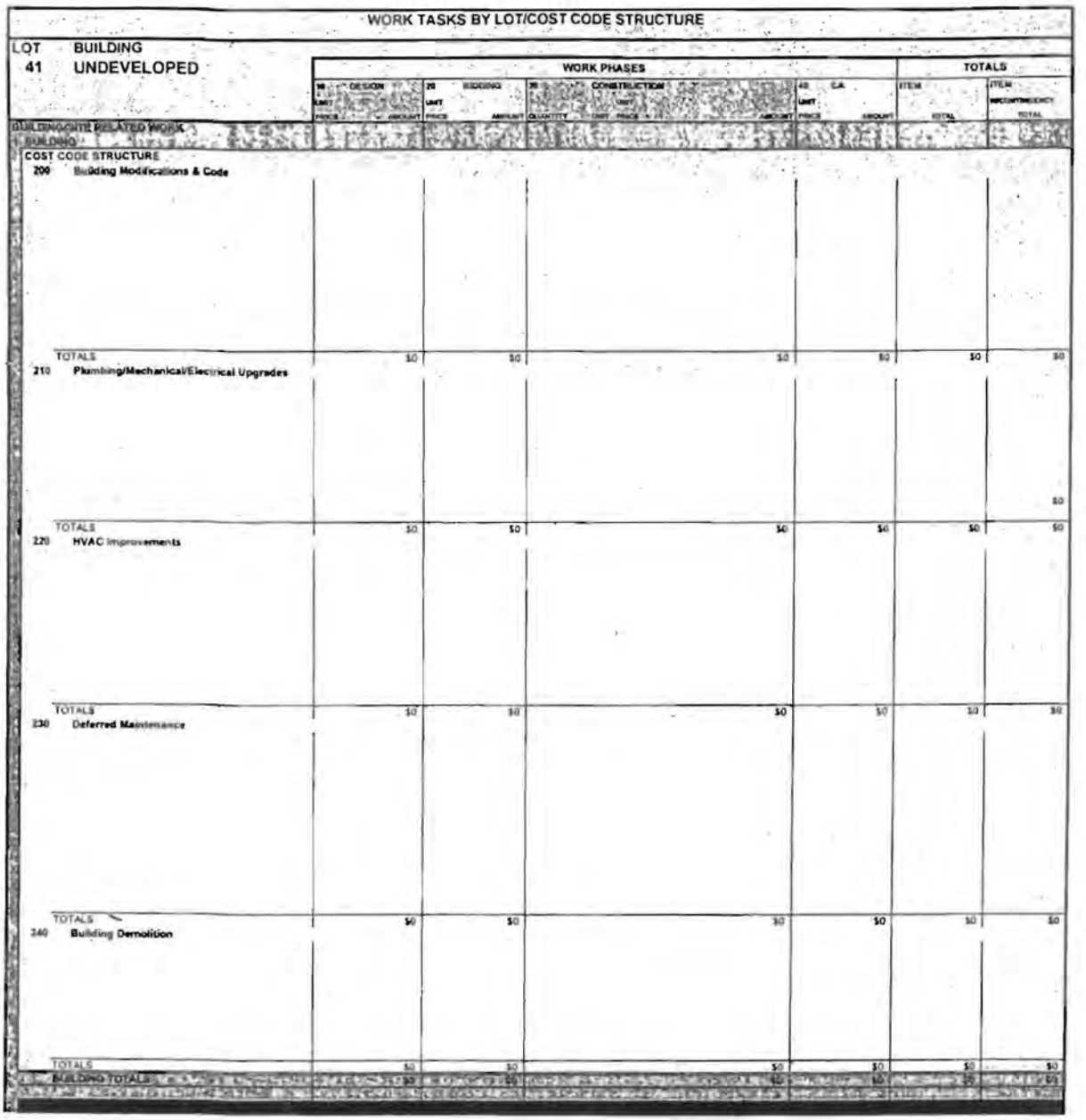
LOT 40 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM w/CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
1 BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 40 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 [illegible]		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	[illegible] CONTINGENCY TOTAL
BUILDING-SITE RELATED WORK												
2	SITE											
250	Water											
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6%	$78	$1,532	$1,438
2	Main	10%	$37	2%	$7	1 LS	$369	$369	6%	$22	$435	$823
	TOTALS		$167		$33			$1,667		$100	$1,967	$2,360
260	Waste Water											
1	Lateral	10%	$26	2%	$5	1 LS	$263	$263	6%	$16	$310	$372
2	Main	10%	$106	2%	$21	1 LS	$1,060	$1,060	6%	$64	$1,251	$1,501
	TOTALS		$133		$26			$1,323		$79	$1,561	$1,873
270	Electric											
1	Site Distribution	10%	$1,960	2%	$392	392 LF	$50	$19,600	6%	$1,176	$23,139	$27,764
	TOTALS		$1,960		$392			$19,600		$1,176	$23,139	$27,764
280	Gas											
1	Main	10%	$56	2%	$12	1 LS	$560	$560	6%	$35	$664	$821
	TOTALS		$56		$12			$560		$35	$664	$821
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$594	2%	$119	1 LS	$5,944	$5,944	6%	$357	$7,014	$8,417
	TOTALS		$594		$119			$5,944		$357	$7,014	$8,417
310	Road Improvements											
1	Infrastructure-Banner & D Street	10%	$6,425	2%	$1,285	1 LS	$64,253	$64,253	6%	$3,855	$75,819	$90,982
	TOTALS		$6,425		$1,285			$64,253		$3,855	$75,819	$90,982
320	Road Lighting											
1	Light & Pole Assembly	10%	$900	2%	$180	3 EA	$3,000	$9,000	6%	$540	$10,620	$12,744
	TOTALS		$900		$180			$9,000		$540	$10,620	$12,744
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Site Signage & Bollards	10%	$1,500	2%	$300	1 EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$420	2%	$84	12 EA	$350	$4,200	6%	$252	$4,956	$5,947
4	Evergreen	10%	$380	2%	$72	12 EA	$300	$3,600	6%	$216	$4,248	$5,098
	TOTALS		$3,280		$656			$32,800		$1,968	$38,704	$46,445
380	Natural Landscaped Areas											
1	Native Grasses	10%	$200	2%	$40	0.2000 AC	$10,000	$2,000	6%	$120	$2,360	$2,832
	TOTALS		$200		$40			$2,000		$120	$2,360	$2,832
390	Telephone/Information Technology											
1	Site Distribution	10%	$1,077	2%	$215	359 LF	$30	$10,770	6%	$646	$12,709	$15,250
	TOTALS		$1,077		$215			$10,770		$646	$12,709	$15,250
	SUBTOTALS		$14,794		$2,959			$147,937		$8,876	$174,568	$209,478
LOT TOTALS			$14,794		$2,959			$147,937		$8,876	$174,568	$209,478



WORK TASKS BY LOT/COST CODE STRUCTURE

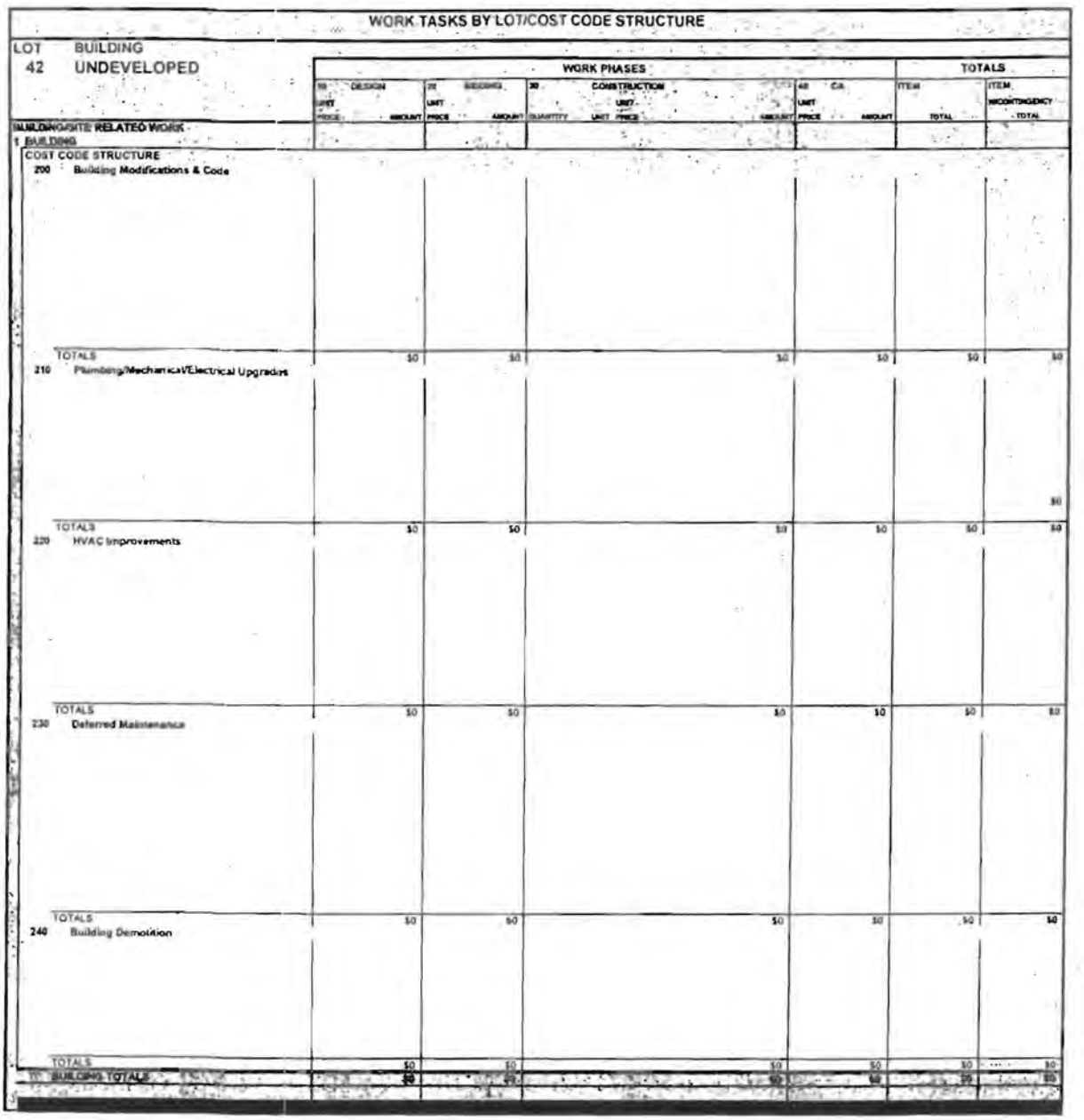
LOT 41 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 C.A. UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 41 BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA			ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT		TOTAL	CONTINGENCY TOTAL
1	MINOR SITE RELATED WORK												
	SITE												
250	Water												
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6%	$78		$1,532	$1,838
2	Main	10%	$755	2%	$151	1 LS	$7,549	$7,549	6%	$453		$8,908	$10,689
	TOTALS		$885		$177			$8,847		$531		$10,439	$12,527
260	Waste Water												
1	Lateral	10%	$18	2%	$4	1 LS	$176	$176	6%	$11		$208	$249
2	Main	10%	$1,408	2%	$282	1 LS	$14,082	$14,082	6%	$845		$16,617	$19,940
	TOTALS		$1,426		$285			$14,258		$856		$16,824	$20,189
270	Electric												
1	Site Distribution	10%	$2,955	2%	$591	591 LF	$50	$29,550	6%	$1,773		$34,869	$41,843
									8%	$0		$0	$0
									8%	$0		$0	$0
	TOTALS		$2,955		$591			$29,550		$1,773		$34,869	$41,843
280	Gas												
1	Main	10%	$816	2%	$163	1 LS	$8,163	$8,163	6%	$550		$10,812	$12,975
	TOTALS		$816		$163			$8,163		$550		$10,812	$12,975
290	Stormwater-Detention												
	TOTALS		$0		$0			$0		$0		$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$495	2%	$99	1 LS	$4,953	$4,953	6%	$297		$5,845	$7,013
	TOTALS		$495		$99			$4,953		$297		$5,845	$7,013
310	Road Improvements												
1	Infrastructure-D Street	10%	$2,256	2%	$451	1 LS	$22,563	$22,563	6%	$1,354		$26,624	$31,949
	TOTALS		$2,256		$451			$22,563		$1,354		$26,624	$31,949
320	Road Lighting												
1	Light & Pole Assembly	10%	$600	2%	$120	2 EA	$3,000	$6,000	6%	$360		$7,080	$8,496
	TOTALS		$600		$120			$6,000		$360		$7,080	$8,496
330	Parking												
	TOTALS		$0		$0			$0		$0		$0	$0
340	Parking Lighting												
	TOTALS		$0		$0			$0		$0		$0	$0
350	Site Lighting												
	TOTALS		$0		$0			$0		$0		$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0			$0		$0		$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$105	2%	$21	3 EA	$350	$1,050	6%	$63		$1,239	$1,487
	TOTALS		$105		$21			$1,050		$63		$1,239	$1,487
380													
1	Native Grasses	10%	$124	2%	$25	0.1240 AC	$10,000	$1,240	6%	$74		$1,463	$1,756
	TOTALS		$124		$25			$1,240		$74		$1,463	$1,756
390	Telephone/Information Technology												
	TOTALS		$0		$0			$0		$0		$0	$0
	SITE TOTALS		$9,762		$1,952			$97,624		$5,857		$115,196	$138,235
	LOT TOTALS		$9,762		$1,952			$97,624		$5,857		$115,196	$138,235



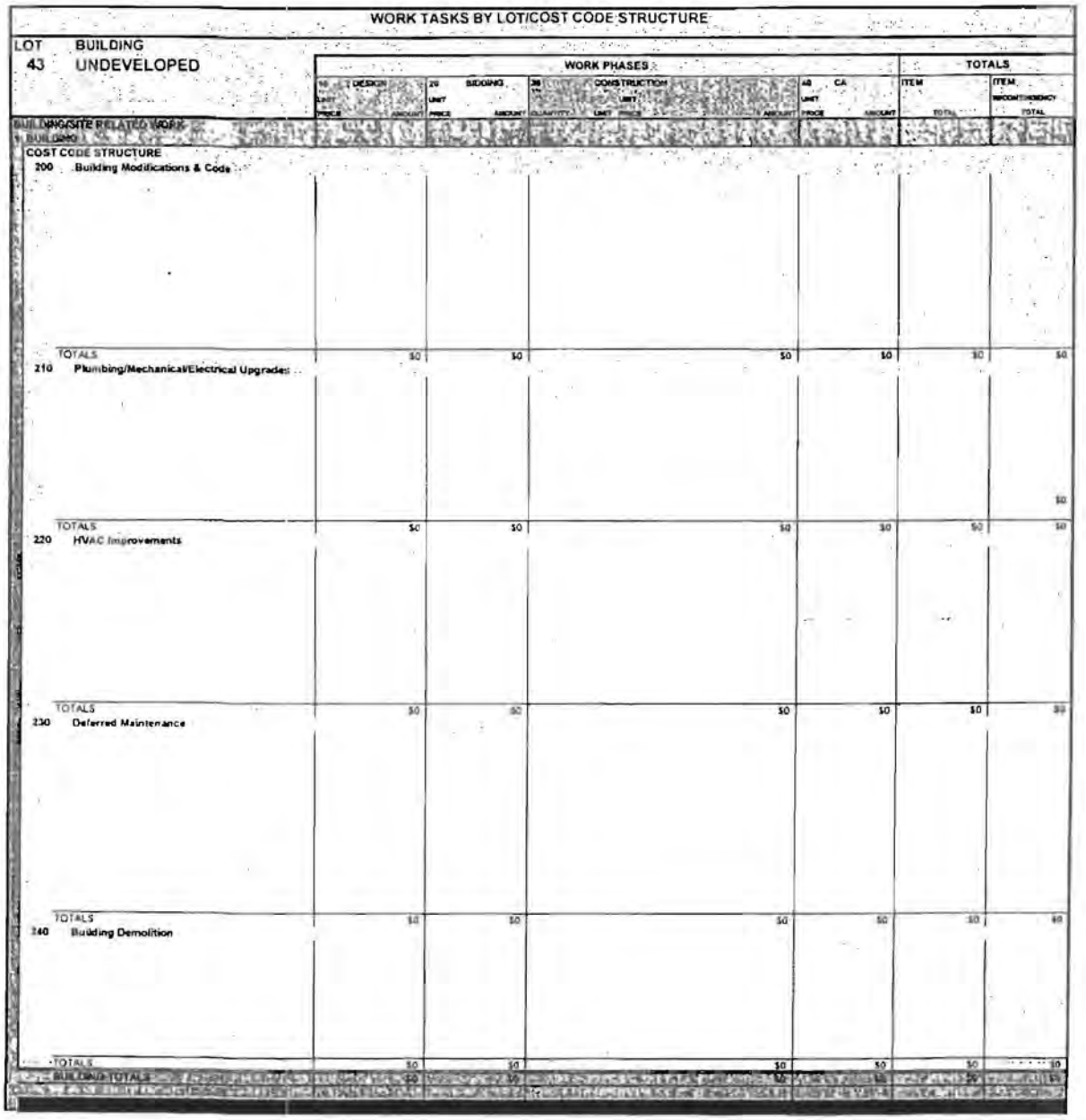
WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 C.A.	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK											
1 BUILDING											
COST CODE STRUCTURE											
200	Building Modifications & Code										
	TOTALS	$0		$0				$0	$0	$0	$0
210	Plumbing/Mechanical/Electrical Upgrades										$0
	TOTALS	$0		$0				$0	$0	$0	$0
220	HVAC Improvements										
	TOTALS	$0		$0				$0	$0	$0	$0
230	Deferred Maintenance										
	TOTALS	$0		$0				$0	$0	$0	$0
240	Building Demolition										
	TOTALS	$0		$0				$0	$0	$0	$0
	BUILDING TOTALS	$0		$0				$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 42 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT % PRICE	AMOUNT	UNIT % PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT % PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
SITE												
250	Water											
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6%	$78	$1,532	$1,838
2	Main	10%	$344	2%	$69	1 LS	$3,437	$3,437	6%	$206	$4,056	$4,867
	TOTALS		$474		$95			$4,735		$284	$5,587	$6,705
260	Waste Water											
1	Lateral	10%	$18	2%	$4	1 LS	$178	$178	6%	$11	$208	$249
2	Main	10%	$1,968	2%	$394	1 LS	$19,684	$19,684	6%	$1,181	$23,227	$27,873
	TOTALS		$1,986		$397			$19,860		$1,192	$23,435	$28,122
270	Electric											
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
1	Main	10%	$557	2%	$111	1 LS	$5,567	$5,567	6%	$334	$6,569	$7,883
	TOTALS		$557		$111			$5,567		$334	$6,569	$7,883
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
	TOTALS		$0		$0			$0		$0	$0	$0
310	Road Improvements											
1	Infrastructure-D Street	10%	$865	2%	$173	1 LS	$8,653	$8,653	6%	$519	$10,211	$12,253
	TOTALS		$865		$173			$8,653		$519	$10,211	$12,253
320	Road Lighting											
1	Light & Pole Assembly	10%	$300	2%	$60	1 EA	$3,000	$3,000	6%	$180	$3,540	$4,248
	TOTALS		$300		$60			$3,000		$180	$3,540	$4,248
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Deciduous	10%	$175	2%	$35	5 EA	$350	$1,750	6%	$105	$2,065	$2,478
	TOTALS		$175		$35			$1,750		$105	$2,065	$2,478
380	Natural Landscaped Areas											
	TOTALS		$0		$0			$0		$0	$0	$0
390	Telephone/Information Technology											
	TOTALS		$0		$0			$0		$0	$0	$0
SITE TOTALS			$4,357		$871			$43,565		$2,614	$51,407	$61,689
LOT TOTALS			$4,357		$871			$43,565		$2,614	$51,407	$61,689



WORK TASKS BY LOT/COST CODE STRUCTURE

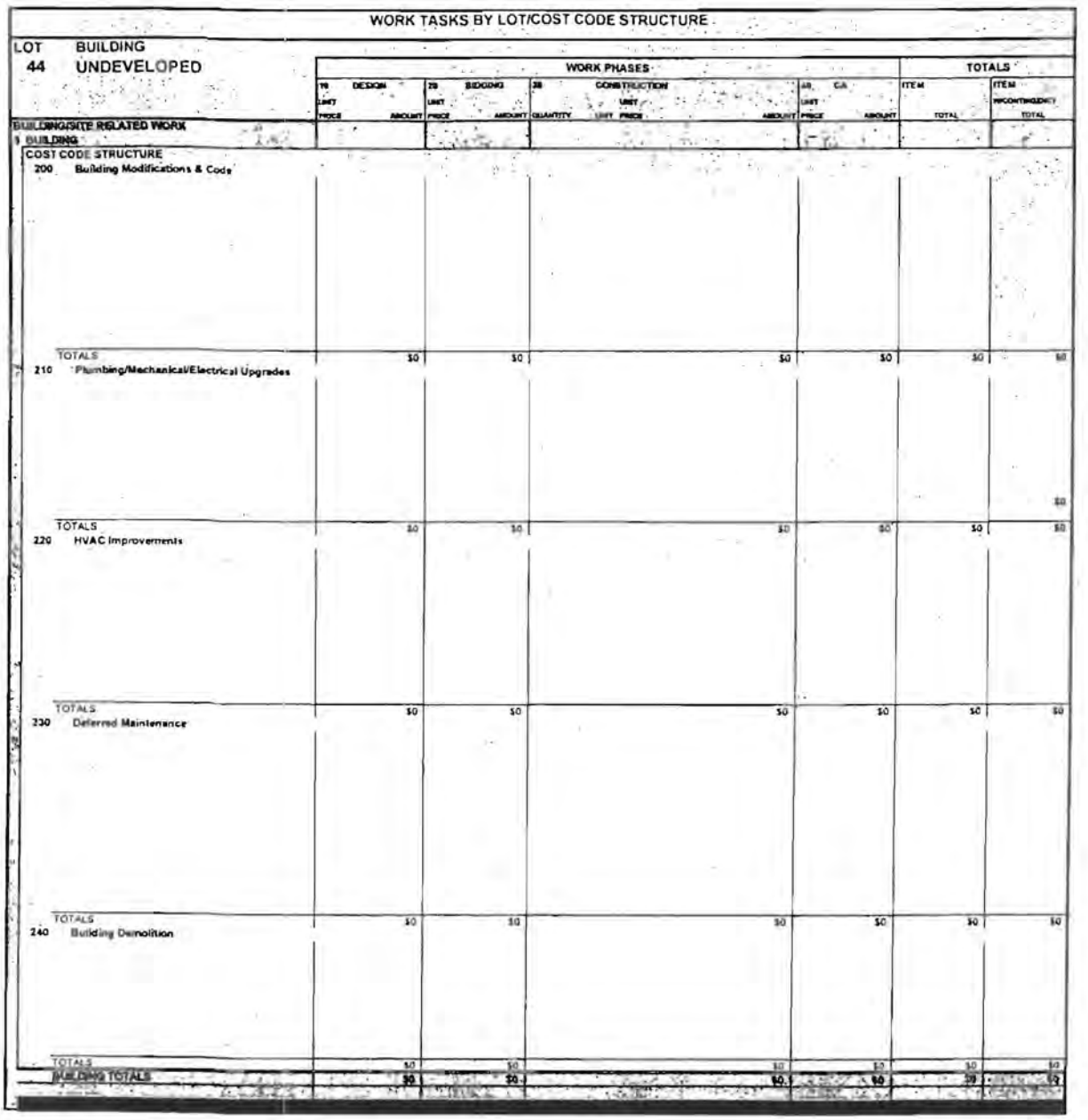
LOT 43 BUILDING UNDEVELOPED

	WORK PHASES				TOTALS	
	10 DESIGN UNIT PRICE / AMOUNT	20 BIDDING UNIT PRICE / AMOUNT	30 CONSTRUCTION QUANTITY / UNIT / UNIT PRICE / AMOUNT	40 CA UNIT PRICE / AMOUNT	ITEM TOTAL	ITEM CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK						
BUILDING						
COST CODE STRUCTURE						
200 Building Modifications & Code						
TOTALS	$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades						$0
TOTALS	$0	$0	$0	$0	$0	$0
220 HVAC Improvements						
TOTALS	$0	$0	$0	$0	$0	$0
230 Deferred Maintenance						
TOTALS	$0	$0	$0	$0	$0	$0
240 Building Demolition						
TOTALS	$0	$0	$0	$0	$0	$0
BUILDING TOTALS	$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 43 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM W/CONTINGENCY
		UNIT % PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE AMOUNT	TOTAL	TOTAL
BUILDING/SITE RELATED WORK											
SITE											
250	Water										
1	Service	10%	$216	2%	$43	1 LS	$2,163	$2,163	6% $130	$2,552	$3,063
2	Main	10%	$976	2%	$195	1 LS	$9,758	$9,758	6% $585	$11,514	$13,817
	TOTALS		$1,192		$238			$11,921	$715	$14,067	$16,880
260	Waste Water										
1	Lateral	10%	$18	2%	$4	1 LS	$176	$176	6% $11	$208	$249
	TOTALS		$18		$4			$176	$11	$208	$249
270	Electric										
	TOTALS		$0		$0			$0	$0	$0	$0
280	Gas										
1	Main	10%	$1,154	2%	$231	1 LS	$11,540	$11,540	6% $692	$13,617	$16,341
	TOTALS		$1,154		$231			$11,540	$692	$13,617	$16,341
290	Stormwater-Detention										
	TOTALS		$0		$0			$0	$0	$0	$0
300	Stormwater-Sewer										
	TOTALS		$0		$0			$0	$0	$0	$0
310	Road Improvements										
1	Infrastructure-O Street	10%	$683	2%	$137	1 LS	$6,831	$6,831	6% $410	$8,061	$9,673
	TOTALS		$683		$137			$6,831	$410	$8,061	$9,673
320	Road Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
330	Parking										
	TOTALS		$0		$0			$0	$0	$0	$0
340	Parking Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
350	Site Lighting										
	TOTALS		$0		$0			$0	$0	$0	$0
360	Demolition of Stanchions										
	TOTALS		$0		$0			$0	$0	$0	$0
370	Formal Landscaped Areas										
1	Deciduous	10%	$35	2%	$7	1 EA	$350	$350	6% $21	$413	$496
	TOTALS		$35		$7			$350	$21	$413	$496
380	Natural Landscaped Areas										
1	Native Grasses	10%	$661	2%	$132	0.5510 AC	$10,000	$5,510	6% $397	$7,800	$9,360
2	Reforestation	10%	$578	2%	$116	0.4820 AC	$12,000	$5,784	6% $347	$6,825	$8,190
	TOTALS		$1,239		$248			$12,394	$744	$14,625	$17,550
390	Telephone/Information Technology										
1	Site Distribution	10%	$132	2%	$26	44 LF	$30	$1,320	6% $79	$1,558	$1,869
	TOTALS		$132		$26			$1,320	$79	$1,558	$1,869
SITE TOTALS			$4,453		$891			$44,532	$2,672	$52,548	$63,058
LOT TOTALS			$4,453		$891			$44,532	$2,672	$52,548	$63,058



WORK TASKS BY LOT/COST CODE STRUCTURE

LOT	BUILDING	WORK PHASES				TOTALS	
		10 DESIGN	20 BIDDING	30 CONSTRUCTION	40 C.A.	ITEM	ITEM
		UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	QUANTITY / UNIT / UNIT PRICE / AMOUNT	UNIT PRICE / AMOUNT	TOTAL	CONTINGENCY TOTAL
44	UNDEVELOPED						
BUILDING/SITE RELATED WORK							
1 BUILDING							
COST CODE STRUCTURE							
200 Building Modifications & Code							
TOTALS		$0	$0	$0	$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades							$0
TOTALS		$0	$0	$0	$0	$0	$0
220 HVAC Improvements							
TOTALS		$0	$0	$0	$0	$0	$0
230 Deferred Maintenance							
TOTALS		$0	$0	$0	$0	$0	$0
240 Building Demolition							
TOTALS		$0	$0	$0	$0	$0	$0
BUILDING TOTALS		$0	$0	$0	$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 44 BUILDING UNDEVELOPED

		WORK PHASES										TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 CA		ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK													
250	Water												
1	Service	10%	$130	2%	$26	1	LS	$1,298	$1,298	6%	$78	$1,533	$1,838
2	Main	10%	$1,982	2%	$396	1	LS	$19,823	$19,823	6%	$1,189	$23,391	$28,069
	TOTALS		$2,112		$422				$21,121		$1,267	$24,923	$29,907
260	Waste Water												
1	Lateral	10%	$175	2%	$35	1	LS	$1,751	$1,751	6%	$105	$2,066	$2,479
2	Main	10%	$851	2%	$130	1	LS	$8,511	$8,511	6%	$391	$7,683	$9,220
	TOTALS		$826		$165				$8,262		$496	$9,749	$11,699
270	Electric												
	TOTALS		$0		$0				$0		$0	$0	$0
280	Gas												
1	Main	10%	$922	2%	$184	1	LS	$9,221	$9,221	6%	$553	$10,881	$13,057
	TOTALS		$922		$184				$9,221		$553	$10,881	$13,057
290	Stormwater-Detention												
	TOTALS		$0		$0				$0		$0	$0	$0
300	Stormwater-Sewer												
1	Infrastructure	10%	$495	2%	$99	1	LS	$4,953	$4,953	6%	$297	$5,845	$7,013
	TOTALS		$495		$99				$4,953		$297	$5,845	$7,013
310	Road Improvements												
1	Infrastructure-D Street	10%	$9,584	2%	$1,917	1	LS	$95,842	$95,842	6%	$5,751	$113,094	$135,712
	TOTALS		$9,584		$1,917				$95,842		$5,751	$113,094	$135,712
320	Road Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
330	Parking												
	TOTALS		$0		$0				$0		$0	$0	$0
340	Parking Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
350	Site Lighting												
	TOTALS		$0		$0				$0		$0	$0	$0
360	Demolition of Stanchions												
	TOTALS		$0		$0				$0		$0	$0	$0
370	Formal Landscaped Areas												
1	Deciduous	10%	$140	2%	$28	4	EA	$350	$1,400	6%	$84	$1,652	$1,982
	TOTALS		$140		$28				$1,400		$84	$1,652	$1,982
380	Natural Landscaped Areas												
1	Native Grasses	10%	$161	2%	$32	0.1610	AC	$10,000	$1,610	6%	$97	$1,900	$2,280
2	Reforestation	10%	$434	2%	$87	0.3620	AC	$12,000	$4,344	6%	$261	$5,126	$6,151
	TOTALS		$595		$119				$5,954		$357	$7,026	$8,431
390	Telephone/Information Technology												
1	Site Distribution	10%	$963	2%	$193	321	LF	$30	$9,630	6%	$578	$11,363	$13,636
	TOTALS		$963		$193				$9,630		$578	$11,363	$13,636
LOT TOTALS			$15,638		$3,128				$156,383		$9,383	$184,532	$221,437

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 45 BUILDING UNDEVELOPED

	WORK PHASES										TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION				40 C.A		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	CONTINGENCY TOTAL
BUILDING/SITE RELATED WORK												
1 BUILDING												
COST CODE STRUCTURE												
200 Building Modifications & Code												
TOTALS		$0		$0				$0		$0	$0	$0
210 Plumbing/Mechanical/Electrical Upgrades												$0
TOTALS		$0		$0				$0		$0	$0	$0
220 HVAC Improvements												
TOTALS		$0		$0				$0		$0	$0	$0
230 Deferred Maintenance												
TOTALS		$0		$0				$0		$0	$0	$0
240 Building Demolition												
TOTALS		$0		$0				$0		$0	$0	$0
BUILDING TOTALS		$0		$0				$0		$0	$0	$0

WORK TASKS BY LOT/COST CODE STRUCTURE

LOT 45 BUILDING UNDEVELOPED

		WORK PHASES								TOTALS	
		10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA	ITEM	ITEM
		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	W/CONTINGENCY TOTAL
BUILDING/SITE/RELATED WORK												
SITE												
250	Water											
1	Service	10%	$130	2%	$26	1 LS	$1,298	$1,298	6%	$78	$1,532	$1,838
2	Main	10%	$2,979	2%	$596	1 LS	$369	$29,792	6%	$1,788	$35,155	$42,185
	TOTALS		$3,109		$622			$31,090		$1,865	$36,688	$44,023
260	Waste Water											
1	Laurel	10%	$175	2%	$35	1 LS	$1,751	$1,751	6%	$105	$2,066	$2,479
2	Main	10%	$106	2%	$21	1 LS	$1,060	$1,060	6%	$64	$1,251	$1,501
	TOTALS		$281		$56			$2,811		$169	$3,317	$3,980
270	Electric											
1												
	TOTALS		$0		$0			$0		$0	$0	$0
280	Gas											
1	Main	10%	$58	2%	$12	1 LS	$580	$580	6%	$35	$684	$821
	TOTALS		$58		$12			$580		$35	$684	$821
290	Stormwater-Detention											
	TOTALS		$0		$0			$0		$0	$0	$0
300	Stormwater-Sewer											
1	Infrastructure	10%	$990	2%	$198	1 LS	$9,904	$9,904	6%	$594	$11,687	$14,024
	TOTALS		$990		$198			$9,904		$594	$11,687	$14,024
310	Road Improvements											
1	Infrastructure-Banner & O Street	10%	$11,142	2%	$2,228	1 LS	$111,423	$111,423	6%	$6,685	$131,479	$157,775
	TOTALS		$11,142		$2,228			$111,423		$6,685	$131,479	$157,775
320	Road Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
330	Parking											
	TOTALS		$0		$0			$0		$0	$0	$0
340	Parking Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
350	Site Lighting											
	TOTALS		$0		$0			$0		$0	$0	$0
360	Demolition of Stanchions											
	TOTALS		$0		$0			$0		$0	$0	$0
370	Formal Landscaped Areas											
1	Site Signage & Bollards	10%	$1,500	2%	$300	1 EA	$15,000	$15,000	6%	$900	$17,700	$21,240
2	Landscape Treatments @ Signs	10%	$1,000	2%	$200	1 LS	$10,000	$10,000	6%	$600	$11,800	$14,160
3	Deciduous	10%	$420	2%	$84	12 EA	$350	$4,200	6%	$252	$4,956	$5,947
4	Evergreen	10%	$360	2%	$72	12 EA	$300	$3,600	6%	$216	$4,248	$5,098
	TOTALS		$3,280		$656			$32,800		$1,968	$38,704	$46,445
380												
1	Native Grasses	10%	$141	2%	$28	0.1410 AC	$10,000	$1,410	6%	$85	$1,664	$1,997
2	Reforestation	10%	$7	2%	$1	0.0060 AC	$12,000	$72	6%	$4	$85	$102
	TOTALS		$148		$30			$1,482		$89	$1,749	$2,099
390	Telephone/Information Technology											
1	Site Distribution	10%	$1,068	2%	$214	356 LF	$30	$10,680	6%	$641	$12,602	$15,123
	TOTALS		$1,068		$214			$10,680		$641	$12,602	$15,123
SITE TOTALS			$20,077		$4,015			$200,770		$12,046	$236,908	$284,290
LOT TOTALS			$20,077		$4,015			$200,770		$12,046	$236,908	$284,290

WORK TASKS BY LOT/COST CODE STRUCTURE

OTHER DEVELOPMENT COSTS

	WORK PHASES									TOTALS	
	10 DESIGN		20 BIDDING		30 CONSTRUCTION			40 CA		ITEM	ITEM
	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	WITH CONTINGENCY TOTAL
1 OFF SITE DEVELOPMENT COSTS											
.1 Water Main											
1 Range Avenue (50% of Total Cay Cost)	10%	$10,000	2%	$2,000	1 LS	$100,000	$100,000	6%	$6,000	$118,000	$141,600
2 Benner Road (50%of Total Cay Cost)	10%	$15,500	2%	$3,100	1 LS	$155,000	$155,000	6%	$9,300	$182,900	$219,480
TOTALS		$25,500		$5,100			$255,000		$15,300	$300,900	$361,080
2 Water Treatment											
1 Plant Upgrades, 3.5% of Total Cay Cost	10%	$7,000	2%	$1,400	1 LS	$70,000	$70,000	6%	$4,200	$82,600	$99,120
											$0
TOTALS		$7,000		$1,400			$70,000		$4,200	$82,600	$99,120
3 Waste Water											
1 Plant Upgrades, 5% of Total Cay Cost	10%	$32,500	2%	$6,500	1 LS	$325,000	$325,000	6%	$19,500	$383,500	$460,200
2 East Side Pump Station, 5% Total Cay Cost	10%	$2,500	2%	$500	1 LS	$25,000	$25,000	6%	$1,500	$29,500	$35,400
TOTALS		$35,000		$7,000			$350,000		$21,000	$413,000	$495,600
4 Site Access Road Improvements											
1 Range Avenue (50% of Total Cay Cost)	10%	$45,000	2%	$9,000	1 LS	$450,000	$450,000	6%	$27,000	$531,000	$637,200
2 Benner Road, South Side, Day-Cin to East property line (13% of Total Cay Cost)	10%	$8,112	2%	$1,622	1 LS	$81,120	$81,120	6%	$4,867	$95,722	$114,866
3 Benner Road, East Property line to Miamisburg-Springboro Pike (13% of Total Cay Cost)	10%	$34,125	2%	$6,825	1 LS	$341,250	$341,250	6%	$20,475	$402,675	$483,210
4 Miamisburg-Springboro Pike, Benner to Wolfe Road, Traffic Signal (13% of Total Cay Cost)	10%	$54,600	2%	$10,920	1 LS	$546,000	$546,000	6%	$32,760	$644,280	$773,136
5 Interchange I-75 at Austin Road (13% of Total Cost)	10%	$308,620	2%	$61,724	1 LS	$3,088,200	$3,088,200	6%	$185,172	$3,641,716	$4,370,059
TOTALS		$450,457		$90,091			$4,504,570		$270,274	$5,315,393	$6,378,471
TOTALS		$0		$0			$0		$0	$0	$0
TOTALS		$517,957		$103,591			$5,179,570		$310,774	$6,111,293	$7,334,751

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
DOE Activities					
BPDGD722QF	Demo Sewer Plant	0		30JUN05 •	0.00
BPDGD722QG	Sewer System Bypass Plant	0		25NOV03 *	0.00
EBDEB0WDM	Cluster WD Complete	0		29NOV04 •	0.00
EBDEC038DB	PRS 305 Field Work	0		14AUG03 •	0.00
EBDEC038M	Cluster 38 Complete	0		27APR04 *	0.00
EBDED0HHM	Cluster HH Complete	0		11AUG04 *	0.00
EBDEE00AAB	Bldg A - Physical Demolition	57	03NOV03	20JAN04 *	0.00
EBDEE00HM	Cluster H Complete	0		27JAN04 *	0.00
EBDEE00TBT	Bldg 45 Ready for Transfer	0		14JUN04 *	0.00
EBDEE00TDT	Bldg 126 Ready for Transfer	0		08SEP04 •	0.00
EBDEE00TFQ	OSE Ready for Transfer	0		20JAN04 *	0.00
EBDEE00TGP	OSW Ready for Transfer	0		20JAN04 •	0.00
EBDEE031M	Cluster 31 Complete	0		04MAY04 •	0.00
EBDEE048M	Cluster 48 Complete	0		10JUN05 •	0.00
EBDEE095AB	Building 49 Demolition	0		15APR03 A	0.00
EBDEE0DSBB	Bldg DS - Physical Demolition	83	23JUL04	16NOV04 *	0.00
EBDEE0DSN	Cluster DS Complete	0		21MAR05 *	0.00
ERCDC002A4	PRS 66 Field Work	0		27MAY04 *	0.00
ERCDC002B4	PRS 40 Field Work	0		30MAR04 •	0.00
ERCDC002D4	PRS 80 Field Work	0		06OCT03 •	0.00
ERCDC003A4	PRS 63 Field Work	0		17FEB04 *	0.00
ERCDC004A4	PRS 363 Field Work	0		08MAR05 *	0.00
ERCDC004B4	PRS 417 Field Work	0		03MAR03 A	0.00
ERCDC004C4	PRS 76 Field Work	0		08MAR05 •	0.00
ERCDC005A4	PRS 273 Field Work	0		28APR04 •	0.00
ERCDC005B4	PRS 267 Field Work	0		06JUL04 •	0.00
ERCDC005D4	PRS 303 Field Work	0		28APR04 *	0.00
ERCDC006A4	PRS 237 Field Work	0		01FEB05 •	0.00
ERCDC007A4	PRS 410 Field Work	0		08MAR05 •	0.00
ERCDC009C4	PRS 153 Field Work	0		19APR05 •	0.00
ERCDC009D4	PRS 154 Field Work	0		01FEB05 •	0.00
ERCDC009E4	PRS 238 Field Work	0		15MAR05 •	0.00
ERCDC009F4	PRS 240 Field Work	0		31AUG04 •	0.00

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	1A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
ERCDC010A4	PRS 411 Field Work	0		10NOV04 *	0.00
ERCDC010B4	PRS 101/102 Field Work	0		21OCT04 *	0.00
ERCDC012A3	PRS 41 Field Work	0		03MAR05 *	0.00
ERCDC013A4	PRS 269 Field Work	0		31MAR03 A	0.00
ERCDC014A4	PRS 67 Field Work	0		05OCT04 *	0.00
ERCDC014B4	PRS 68 Field Work	0		17AUG04 *	0.00
ERCDC016A4	PRS 75 Field Work	0		08MAR05 *	0.00
ERCDC018A4	PRS 409 Field Work	0		08MAR05 *	0.00
ERCDC018B3	PRS 17-Field Work	0		13SEP04 *	0.00
ERCDC018D4	PRS 69 Field Work	0		19AUG04 *	0.00
ERCDC018E5	PRS 70 Field Work	0		15DEC04 *	0.00
ERCDC019A4	PRS 414 Field Work	0		17FEB05 *	0.00
ERCDC020A4	PRS 106 Field Work	0		20JAN04 *	0.00
ERCDG10B0B	PRS 112/368 Field Work	0		13JAN05 *	0.00
ERDGD721DM	All Demo Bldgs 'Cold & Dark'	0		01APR04 *	0.00
MHDFB26B05	Verification Compl Bldg T Ready f	0		10MAY05 *	0.00
MHDFE15J06	SW/R Complete	0		02FEB05 *	0.00
PRCL005	Parcel 5 Transfer	0	31OCT03 *		0.00
PRCL006	Parcel 6 Transfer	0	21DEC04 *		0.00
PRCL007	Parcel 7 Transfer	0	11MAY05 *		0.00
PRCL008	Parcel 8 Transfer	0	21NOV05 *		0.00
WKSTS0050	Reroute OSW Lateral & Install Mai	40	31JUL03	24SEP03	0.00
Lot 1					
Site					
Building Modifications & Code					
0120010	Flex Building	120	06OCT03	05MAR04	1,261,016.00
Formal Landscaped Areas					
0137010	Formal Landscaped Areas	20	29APR04	26MAY04	5,523.00
Lot 2					
Site					
Formal Landscaped Areas					
0237010	Formal Landscaped Areas	25	28APR05 *	01JUN05	16,001.00
Natural Landscaped Areas					
0238010	Natural Landscaped Areas	25	28APR05	01JUN05	3,124.00
Lot 3					
Site					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	2A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Water					
0325010	Water Service	5	09AUG10	13AUG10	1,786.00
0325020	Main on Benner	40	14JUN10	06AUG10	25,550.00
Formal Landscaped Areas					
0337010	Formal Landscaped Areas	4	16AUG10	19AUG10	991.00
Natural Landscaped Areas					
0338010	Natural Landscaped Areas	5	16AUG10	20AUG10	9,534.00
Lot 4					
Site					
Water					
0425010	Water Service	5	06SEP10	10SEP10	2,145.00
0425020	Main on Benner	20	09AUG10	03SEP10	25,550.00
Gas					
0428010	Gas Main	20	09AUG10	03SEP10	6,645.00
Stormwater - Sewer					
0430010	Infrastructure	20	09AUG10	03SEP10	5,452.00
Road Lighting					
0432010	Light & Pole Assembly	10	06SEP10	17SEP10	4,248.00
Formal Landscaped Areas					
0437010	Formal Landscaped Areas	20	06SEP10	01OCT10	6,231.00
Natural Landscaped Areas					
0438010	Natural Landscaped Areas	20	06SEP10	01OCT10	6,356.00
Lot 5					
Site					
Water					
0525010	Service	5	21APR06	27APR06	2,145.00
0525020	Main on Vanguard	15	31MAR06	20APR06	6,257.00
Waste Water					
0526010	Lateral	5	28APR06	04MAY06	869.00
0526020	Main on Vanguard	15	31MAR06	20APR06	5,361.00
Stormwater - Sewer					
0530010	Infrastructure	15	31MAR06	20APR06	9,088.00
Road Improvements					
0531010	Infrastructure - Vanguard	15	31MAR06	20APR06	35,751.00
Road Lighting					
0532010	Light & Pole Assembly	10	05MAY06	18MAY06	8,496.00

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 3A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Formal Landscaped Areas					
0537010	Formal Landscaped Areas	15	19MAY06	08JUN06	4,743.00
Lot 6					
Site					
Water					
0625010	Service	5	16JUN06	22JUN06	2,145.00
0625020	Main on Vanguard	30	05MAY06	15JUN06	51,531.00
Waste Water					
0626010	Main on Vanguard	30	05MAY06	15JUN06	45,523.00
0628010	Service	5	16JUN06	22JUN06	2,258.00
Stormwater - Sewer					
0630010	Infrastructure	25	05MAY06	08JUN06	42,412.00
Road Improvements					
0631005	Infrastructure-Vanguard	10	21APR06	04MAY06	8,586.00
0631010	Pavement Removal	10	05MAY06	18MAY06	8,586.00
Formal Landscaped Areas					
0637010	Formal Landscaped Areas	15	23JUN06	13JUL06	14,585.00
Lot 7					
Site					
Water					
0725010	Service	5	02JUN06	08JUN06	2,145.00
0725020	Main on Vanguard	20	05MAY06	01JUN06	18,249.00
Waste Water					
0726010	Lateral	5	02JUN06	08JUN06	869.00
0726020	Main on Vanguard	20	05MAY06	01JUN06	14,936.00
Stormwater - Sewer					
0730010	Infrastructure	20	05MAY06	01JUN06	12,723.00
Road Improvements					
0731010	Infrastructure - Vanguard	20	05MAY06	01JUN06	65,777.00
Road Lighting					
0732010	Light & Pole Assembly	10	02JUN06	15JUN06	12,744.00
Formal Landscaped Areas					
0737010	Formal Landscaped Areas	10	16JUN06	29JUN06	5,947.00
Lot 8					
Site					
Water					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	4A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
0825010	Service	5	14JUL06	20JUL06	2,145.00
0825020	Main on Vanguard	30	02JUN06	13JUL06	22,074.00
Waste Water					
0826010	Lateral	5	14JUL06	20JUL06	869.00
0826020	Main on Vanguard	30	02JUN06	13JUL06	18,153.00
Stormwater - Sewer					
0830010	Infrastructure	30	02JUN06	13JUL06	15,147.00
Road Improvements					
0831010	Infrastructure - Vanguard	30	02JUN06	13JUL06	104,246.00
0831020	Pavement Removal	10	14JUL06	27JUL06	3,932.00
Road Lighting					
0832010	Light & Pole Assembly	10	14JUL06	27JUL06	16,992.00
Formal Landscaped Areas					
0837010	Formal Landscaped Areas	10	28JUL06	10AUG06	7,080.00
Natural Landscaped Areas					
0838010	Natural Landscaped Areas	10	28JUL06	10AUG06	1,658.00
Lot 9					
Site					
Water					
0925010	Service	5	11AUG06	17AUG06	2,145.00
0925020	Main on Vanguard	20	14JUL06	10AUG06	13,121.00
Waste Water					
0926010	Lateral	5	11AUG06	17AUG06	869.00
0926020	Main on Vanguard	20	14JUL06	10AUG06	10,792.00
Stormwater - Sewer					
0930010	Infrastructure	20	14JUL06	10AUG06	6,831.00
Road Improvements					
0931010	Infrastructure - Vanguard	20	14JUL06	10AUG06	61,774.00
0931020	Pavement Removal	5	11AUG06	17AUG06	6,769.00
Road Lighting					
0932010	Light & Pole Assembly	5	11AUG06	17AUG06	8,496.00
Formal Landscaped Areas					
0937010	Formal Landscaped Areas	10	18AUG06	31AUG06	3,894.00
Natural Landscaped Areas					
0938010	Natural Landscaped Areas	10	18AUG06	31AUG06	20,815.00
Lot 10					

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 5A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Site					
Water					
1025010	Service	5	08SEP06	14SEP06	2,145.00
1025020	Main on Vanguard	20	11AUG06	07SEP06	12,776.00
Waste Water					
1026010	Lateral	5	08SEP06	14SEP06	869.00
1026020	Main on Vanguard	20	11AUG06	07SEP06	1,143.00
Stormwater - Detention					
1029010	Fill in Ex. Detention Basin	30	13JAN06	23FEB06	74,493.00
Road Improvements					
1031010	Infrastructure - Vanguard	20	11AUG06	07SEP06	60,331.00
1031020	Pavement Removal	5	08SEP06	14SEP06	5,011.00
Road Lighting					
1032010	Light & Pole Assembly	10	15SEP06	28SEP06	8,496.00
Formal Landscaped Areas					
1037010	Formal Landscaped Areas	10	29SEP06	12OCT06	3,257.00
Natural Landscaped Areas					
1038010	Natural Landscaped Areas	10	29SEP06	12OCT06	16,675.00
Lot 11					
Site					
Water					
1125010	Service	5	27OCT06	02NOV06	2,145.00
1125020	Main on Vanguard	35	08SEP06	26OCT06	34,587.00
1126030	Existing Main Improvements	2	27OCT06	30OCT06	822.00
Waste Water					
1126010	Lateral	5	18OCT06	24OCT06	869.00
1126020	Main on Vanguard	28	08SEP06	17OCT06	28,454.00
Electric					
1127010	Site Distribution	13	08SEP06	26SEP06	12,885.00
Gas					
1128010	Main	35	01JUL05	18AUG05	3,285.00
Stormwater - Detention					
1129010	Detention Basin	60	08SEP06	30NOV06	184,329.00
Stormwater - Sewer					
1130010	Infrastructure	90	08SEP06	11JAN07	136,877.00
Road Improvements					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	6A

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1131010	Infrastructure - Vanguard	60	08SEP06	30NOV06	163,343.00
1131020	Pavement Removal	5	01DEC06	07DEC06	4,885.00
Road Lighting					
1132010	Light & Pole Assembly	10	01DEC06	14DEC06	21,240.00
Formal Landscaped Areas					
1137010	Formal Landscaped Areas	15	15DEC06	04JAN07	10,691.00
Loc12					
Site					
Water					
1225010	Service	5	19JAN07	25JAN07	2,145.00
1225020	Main on Vanguard	35	01DEC06	18JAN07	34,587.00
1225030	Existing Main Improvements	15	21NOV05	09DEC05	822.00
Waste Water					
1226010	Lateral	5	09FEB07	15FEB07	669.00
1226020	Main on Vanguard	35	22DEC06	08FEB07	36,021.00
1226030	Replace Ex. Main	15	01DEC06	21DEC06	16,409.00
Electric					
1227010	Site Distribution	30	21NOV05	30DEC05	34,055.00
Stormwater - Sewer					
1230010	Infrastructure	90	01DEC06	05APR07	157,516.00
Road Improvements					
1231010	Infrastructure - Vanguard	60	01DEC06	22FEB07	281,787.00
1231015	Infrastructure - Capstone	60	18DEC09	11MAR10	281,787.00
1231020	Pavement Removal	10	23FEB07	08MAR07	10,710.00
Road Lighting					
1232010	Light & Pole Assembly	10	23FEB07	08MAR07	8,496.00
Formal Landscaped Areas					
1237010	Formal Landscaped Areas	20	09MAR07	05APR07	46,303.00
Natural Landscaped Areas					
1238010	Natural Landscaped Areas	10	09MAR07	22MAR07	2,229.00
Telephone/Information Technology					
1239010	Telephone/Information Technology	15	21NOV05	09DEC05	19,668.00
Loc13					
Site					
Water					
1325010	Service	5	06APR07	12APR07	2,145.00

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 7A

MMCIC

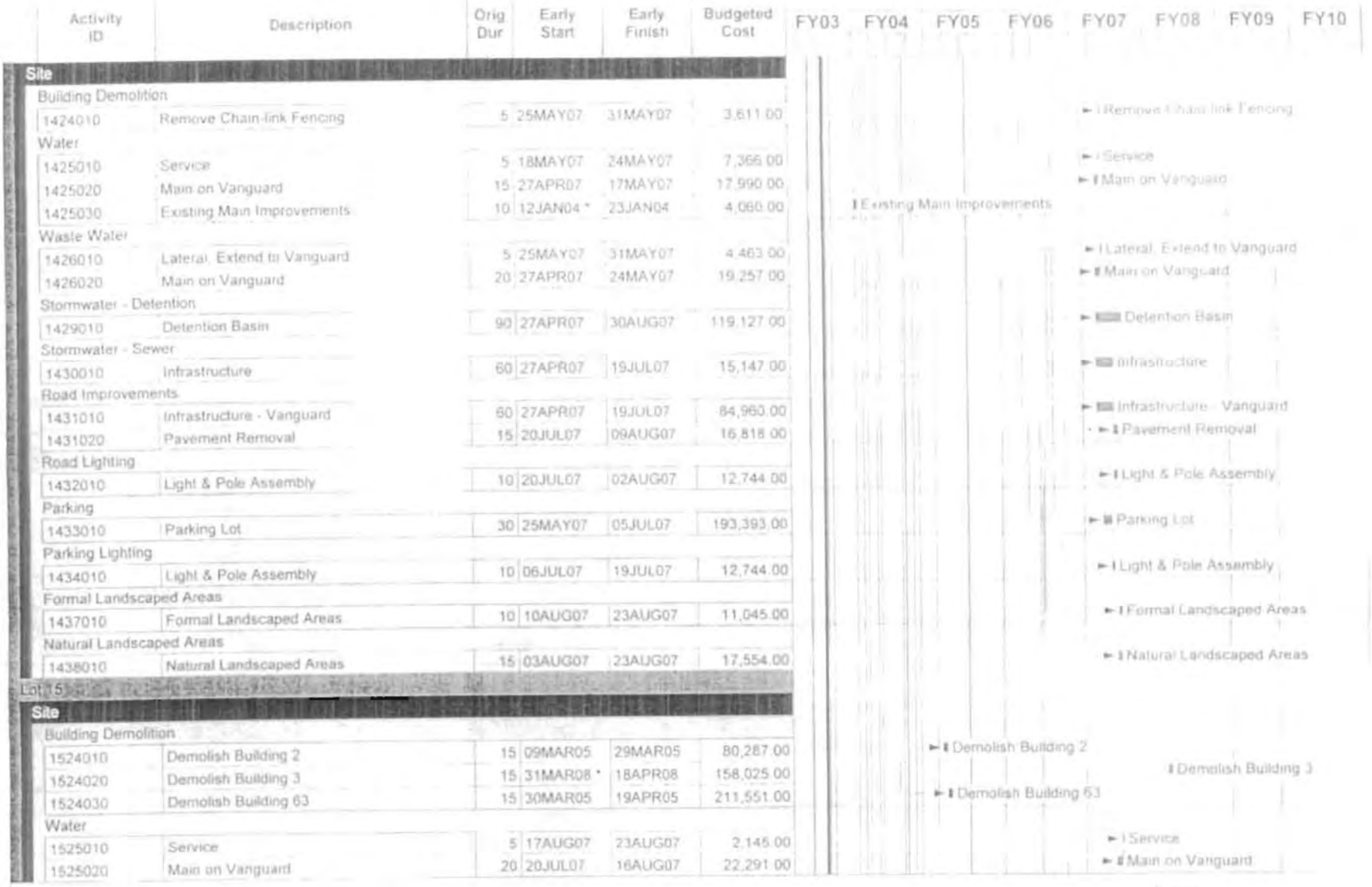
Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1325020	Main on Vanguard	30	23FEB07	05APR07	38,136.00
1325030	Existing Main Improvements	10	20APR05	03MAY05	14,736.00
Waste Water					
1326010	Lateral	5	20APR07	26APR07	496.00
1326020	Main on Vanguard	40	23FEB07	19APR07	50,169.00
Electric					
1327010	Site Distribution	20	23FEB07	22MAR07	27,930.00
Gas					
1328010	Main	20	21NOV05	16DEC05	13,371.00
Stormwater - Sewer					
1330010	Infrastructure - Vanguard	90	23FEB07	28JUN07	219,058.00
1330015	Infrastructure - Capstone	90	16OCT09	18FEB10	219,058.00
Road Improvements					
1331010	Infrastructure - Vanguard	45	23FEB07	26APR07	387,469.00
1331015	Infrastructure - Capstone	45	16OCT09 *	17DEC09	387,469.00
Road Lighting					
1332010	Light & Pole Assembly	10	27APR07	10MAY07	16,992.00
Formal Landscaped Areas					
1337010	Formal Landscaped Areas	30	11MAY07	21JUN07	40,356.00
Natural Landscaped Areas					
1338010	Natural Landscaped Areas	30	11MAY07	21JUN07	87,495.00
Telephone/Information Technology					
1339010	Telephone/Information Technology	15	21NOV05	09DEC05	16,652.00
Lot 14					
07					
Building Modifications & Code					
1420010	Improve Security at Entrances	15	15JUN07	05JUL07	8,496.00
1420020	Improve Dumpster Pad/Screening	15	25MAY07	14JUN07	7,080.00
Plumbing/Mechanical/Electrical Upgrade					
1421010	Add Water Meter	20	26JAN04 *	20FEB04	8,496.00
1421020	Add Backflow Preventer	20	26JAN04	20FEB04	12,744.00
1421030	Fire Alarm System	15	31JUL03 A	25OCT03 A	16,992.00
1421040	Renovate Fire Protection System	100	01DEC03 *	16APR04	335,847.00
Deferred Maintenance					
1423010	Replace Roofing System	60	31OCT08 *	22JAN09	317,184.00
1423020	Repair Building Caulking/Sealants	20	31OCT08	27NOV08	8,496.00

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	8A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Site					
Building Demolition					
1424010	Remove Chain-link Fencing	5	25MAY07	31MAY07	3,611.00
Water					
1425010	Service	5	18MAY07	24MAY07	7,366.00
1425020	Main on Vanguard	15	27APR07	17MAY07	17,990.00
1425030	Existing Main Improvements	10	12JAN04 *	23JAN04	4,060.00
Waste Water					
1426010	Lateral, Extend to Vanguard	5	25MAY07	31MAY07	4,463.00
1426020	Main on Vanguard	20	27APR07	24MAY07	19,257.00
Stormwater - Detention					
1429010	Detention Basin	90	27APR07	30AUG07	119,127.00
Stormwater - Sewer					
1430010	Infrastructure	60	27APR07	19JUL07	15,147.00
Road Improvements					
1431010	Infrastructure - Vanguard	60	27APR07	19JUL07	84,960.00
1431020	Pavement Removal	15	20JUL07	09AUG07	16,818.00
Road Lighting					
1432010	Light & Pole Assembly	10	20JUL07	02AUG07	12,744.00
Parking					
1433010	Parking Lot	30	25MAY07	05JUL07	193,393.00
Parking Lighting					
1434010	Light & Pole Assembly	10	06JUL07	19JUL07	12,744.00
Formal Landscaped Areas					
1437010	Formal Landscaped Areas	10	10AUG07	23AUG07	11,045.00
Natural Landscaped Areas					
1438010	Natural Landscaped Areas	15	03AUG07	23AUG07	17,554.00
Lot 15					
Site					
Building Demolition					
1524010	Demolish Building 2	15	09MAR05	29MAR05	80,287.00
1524020	Demolish Building 3	15	31MAR08 *	18APR08	158,025.00
1524030	Demolish Building 63	15	30MAR05	19APR05	211,551.00
Water					
1525010	Service	5	17AUG07	23AUG07	2,145.00
1525020	Main on Vanguard	20	20JUL07	16AUG07	22,291.00

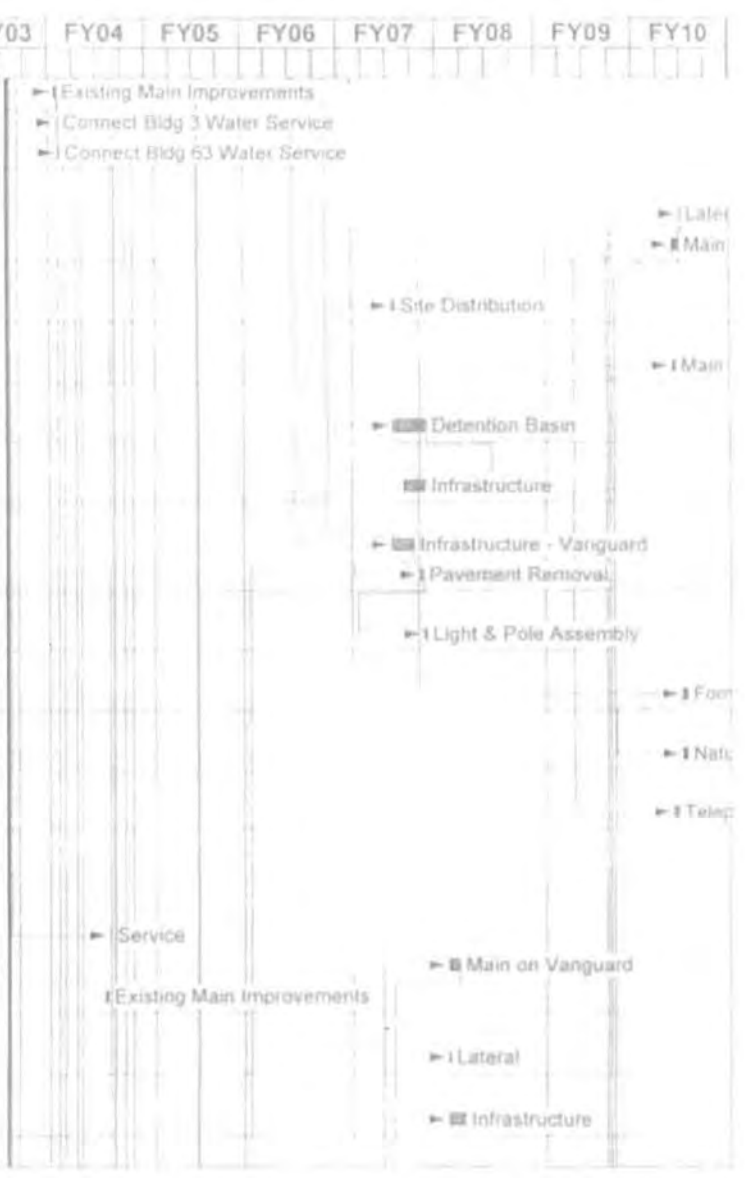


Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	9A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1525030	Existing Main Improvements	10	26JAN04	06FEB04	4,922.00
1525040	Connect Bldg 3 Water Service	5	09FEB04	13FEB04	4,375.00
1525050	Connect Bldg 63 Water Service	5	16FEB04	20FEB04	4,375.00
Waste Water					
1526010	Lateral	5	29JUN10	05JUL10	869.00
1526020	Main on Vanguard	20	01JUN10	28JUN10	52,865.00
Electric					
1527010	Site Distribution	10	20JUL07	02AUG07	13,169.00
Gas					
1528010	Main	10	01JUN10	14JUN10	9,361.00
Stormwater - Detention					
1529010	Detention Basin	90	20JUL07	22NOV07	108,759.00
Stormwater - Sewer					
1530010	Infrastructure	60	31AUG07	22NOV07	86,121.00
Road Improvements					
1531010	Infrastructure - Vanguard	60	20JUL07	11OCT07	97,492.00
1531020	Pavement Removal	10	02NOV07	15NOV07	21,498.00
Road Lighting					
1532010	Light & Pole Assembly	10	16NOV07	29NOV07	8,496.00
Formal Landscaped Areas					
1537010	Formal Landscaped Areas	15	06JUL10	26JUL10	7,647.00
Natural Landscaped Areas					
1538010	Natural Landscaped Areas	15	06JUL10	26JUL10	6,867.00
Telephone/Information Technology					
1539010	Telephone/Information Technology	15	01JUN10	21JUN10	7,647.00
Lot 16					
Site					
Water					
1625010	Service	5	18AUG04	24AUG04	2,145.00
1625020	Main on Vanguard	30	15FEB08	27MAR08	53,272.00
1625030	Existing Main Improvements	10	02AUG04 *	13AUG04	2,462.00
Waste Water					
1626010	Lateral	5	15FEB08	21FEB08	869.00
Stormwater - Sewer					
1630010	Infrastructure	45	15FEB08	17APR08	158,918.00
Road Improvements					



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	10A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1631010	Infrastructure - Vanguard	60	15FEB08	08MAY08	251,578.00
1631020	Pavement Removal	10	09MAY08	22MAY08	7,796.00
Formal Landscaped Areas					
1637010	Formal Landscaped Areas	30	23MAY08	03JUL08	47,790.00
Natural Landscaped Areas					
1638010	Natural Landscaped Areas	30	23MAY08	03JUL08	4,673.00
Building 61					
Design					
17DB0010	Building 61 Design, Bidding	60	11MAY05	02AUG05	42,460.00
Building Modifications & Code					
1720010	Upgrade Restrooms to meet ADA	30	03AUG05	13SEP05	29,004.00
1720020	Add Backflow Preventer	10	31JUL03	13AUG03	11,328.00
1720030	Upgrade building exterior	45	03AUG05	04OCT05	206,491.00
1720040	Replace Door Hardware with ADA Compliant	8	03AUG05	12AUG05	12,390.00
1720050	Tenant Improvements	120	11MAY06 *	25OCT06	1,610,346.00
1720060	Improve security at entrances	20	03AUG05	30AUG05	16,992.00
1720070	Improve dumpster pad/screening	10	03AUG05	16AUG05	7,080.00
1720080	Add Water Meter	10	17NOV03 *	28NOV03	11,328.00
Plumbing/Mechanical/Electrical Upgrade					
1721010	Fire Alarm System	15	31JUL03 A	20AUG03 A	9,912.00
1721020	Renovate Fire Protection System	45	17NOV03 *	16JAN04	225,498.00
1721030	Insulate Restroom Piping	2	03AUG05	04AUG05	1,133.00
HVAC Improvements					
1722010	Provide new DDC System	45	11MAY06	12JUL06	148,680.00
1722020	Replace AHU1, HV1, 2, 3, 4	60	11MAY06	02AUG06	322,848.00
Deferred Maintenance					
1723010	Recaulk Windows	10	03AUG05	16AUG05	1,133.00
1723020	Repaint Louvers	10	03AUG05	16AUG05	337.00
1723030	Clean Restrooms	2	14SEP05	15SEP05	708.00
1723040	Repaint Roof	20	24AUG05	20SEP05	93,145.00
1723050	Re-crimp Standing Seam Metal Roof	15	03AUG05	23AUG05	13,124.00
1723060	Replace Loading Dock Seals & Bumpers	15	03AUG05	23AUG05	5,191.00
1723070	Replace EPDM Roof	15	05AUG05	25AUG05	10,875.00
Site					
Water					

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 11A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1725010	Service	28	01DEC03	07JAN04	8,782.00
1725020	Main on Vanguard	20	28MAR08	24APR08	22,855.00
1725030	Existing Main Improvements	10	17NOV03 *	28NOV03	3,446.00
Electric					
1727010	Decentralize Electrical Service	30	03NOV03 *	12DEC03	28,320.00
1727020	"Aid to Construction-DP&L"	30	03NOV03	12DEC03	45,001.00
1727030	Site Distribution	20	03NOV03	28NOV03	54,941.00
Stormwater - Detention					
1729010	Detention Basin	20	28MAR08	24APR08	24,948.00
Stormwater - Sewer					
1730010	Infrastructure	30	08AUG08	18SEP08	78,914.00
Road Improvements					
1731010	Infrastructure - Vanguard	30	08AUG08	18SEP08	77,652.00
Road Lighting					
1732010	Light & Pole Assembly	15	19SEP08	09OCT08	12,744.00
Parking					
1733010	Parking Lot	40	22JUN05	16AUG05	253,219.00
Parking Lighting					
1734010	Light & Pole Assembly	15	17AUG05	06SEP05	25,488.00
Formal Landscaped Areas					
1737010	Formal Landscaped Areas	20	07SEP05	04OCT05	17,516.00
Natural Landscaped Areas					
1738010	Natural Landscaped Areas	30	07SEP05	18OCT05	7,802.00
Telephone/Information Technology					
1739010	Telephone/Information Technology	60	11MAY05	02AUG05	26,466.00
Lot 18					
Site					
Water					
1825010	Service	5	14AUG06	18AUG06	1,226.00
1825020	Existing Main Improvements	10	31JUL06 *	11AUG06	1,641.00
Waste Water					
1826010	Lateral	5	14AUG06	18AUG06	669.00
1826020	Main on Vanguard	10	31JUL06 *	11AUG06	3,575.00
Stormwater - Sewer					
1830010	Infrastructure	10	31JUL06 *	11AUG06	21,332.00
Road Improvements					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	12A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

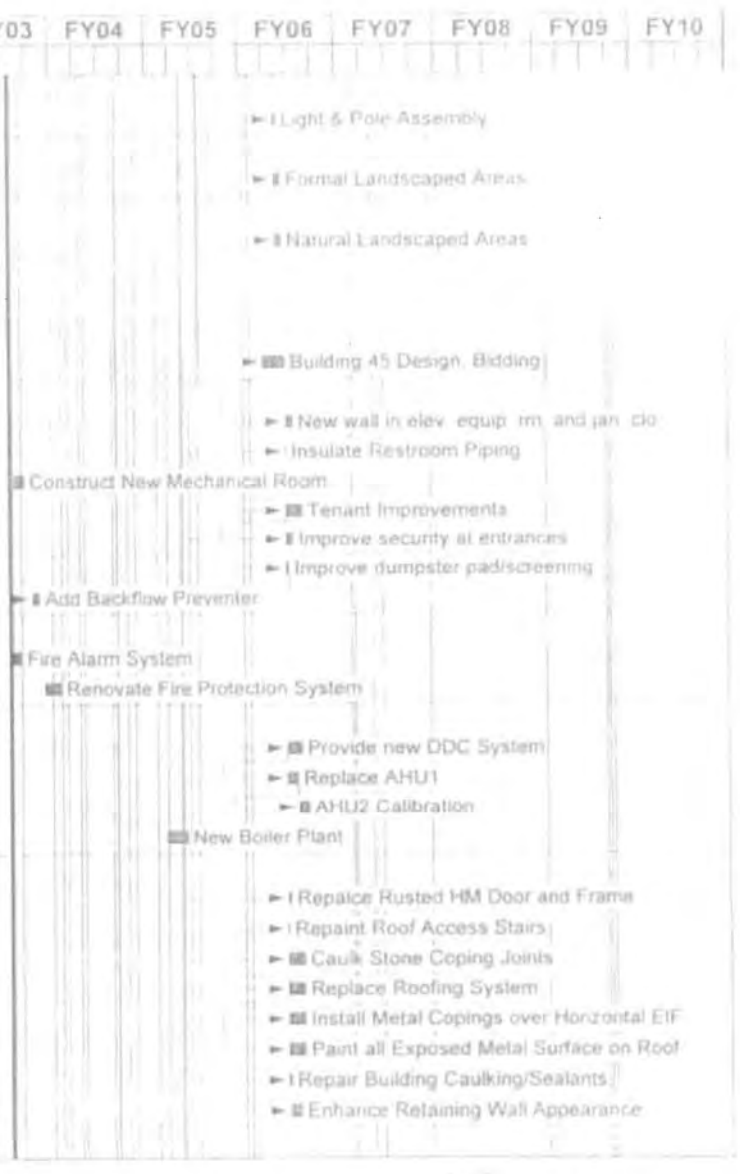
Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
1831005	Infrastructure-Capstone	10	21NOV05	02DEC05	31,268.00
1831010	Pavement Removal	10	05DEC05	16DEC05	31,268.00
Natural Landscaped Areas					
1838010	Natural Landscaped Areas	10	21AUG06	01SEP06	7,887.00
Lot 19					
Site					
Water					
1925010	Service	5	31JUL06 *	04AUG06	1,226.00
Waste Water					
1926010	Lateral	5	21AUG06	25AUG06	869.00
1926020	Main on Vanguard	15	31JUL06 *	18AUG06	13,377.00
Stormwater - Sewer					
1930010	Infrastructure	10	31JUL06 *	11AUG06	8,679.00
Road Improvements					
1931010	Infrastructure - Capstone	15	21NOV05	09DEC05	69,847.00
1931020	Pavement Removal	5	12DEC05	16DEC05	39,085.00
Formal Landscaped Areas					
1937010	Formal Landscaped Areas	15	28AUG06	15SEP06	5,361.00
Natural Landscaped Areas					
1938010	Natural Landscaped Areas	15	28AUG06	15SEP06	8,115.00
Lot 20					
Site					
Building Demolition					
2024010	Demolish Building GH	15	27MAR06	14APR06	67,543.00
Water					
2025010	Service	5	05DEC05	09DEC05	1,838.00
2025020	Existing Main Improvements	10	21NOV05	02DEC05	4,515.00
Waste Water					
2026010	Lateral	5	05DEC05	09DEC05	496.00
2026020	Main	10	21NOV05	02DEC05	7,147.00
Stormwater - Sewer					
2030010	Infrastructure	10	21NOV05	02DEC05	12,617.00
Road Improvements					
2031010	Infrastructure - Capstone	20	20MAR06	14APR06	73,322.00
2031015	Infrastructure - A Street	20	17APR06	12MAY06	73,322.00
2031020	Pavement Removal	5	15MAY06	19MAY06	2,736.00

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 13A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Road Lighting					
2032010	Light & Pole Assembly	10	15MAY06	26MAY06	12,744.00
Formal Landscaped Areas					
2037010	Formal Landscaped Areas	20	15MAY06	09JUN06	39,861.00
Natural Landscaped Areas					
2038010	Natural Landscaped Areas	20	15MAY06	09JUN06	7,802.00
Lot 21					
Building 45					
Design					
21DB0010	Building 45 Design, Bidding	60	27MAR06	16JUN06	42,480.00
Building Modifications & Code					
2120010	New wall in elev. equip. rm. and jan. clo	20	19JUN06	14JUL06	2,959.00
2120020	Insulate Restroom Piping	1	19JUN06	19JUN06	283.00
2120030	Construct New Mechanical Room	40	31JUL03	24SEP03	27,413.00
2120040	Tenant Improvements	45	19JUN06	18AUG06	203,523.00
2120050	Improve security at entrances	20	19JUN06	14JUL06	25,488.00
2120060	Improve dumpster pad/screening	10	19JUN06	30JUN06	7,080.00
2120070	Add Backflow Preventer	20	23OCT03	19NOV03	14,160.00
Plumbing/Mechanical/Electrical Upgrade					
2121010	Fire Alarm System	30	31JUL03 A	10SEP03 A	9,912.00
2121020	Renovate Fire Protection System	45	08DEC03 *	06FEB04	81,561.00
HVAC Improvements					
2122010	Provide new DDC System	40	19JUN06	11AUG06	76,464.00
2122020	Replace AHU1	30	19JUN06	28JUL06	61,171.00
2122030	AHU2 Calibration	30	31JUL06	08SEP06	5,664.00
2122050	New Boiler Plant	60	14MAR05 *	03JUN05	152,928.00
Deferred Maintenance					
2123010	Repalce Rusted HM Door and Frame	10	19JUN06	30JUN06	708.00
2123020	Repaint Roof Access Stairs	3	19JUN06	21JUN06	700.00
2123030	Caulk Stone Coping Joints	45	19JUN06	18AUG06	2,992.00
2123040	Replace Roofing System	45	19JUN06	18AUG06	64,428.00
2123050	Install Metal Copings over Horizontal EIF	45	19JUN06	18AUG06	3,002.00
2123060	Paint all Exposed Metal Surface on Roof	45	19JUN06	18AUG06	2,992.00
2123070	Repair Building Caulking/Sealants	10	19JUN06	30JUN06	991.00
2123080	Enhance Retaining Wall Appearance	30	26JUN06	04AUG06	28,320.00
Site					



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	14A

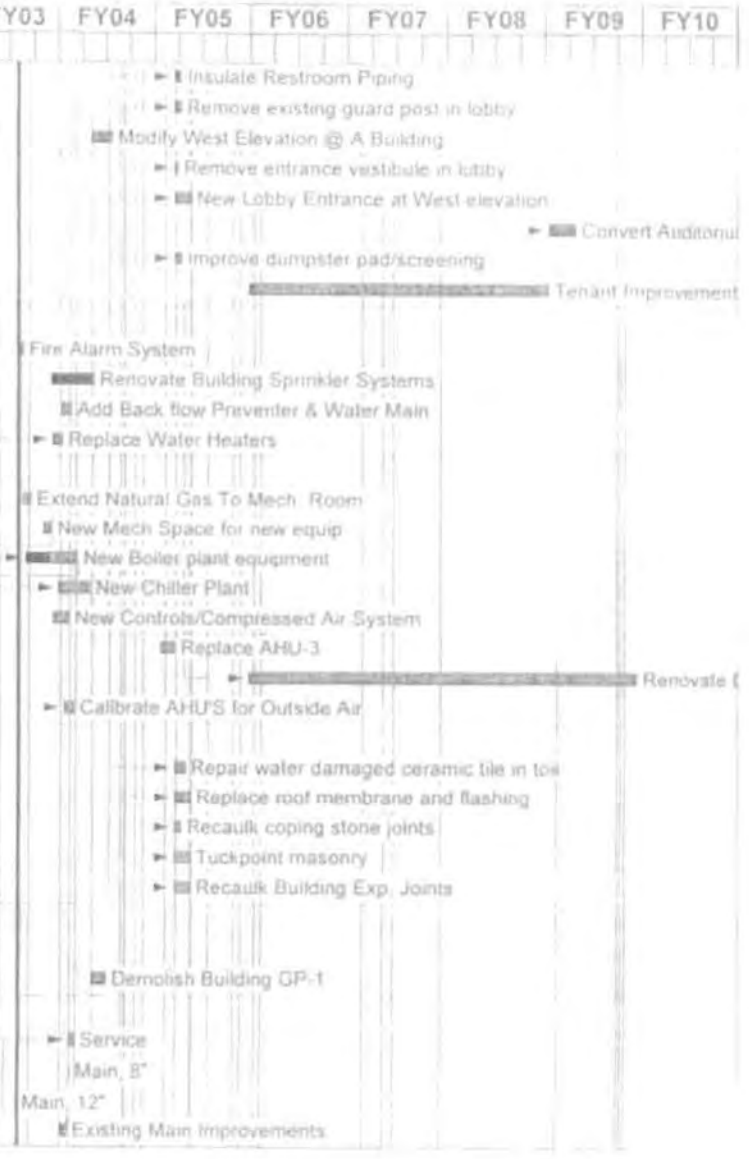
Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Building Demolition					
2124010	Remove Chain-link Fencing	10	21DEC04	03JAN05	1,806.00
Water					
2125010	Service-Domestic	20	25SEP03	22OCT03	3,830.00
2125020	Service-Fire	20	25SEP03	22OCT03	4,595.00
2125030	Main on A Street	20	28AUG03	24SEP03	987.00
2125040	Existing Main Improvements	20	31JUL03	27AUG03	3,282.00
Waste Water					
2126010	Main on A Street and on Property	15	01APR04 *	21APR04	31,803.00
Electric					
2127010	Decentralize Electrical Service	45	31JUL03	01OCT03	18,408.00
2127020	"Aid to Construction-DP&L"	60	31JUL03	22OCT03	30,999.00
Gas					
2128010	Service to New Mech Room	15	31JUL03	20AUG03	2,931.00
Stormwater - Sewer					
2130010	Infrastructure	20	26JUN06	21JUL06	8,386.00
Road Improvements					
2131010	Infrastructure - A Street	20	26JUN06	21JUL06	11,395.00
2131020	Pavement Removal	15	24JUL06	11AUG06	5,384.00
Parking					
2133010	Parking Lot	30	22MAY06	30JUN06	55,822.00
Parking Lighting					
2134010	Light & Pole Assembly	30	03JUL06	11AUG06	8,496.00
Formal Landscaped Areas					
2137010	Formal Landscaped Areas	30	14AUG06	22SEP06	5,947.00
Natural Landscaped Areas					
2138010	Natural Landscaped Areas	30	14AUG06	22SEP06	10,092.00
Telephone/Information Technology					
2139010	Telephone/Information Technology	20	10NOV03 *	05DEC03	4,970.00
Lot 22 & 48					
OSE Building					
Design					
22DB0010	OSE Design, Bidding	60	21DEC04	14MAR05	42,480.00
Building Modifications & Code					
2220010	Upgrade Restrooms to meet ADA	45	15MAR05	16MAY05	42,480.00
2220020	Replace door knobs with ADA handles	10	17MAY05	30MAY05	39,648.00

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 15A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2220030	Insulate Restroom Piping	20	15MAR05	11APR05	5,664.00
2220040	Remove existing guard post in lobby	20	15MAR05	11APR05	4,673.00
2220050	Modify West Elevation @ A Building	60	03MAY04 *	23JUL04	70,800.00
2220060	Remove entrance vestibule in lobby	10	15MAR05	28MAR05	3,540.00
2220070	New Lobby Entrance at West elevation	45	15MAR05	16MAY05	39,648.00
2220080	Convert Auditorium to Office Space	75	14JAN09	28APR09	346,920.00
2220090	Improve dumpster pad/screening	20	15MAR05	11APR05	7,080.00
2220095	Tenant Improvements	800	21DEC05 *	13JAN09	2,832,000.00
Plumbing/Mechanical/Electrical Upgrade					
2221010	Fire Alarm System	15	31JUL03 A	20AUG03 A	9,912.00
2221020	Renovate Building Sprinkler Systems	120	01DEC03 *	14MAY04	765,252.00
2221030	Add Back flow Preventer & Water Main	30	12JAN04 *	20FEB04	32,568.00
2221040	Replace Water Heaters	30	08DEC03 *	16JAN04	36,816.00
HVAC Improvements					
2222010	Extend Natural Gas To Mech Room	25	15AUG03 *	18SEP03	16,992.00
2222020	New Mech Space for new equip	25	03NOV03 *	05DEC03	57,348.00
2222030	New Boiler plant equipment	75	28AUG03 A	12MAR04	311,520.00
2222040	New Chiller Plant	90	29DEC03	30APR04	389,400.00
2222050	New Controls/Compressed Air System	45	10DEC03 *	10FEB04	56,640.00
2222060	Replace AHU-3	40	21JAN05 *	17MAR05	36,533.00
2222070	Renovate DDC Controls	1040	21DEC05	15DEC09	146,680.00
2222080	Calibrate AHU'S for Outside Air	30	21JAN04	02MAR04	22,656.00
Deferred Maintenance					
2223010	Repair water damaged ceramic tile in toil	30	15MAR05	25APR05	11,328.00
2223020	Replace roof membrane and flashing	45	15MAR05	16MAY05	105,465.00
2223030	Recaulk coping stone joints	20	15MAR05	11APR05	2,718.00
2223040	Tuckpoint masonry	45	15MAR05	16MAY05	77,031.00
2223050	Recaulk Building Exp. Joints	45	15MAR05	16MAY05	84,960.00
Site					
Building Demolition					
2224010	Demolish Building GP-1	45	03MAY04 *	02JUL04	82,836.00
Water					
2225010	Service	20	09FEB04 *	05MAR04	920.00
2225020	Main, 8"	20	21JAN05 *	17FEB04 *	17,091.00
2225030	Main, 12"	20	31JUL03	31JUL03	3,414.00
2225040	Existing Main Improvements	20	12JAN04 *	06FEB04	12,307.00



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	16A

Early bar
Progress bar
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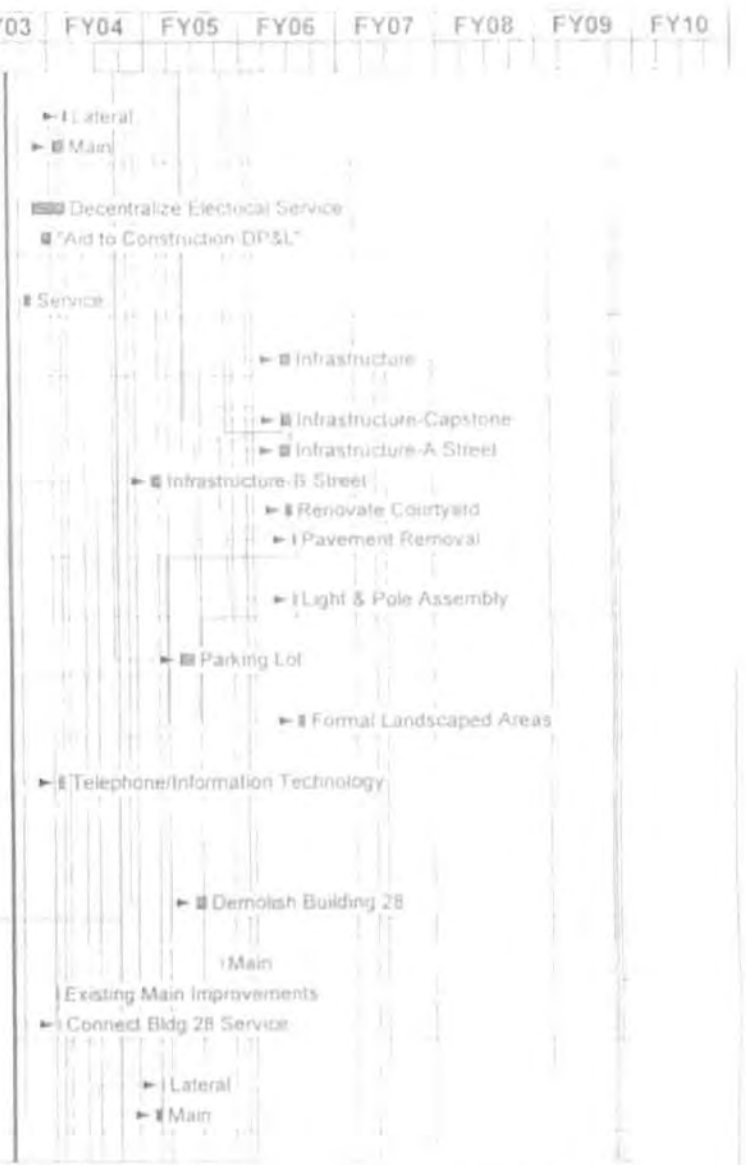
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Waste Water					
2226010	Lateral	10	03MAR04	16MAR04	994.00
2226020	Main	30	21JAN04 *	02MAR04	7,147.00
Electric					
2227010	Decentralize Electrical Service	60	03NOV03 *	05MAR04	177,000.00
2227020	"Aid to Construction-DP&L"	30	08DEC03 *	16JAN04	49,999.00
Gas					
2228010	Service	20	01OCT03 *	28OCT03	4,544.00
Stormwater - Sewer					
2230010	Infrastructure	30	22MAY06	30JUN06	50,158.00
Road Improvements					
2231010	Infrastructure-Capstone	30	22MAY06	30JUN06	132,486.00
2231012	Infrastructure-A Street	30	15MAY06	23JUN06	132,486.00
2231015	Infrastructure-B Street	30	14JAN05	24FEB05	132,486.00
2231020	Renovate Courtyard	20	05JUN06	30JUN06	56,820.00
2231030	Pavement Removal	10	03JUL06	14JUL06	27,973.00
Road Lighting					
2232010	Light & Pole Assembly	10	03JUL06	14JUL06	8,496.00
Parking					
2233010	Parking Lot	40	26APR05	20JUN05	327,577.00
Formal Landscaped Areas					
2237010	Formal Landscaped Areas	20	17JUL06	11AUG06	56,427.00
Telephone/Information Technology					
2239010	Telephone/Information Technology	20	21JAN04	17FEB04	136,785.00
Site					
Building Demolition					
2324010	Demolish Building 28	30	21JUN05	01AUG05	144,007.00
Water					
2325010	Main	5	26SEP05 *	30SEP05	987.00
2325020	Existing Main Improvements	10	05JAN04 *	16JAN04	11,076.00
2325030	Connect Bldg 28 Service	5	19JAN04 *	23JAN04	4,375.00
Waste Water					
2326010	Lateral	5	11FEB05	17FEB05	496.00
2326020	Main	20	14JAN05	10FEB05	46,234.00
Electric					

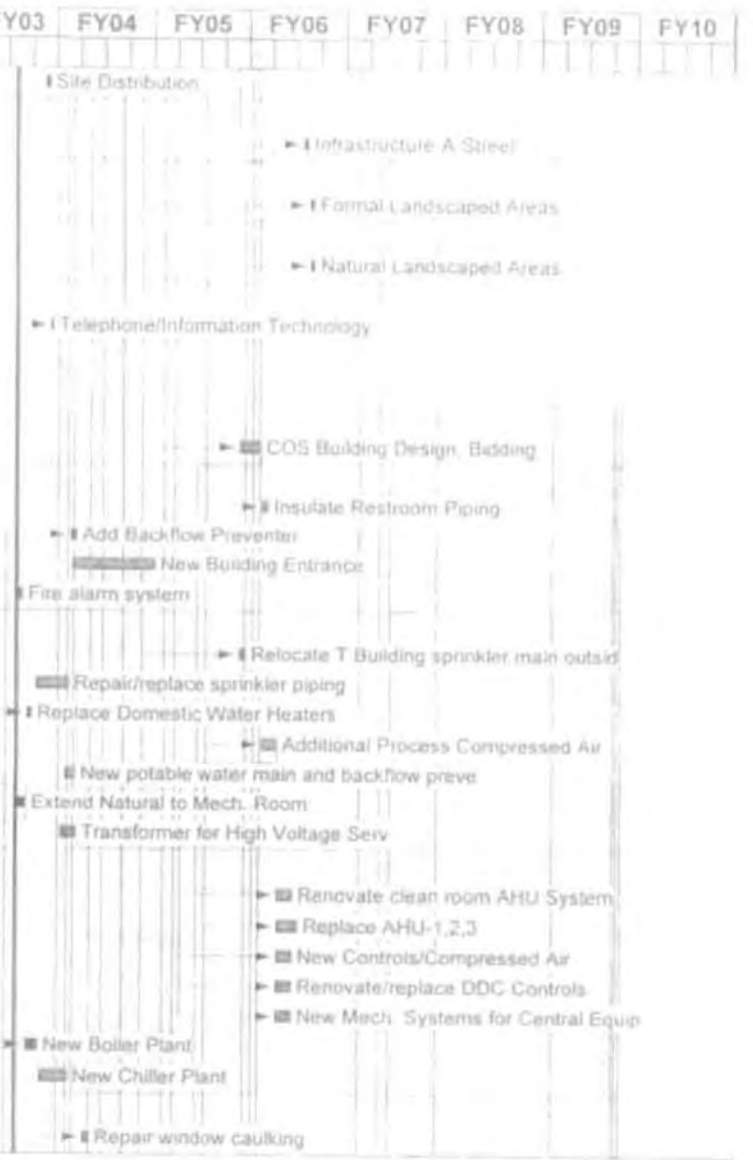


Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 17A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2327010	Site Distribution	15	17NOV03 *	05DEC03	17,417.00
Road Improvements					
2331010	Infrastructure-A Street	15	24JUL06	11AUG06	11,395.00
Formal Landscaped Areas					
2337010	Formal Landscaped Areas	15	14AUG06	01SEP06	10,479.00
Natural Landscaped Areas					
2338010	Natural Landscaped Areas	15	14AUG06	01SEP06	8,836.00
Telephone/Information Technology					
2339010	Telephone/Information Technology	10	08DEC03 *	19DEC03	3,930.00
Lot 24					
COS Building					
Design					
24DB0010	COS Building Design, Bidding	60	21NOV05	10FEB06	42,480.00
Building Modifications & Code					
2420010	Insulate Restroom Piping	20	13FEB06	10MAR06	3,399.00
2420020	Add Backflow Preventer	20	23FEB04 *	19MAR04	4,319.00
2420030	New Building Entrance	180	03MAR04 *	07JAN05	101,952.00
2420040	Fire alarm system	20	31JUL03 A	27AUG03 A	9,912.00
Plumbing/Mechanical/Electrical Upgrade					
2421010	Relocate T Building sprinkler main outsid	20	21NOV05	16DEC05	7,080.00
2421020	Repair/replace sprinkler piping	90	15OCT03 *	17FEB04	552,240.00
2421030	Replace Domestic Water Heaters	30	11SEP03 A	01OCT03 A	18,408.00
2421040	Additional Process Compressed Air	45	13FEB06	14APR06	42,480.00
2421050	New potable water main and backflow preve	30	02FEB04 *	12MAR04	48,144.00
2421060	Extend Natural to Mech. Room	30	31JUL03 A	10SEP03 A	16,992.00
2421070	Transformer for High Voltage Serv	45	19JAN04 *	19MAR04	49,560.00
HVAC Improvements					
2422010	Renovate clean room AHU System	45	17APR06	16JUN06	65,136.00
2422020	Replace AHU-1,2,3	60	17APR06	07JUL06	284,049.00
2422030	New Controls/Compressed Air	45	17APR06	16JUN06	42,480.00
2422040	Renovate/replace DDC Controls	45	17APR06	16JUN06	159,920.00
2422050	New Mech. Systems for Central Equip	45	17APR06	16JUN06	41,064.00
2422060	New Boiler Plant	40	11SEP03 A	30OCT03 A	306,210.00
2422070	New Chiller Plant	80	03NOV03 *	20FEB04	345,504.00
Deferred Maintenance					
2423005	Repair window caulking	20	15APR04	12MAY04	14,124.00



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	18A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2423010	Repair roof counter flashing	20	15APR04	12MAY04	651.00
2423015	Replace door knobs with ADA compliant	30	13FEB06	24MAR06	42,621.00
2423020	Tuckpoint masonry	20	15APR04 *	12MAY04	19,257.00
2423025	Recaulk Building Exp. Joints	30	15APR04	26MAY04	84,960.00
T Building					
Design					
24DB0020	T Building Design, Bidding	60	13FEB06	05MAY06	42,480.00
Building Modifications & Code					
2420005	Renovate/relocate Restrooms	45	08MAY06	07JUL06	84,960.00
2420015	Replace wall and ceiling finishes	180	08MAY06	12JAN07	2,208,960.00
2420025	Remove Guard Entrances Both Towers	45	08MAY06	07JUL06	24,780.00
2420035	Renovate elevator lobbies	45	08MAY06	07JUL06	28,320.00
2420045	Clad Retaining Wall/Tunnel Entrances	45	08MAY06	07JUL06	98,298.00
2420055	Replace door knobs with ADA handles	20	08MAY06	02JUN06	14,160.00
2420065	Fire Alarm System	20	31JUL03 A	27AUG03 A	9,912.00
2420075	Tenant Improvements	600	31JUL06 *	21AUG09	2,208,960.00
Plumbing/Mechanical/Electrical Upgrade					
2421005	New Mechanical Building	60	16FEB05	10MAY05	191,160.00
2421015	Renovate Fire Protections System	75	24NOV03 *	05MAR04	824,679.00
2421025	Add Backflow Preventer & Water Main	20	26JAN04 *	20FEB04	45,312.00
HVAC Improvements					
2422005	New Building Mech. Systems	600	31JUL06 *	21AUG09	53,808.00
2422015	New Central Heat Plant	75	21AUG09 *	03DEC09	209,568.00
2422025	New Central Cool Plant	90	21AUG09 *	24DEC09	467,280.00
2422035	New HVAC Systems	120	21AUG09 *	04FEB10	1,325,376.00
Deferred Maintenance					
2423030	Repair masonry at entrance towers	30	08MAY06	16JUN06	1,722.00
2423035	Replace caulking at coping joints	30	08MAY06	16JUN06	906.00
2423040	Paint window frames	30	08MAY06	16JUN06	354.00
2423045	Repaint roof access ladders	30	08MAY06	16JUN06	429.00
2423050	Tuckpoint brick at entrance towers	30	08MAY06	16JUN06	1,156.00
2423055	Replace roof membrane	60	08MAY06	26JUL06	141,600.00
2423060	Repair drainage behind tunnel entrances	30	08MAY06	16JUN06	7,080.00
2423065	Repair concrete at tunnel entrances	30	08MAY06	16JUN06	13,275.00
2423070	T Building Ext. wall enhancements	45	08MAY06	07JUL06	56,640.00
Site					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	19A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Water					
2425005	Service-T, Two Domestic Services	30	05JAN04 *	13FEB04	10,588.00
2425010	Service-COS	5	16FEB04 *	20FEB04	2,729.00
2425015	Main	20	13JUN05	08JUL05	16,535.00
2425025	Existing Main Improvements	10	23FEB04	05MAR04	13,947.00
Waste Water					
2426005	Main-T	30	13JUN05	22JUL05	36,092.00
2426010	Main-COS	30	13JUN05	22JUL05	35,591.00
Electric					
2427005	"T-Aid to construction-DP&L"	100	01AUG05 *	16DEC05	45,001.00
2427010	COS-Decentralize Electrical Service	30	15DEC03 *	23JAN04	237,888.00
2427020	"COS-Aid to construction-DP&L"	30	26JAN04	05MAR04	40,000.00
2427030	Site Distribution	30	01JAN04 *	11FEB04	51,401.00
Gas					
2428005	T Service	45	01AUG05 *	30SEP05	7,624.00
2428010	COS Mechanical Room Service	30	31JUL03 A	10SEP03 A	20,967.00
2428020	Main	20	13JUN05	08JUL05	40,412.00
2428030	COS Ex. Service - Add Meter	10	31JUL03 A	13AUG03 A	437.00
Stormwater - Sewer					
2430010	Infrastructure	45	13JUN05	12AUG05	219,058.00
Road Improvements					
2431005	Dumpster Screening For T Building	20	13JUN05	08JUL05	1,459.00
2431010	Infrastructure-A Street	45	14AUG06	13OCT06	133,282.00
2431015	Infrastructure-B Street	45	10JUN05	11AUG05	133,282.00
2431020	Infrastructure-Vanguard	45	12OCT07	13DEC07	133,282.00
Road Lighting					
2432010	Light & Pole Assembly	15	14DEC07	03JAN08	4,248.00
Parking					
2433010	Parking Lot	90	21NOV05	24MAR06	494,451.00
Parking Lighting					
2434010	Light & Pole Assembly	20	27MAR06	21APR06	118,944.00
Formal Landscaped Areas					
2437010	Formal Landscaped Areas	30	04JAN08	14FEB08	27,541.00
Natural Landscaped Areas					
2438010	Natural Landscaped Areas	30	04JAN08	14FEB08	78,758.00
Telephone/Information Technology					

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	20A

Early bar
Progress bar
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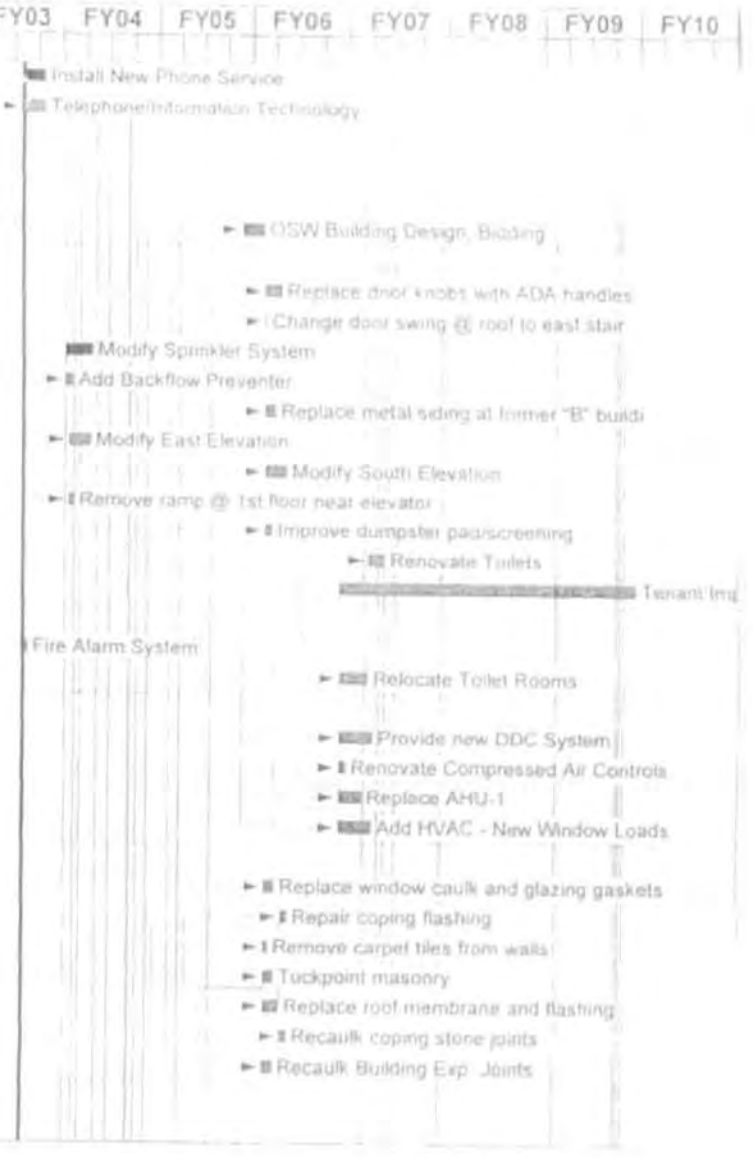
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2439005	Install New Phone Service	60	31JUL03 *	22OCT03	12,744.00
2439010	Telephone/Information Technology	60	31JUL03	22OCT03	3,930.00
Lot 25					
OSW Building					
Design					
25DB0010	OSW Building Design, Bidding	60	21NOV05	10FEB06	42,460.00
Building Modifications & Code					
2520005	Replace door knobs with ADA handles	45	13FEB06	14APR06	51,543.00
2520010	Change door swing @ roof to east stair	5	13FEB06	17FEB06	708.00
2520015	Modify Sprinkler System	75	12JAN04 *	23APR04	444,171.00
2520020	Add Backflow Preventer	20	12JAN04	06FEB04	14,160.00
2520025	Replace metal siding at former "B" buildi	30	13FEB06	24MAR06	27,187.00
2520030	Modify East Elevation	60	21JAN04	13APR04	84,960.00
2520035	Modify South Elevation	60	13FEB06	05MAY06	192,966.00
2520040	Remove ramp @ 1st floor near elevator	15	21JAN04	10FEB04	9,912.00
2520045	Improve dumpster pad/screening	20	13FEB06	10MAR06	7,080.00
2520050	Renovate Toilets	45	06MAR07	07MAY07	79,296.00
2520055	Tenant Improvements	800	21NOV06 *	14DEC09	1,850,712.00
Plumbing/Mechanical/Electrical Upgrade					
2521010	Fire Alarm System	15	31JUL03 A	20AUG03 A	9,912.00
2521020	Relocate Toilet Rooms	75	21NOV06	05MAR07	236,755.00
HVAC Improvements					
2522010	Provide new DDC System	90	21NOV06	26MAR07	106,200.00
2522020	Renovate Compressed Air Controls	20	21NOV06	18DEC06	28,320.00
2522030	Replace AHU-1	60	21NOV06	12FEB07	219,197.00
2522040	Add HVAC - New Window Loads	90	21NOV06	26MAR07	158,592.00
Deferred Maintenance					
2523010	Replace window caulk and glazing gaskets	30	13FEB06	24MAR06	17,098.00
2523020	Repair coping flashing	20	17APR06	12MAY06	3,002.00
2523030	Remove carpet tiles from walls	15	13FEB06	03MAR06	906.00
2523040	Tuckpoint masonry	30	13FEB06	24MAR06	67,401.00
2523050	Replace roof membrane and flashing	45	13FEB06	14APR06	84,960.00
2523060	Recaulk coping stone joints	20	17APR06	12MAY06	2,718.00
2523070	Recaulk Building Exp. Joints	30	13FEB06	24MAR06	84,960.00
Site					
Water					



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	21A

MMCIC

Early bar
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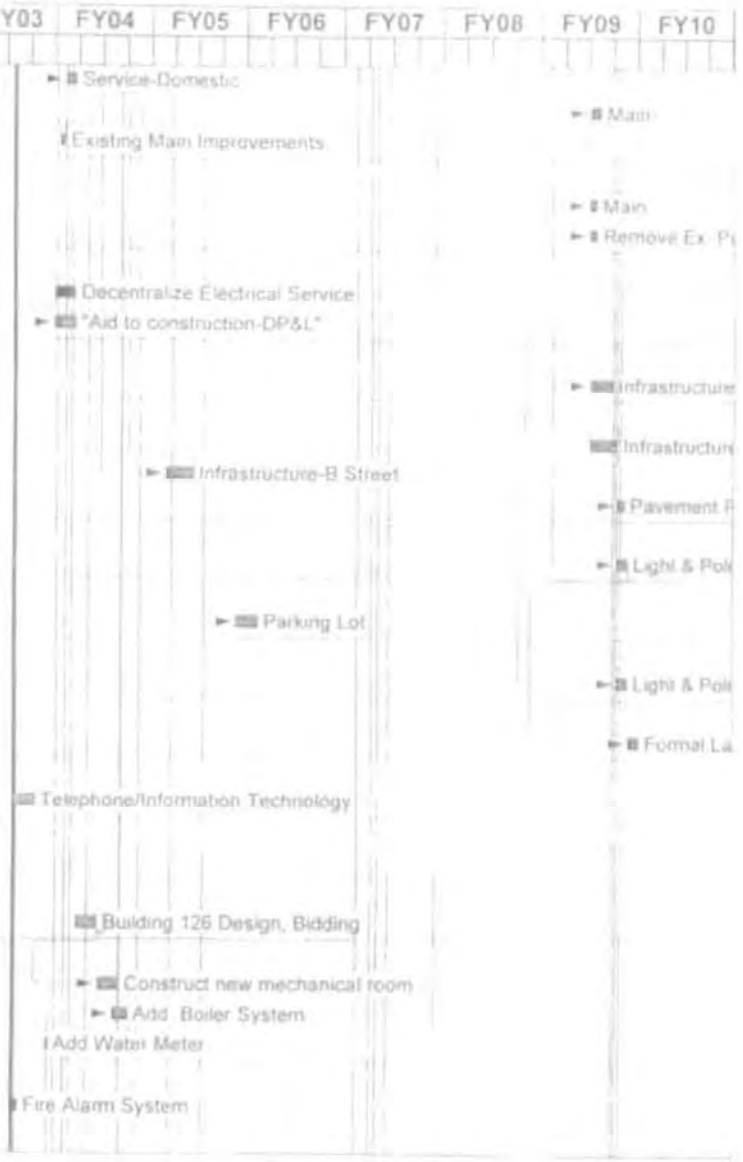
Critical bar
Summary bar
Start milestone point
Finish milestone point

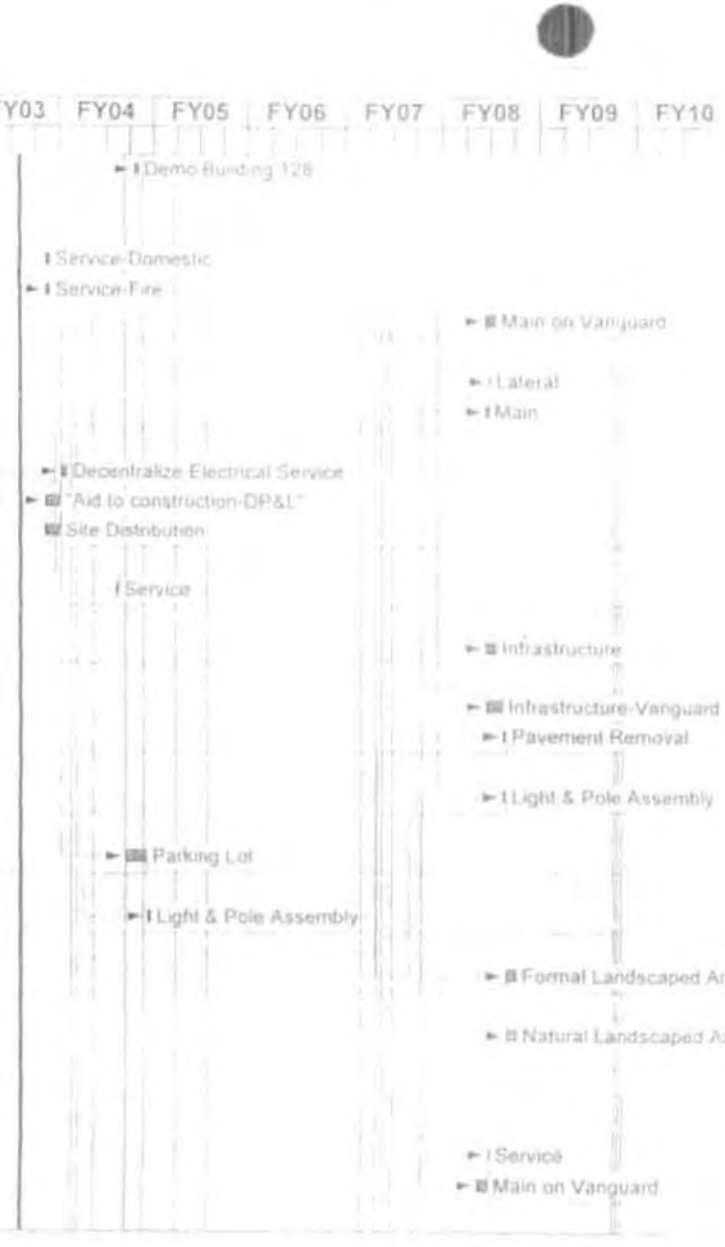
Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2525010	Service-Domestic	30	09FEB04 *	19MAR04	5,368.00
2525020	Main	30	03JUL09	13AUG09	25,862.00
2525030	Existing Main Improvements	15	19JAN04 *	06FEB04	9,845.00
Waste Water					
2526010	Main	20	03JUL09	30JUL09	23,585.00
2526020	Remove Ex. Pump Station	20	03JUL09	30JUL09	7,293.00
Electric					
2527010	Decentralize Electrical Service	60	29DEC03 *	19MAR04	118,944.00
2527020	"Aid to construction-DP&L"	60	29DEC03	19MAR04	59,149.00
Stormwater - Sewer					
2530010	Infrastructure	60	03JUL09	24SEP09	106,762.00
Road Improvements					
2531010	Infrastructure-Capstone	75	03JUL09 *	15OCT09	340,663.00
2531015	Infrastructure-B Street	75	25FEB05	09JUN05	340,663.00
2531020	Pavement Removal	20	16OCT09	12NOV09	1,992.00
Road Lighting					
2532010	Light & Pole Assembly	30	16OCT09	26NOV09	38,232.00
Parking					
2533010	Parking Lot	60	21NOV05	10FEB06	275,188.00
Parking Lighting					
2534010	Light & Pole Assembly	30	16OCT09	26NOV09	21,240.00
Formal Landscaped Areas					
2537010	Formal Landscaped Areas	30	27NOV09	07JAN10	22,869.00
Telephone/Information Technology					
2539010	Telephone/Information Technology	60	31JUL03	22OCT03	109,867.00
Lot 26					
Building 126					
Design					
26DB1101	Building 126 Design, Bidding	60	29MAR04 *	18JUN04	42,480.00
Building Modifications & Code					
2620010	Construct new mechanical room	60	21JUN04	10SEP04	63,720.00
2620020	Add Boiler System	45	16AUG04	15OCT04	72,216.00
2620030	Add Water Meter	10	08DEC03 *	19DEC03	4,248.00
Plumbing/Mechanical/Electrical Upgrade					
2621010	Fire Alarm System	20	31JUL03 A	27AUG03 A	9,912.00
Building Demolition					



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	22A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2624010	Demo Building 128	15	18OCT04	05NOV04	12,744.00
Site					
Water					
2625010	Service-Domestic	15	10NOV03 *	28NOV03	1,604.00
2625020	Service-Fire	15	10NOV03	28NOV03	8,342.00
2625030	Main on Vanguard	30	06JUN08	17JUL08	17,642.00
Waste Water					
2626010	Lateral	5	20JUN08	26JUN08	869.00
2626020	Main	10	06JUN08	19JUN08	6,433.00
Electric					
2627010	Decentralize Electrical Service	20	05JAN04	30JAN04	17,700.00
2627020	"Aid to construction-DP&L"	45	03NOV03 *	02JAN04	43,248.00
2627030	Site Distribution	45	03NOV03 *	02JAN04	24,285.00
Gas					
2628010	Service	10	02AUG04 *	13AUG04	2,053.00
Stormwater - Sewer					
2630010	Infrastructure	30	06JUN08	17JUL08	47,139.00
Road Improvements					
2631005	Infrastructure-Vanguard	45	06JUN08	07AUG08	53,961.00
2631010	Pavement Removal	10	08AUG08	21AUG08	4,422.00
Road Lighting					
2632010	Light & Pole Assembly	10	08AUG08	21AUG08	12,744.00
Parking					
2633010	Parking Lot	60	09SEP04	01DEC04	95,246.00
Parking Lighting					
2634010	Light & Pole Assembly	10	02DEC04	15DEC04	8,496.00
Formal Landscaped Areas					
2637010	Formal Landscaped Areas	30	22AUG08	02OCT08	6,655.00
Natural Landscaped Areas					
2638010	Natural Landscaped Areas	30	22AUG08	02OCT08	43,174.00
Lot 27					
Site					
Water					
2725010	Service	5	20JUN08	26JUN08	6,198.00
2725020	Main on Vanguard	30	09MAY08	19JUN08	38,136.00
Waste Water					



Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 23A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
2727020	Main	10	09MAY08	22MAY08	6,433.00
Electric					
2727010	Site Distribution	20	09MAY08	05JUN08	21,523.00
Gas					
2728010	Service	10	11MAY05	24MAY05	2,053.00
Stormwater - Sewer					
2730010	Infrastructure	20	09MAY08	05JUN08	35,355.00
Road Improvements					
2731010	Infrastructure-Vanguard	20	09MAY08	05JUN08	10,465.00
2731020	Pavement Removal	5	06JUN08	12JUN08	4,623.00
Road Lighting					
2732010	Light & Pole Assembly	10	06JUN08	19JUN08	8,496.00
Formal Landscaped Areas					
2737010	Formal Landscaped Areas	30	20JUN08	31JUL08	6,301.00
Natural Landscaped Areas					
2738010	Natural Landscaped Areas	30	20JUN08	31JUL08	7,743.00
Lot 28					
Site					
Water					
2825010	Service	5	11MAY05	17MAY05	6,198.00
Waste Water					
2826010	Lateral	5	11MAY05	17MAY05	1,240.00
Gas					
2828010	Lateral	5	11MAY05	17MAY05	2,053.00
Formal Landscaped Areas					
2837010	Formal Landscaped Areas	10	18MAY05	31MAY05	4,035.00
Lot 29					
Site					
Water					
2925010	Service	5	11MAY05	17MAY05	6,198.00
Waste Water					
2926010	Lateral	5	11MAY05	17MAY05	496.00
Gas					
2928010	Service	5	11MAY05	17MAY05	2,053.00
Formal Landscaped Areas					
2937010	Formal Landscaped Areas	10	18MAY05	31MAY05	3,681.00

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	24A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

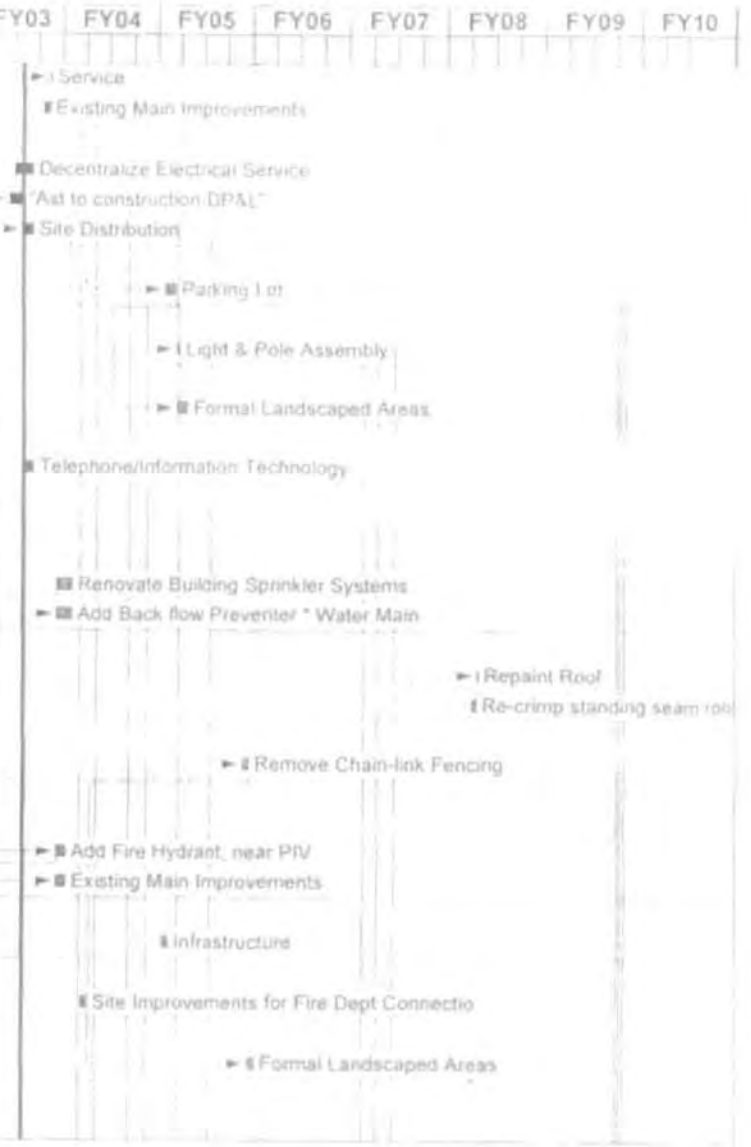
Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Building 102					
Design					
30DE10	Building 102 Work Design/Bidding	75	15OCT04	27JAN05	4,248.00
Building Modifications & Code					
3020005	Insulate Restroom Piping	20	01APR05	28APR05	567.00
3020015	Renovate AHU system outdoor air to meet c	20	28JAN05	24FEB05	4,248.00
3020025	Add Backflow Preventer	20	05JAN04 *	30JAN04	6,372.00
3020035	Remove security booth at entrance	20	28JAN05	24FEB05	4,673.00
3020045	Renovate main entrance	20	25FEB05	24MAR05	10,620.00
3020055	Add Toilet Room to Second Floor	45	28JAN05	31MAR05	56,640.00
3020065	Replace door hardware with ADA handles	20	28JAN05	24FEB05	16,355.00
3020075	Tenant Improvements	260	28JAN05	26JAN06	365,328.00
3020085	Improve dumpster pad/screening	20	28JAN05	24FEB05	7,080.00
3020095	Add Water Meter	20	05JAN04	30JAN04	5,664.00
Plumbing/Mechanical/Electrical Upgrade					
3021010	Fire Alarm System	20	31JUL03 A	27AUG03 A	9,912.00
3021020	Renovate Fire Protection System	45	17NOV03 *	16JAN04	48,954.00
3021030	Plumbing for Second Floor Toilets	45	28JAN05	31MAR05	59,472.00
HVAC Improvements					
3022010	Update mechanical controls system	20	28JAN05	24FEB05	7,080.00
3022020	Chilled Water Pumps	20	28JAN05	24FEB05	8,496.00
Deferred Maintenance					
3023005	Replace window sills because of water dam	20	28JAN05	24FEB05	4,248.00
3023010	Repair/repaint interior perimeter walls	20	04FEB05	03MAR05	4,815.00
3023015	Replace caulking at precast wall panel jo	5	28JAN05	03FEB05	2,832.00
3023020	Repaint metal facing on canopies	5	28JAN05	03FEB05	624.00
3023025	Clean aluminum storefront framing	5	04FEB05	10FEB05	453.00
3023030	Recaulk windows and install flashing at h	15	28JAN05	17FEB05	17,673.00
3023035	Replace window glazing gaskets	15	28JAN05	17FEB05	4,248.00
3023040	Repair flashing at entrance canopy	2	18FEB05	21FEB05	2,265.00
3023045	Replace VCT tile in elevator	2	01APR05	04APR05	1,572.00
3023050	Repaint Roof	5	11FEB05	17FEB05	16,200.00
3023055	Re-crimp standing seam roof	10	28JAN05	10FEB05	2,284.00
Site					
Water					

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 25A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
3025010	Service	5	12NOV03	18NOV03	4,084.00
3025020	Existing Main Improvements	20	15OCT03 *	11NOV03	5,743.00
Electric					
3027010	Decentralize Electrical Service	30	30JUN03 A	10SEP03 A	22,656.00
3027020	"Aid to construction-DP&L"	30	07JUN03 A	31JUL03	48,336.00
3027030	Site Distribution	30	31JUL03 A	10SEP03 A	18,691.00
Parking					
3033010	Parking Lot	30	28JAN05	10MAR05	96,309.00
Parking Lighting					
3034010	Light & Pole Assembly	10	11MAR05	24MAR05	12,744.00
Formal Landscaped Areas					
3037010	Formal Landscaped Areas	30	11MAR05	21APR05	37,311.00
Telephone/Information Technology					
3039010	Telephone/Information Technology	30	31JUL03 A	10SEP03 A	10,450.00
Lot 31					
Building 105					
Plumbing/Mechanical/Electrical Upgrade					
3121010	Renovate Building Sprinkler Systems	45	08DEC03 *	06FEB04	267,624.00
3121020	Add Back flow Preventer * Water Main	45	08DEC03	06FEB04	16,992.00
Deferred Maintenance					
3123010	Repaint Roof	5	22APR08	28APR08	90,341.00
3123020	Re-crimp standing seam roof	15	01APR08 *	21APR08	12,730.00
Building Demolition					
3124010	Remove Chain-link Fencing	20	21NOV05	16DEC05	2,528.00
Site					
Water					
3125010	Add Fire Hydrant, near PIV	30	08DEC03	16JAN04	2,771.00
3125020	Existing Main Improvements	30	08DEC03	16JAN04	9,845.00
Stormwater - Sewer					
3130010	Infrastructure	20	19JAN05 *	15FEB05	8,959.00
Road Improvements					
3131010	Site Improvements for Fire Dept Connectio	20	15MAR04 *	09APR04	8,959.00
Formal Landscaped Areas					
3137010	Formal Landscaped Areas	20	19DEC05	13JAN06	51,401.00
Lot 32					
Site					

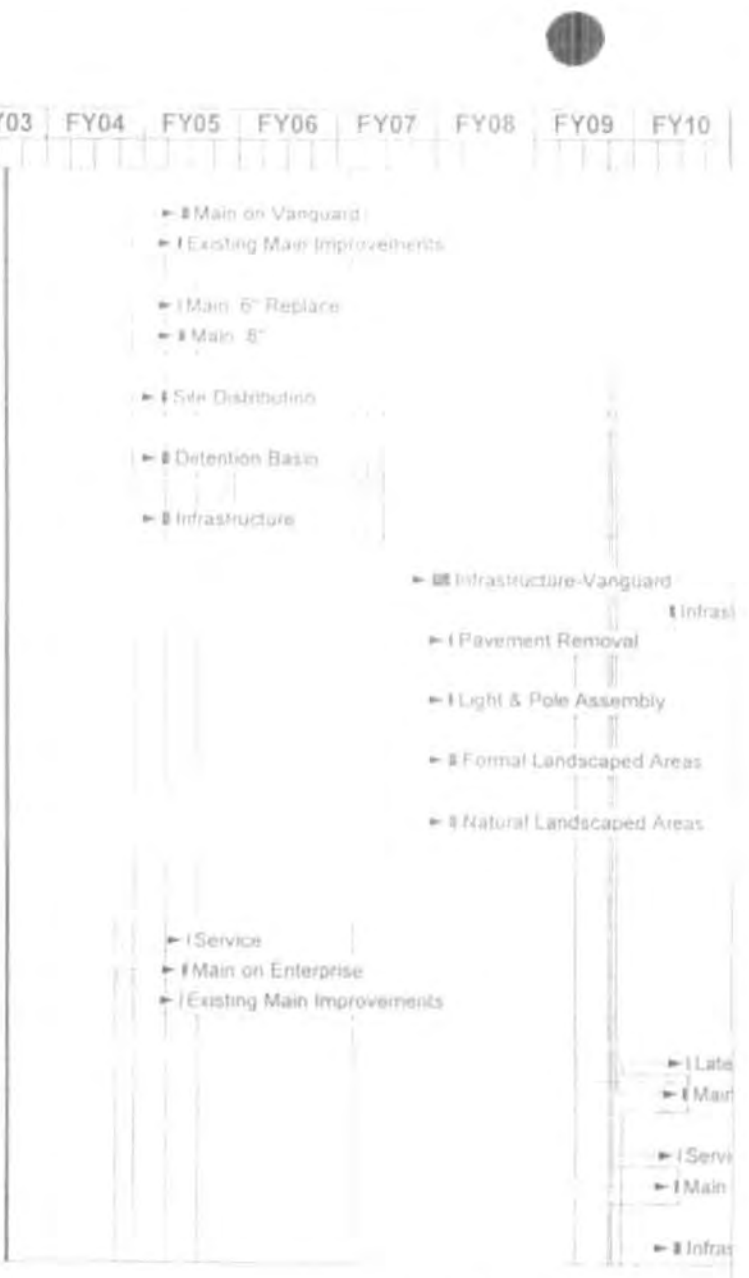


Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	26A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Water					
3225010	Main on Vanguard	20	25MAY05	21JUN05	22,291.00
3225020	Existing Main Improvements	10	11MAY05	24MAY05	8,204.00
Waste Water					
3226010	Main, 6" Replace	5	11MAY05	17MAY05	4,341.00
3226020	Main, 8"	20	11MAY05	07JUN05	44,094.00
Electric					
3227010	Site Distribution	15	09MAR05	29MAR05	9,983.00
Stormwater - Detention					
3229010	Detention Basin	20	09MAR05	05APR05	16,044.00
Stormwater - Sewer					
3230010	Infrastructure	20	09MAR05	05APR05	77,519.00
Road Improvements					
3231010	Infrastructure-Vanguard	45	14DEC07	14FEB08	95,468.00
3231015	Infrastructure-Enterprise Court	15	11MAY10 *	31MAY10	95,468.00
3231020	Pavement Removal	10	15FEB08	28FEB08	4,434.00
Road Lighting					
3232010	Light & Pole Assembly	10	15FEB08	28FEB08	16,992.00
Formal Landscaped Areas					
3237010	Formal Landscaped Areas	20	15FEB08	13MAR08	3,894.00
Natural Landscaped Areas					
3238010	Natural Landscaped Areas	20	15FEB08	13MAR08	22,557.00
Lot 33					
Site					
Water					
3325010	Service	5	10JUN05	16JUN05	7,322.00
3325020	Main on Enterprise	15	20MAY05	09JUN05	19,860.00
3325030	Existing Main Improvements	5	13MAY05	19MAY05	2,872.00
Waste Water					
3326010	Lateral	5	20JUL10	26JUL10	745.00
3326020	Main	15	29JUN10	19JUL10	14,509.00
Gas					
3328010	Service	5	15JUN10	21JUN10	524.00
3328020	Main	10	01JUN10	14JUN10	11,281.00
Stormwater - Sewer					
3330010	Infrastructure	20	01JUN10	28JUN10	19,681.00



Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 27A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Road Improvements					
3331010	Infrastructure-Enterprise Court	30	01JUN10	12JUL10	45,563.00
3331020	Pavement Removal	5	13JUL10	19JUL10	6,898.00
Road Lighting					
3332010	Light & Pole Assembly	15	13JUL10	02AUG10	12,744.00
Formal Landscaped Areas					
3337010	Formal Landscaped Areas	20	27JUL10	23AUG10	3,399.00
Natural Landscaped Areas					
3338010	Natural Landscaped Areas	20	27JUL10	23AUG10	8,580.00
Lot 34					
Site					
Water					
3425010	Service	5	10JUN05	16JUN05	782.00
3425020	Main on Enterprise	15	20MAY05	09JUN05	3,826.00
3425030	Existing Main Improvements	5	13MAY05	19MAY05	1,641.00
Waste Water					
3426010	Lateral	5	17AUG10	23AUG10	496.00
3426020	Main	20	20JUL10	16AUG10	50,027.00
Gas					
3428010	Service	5	22JUN10	28JUN10	524.00
3428020	Main	5	15JUN10	21JUN10	1,756.00
Road Improvements					
3431010	Infrastructure-Enterprise Court	10	14SEP10	27SEP10	5,583.00
3431020	Pavement Removal	5	28SEP10	04OCT10	1,415.00
Road Lighting					
3432010	Light & Pole Assembly	10	28SEP10	11OCT10	4,248.00
Formal Landscaped Areas					
3437010	Formal Landscaped Areas	10	05OCT10	18OCT10	1,487.00
3437020	Natural Landscaped Areas	15	05OCT10	25OCT10	7,102.00
Lot 35					
Site					
Water					
3525010	Service	5	12OCT10	18OCT10	782.00
3525020	Main on Enterprise	10	28SEP10	11OCT10	3,826.00
Waste Water					
3526010	Lateral	5	31AUG10	06SEP10	745.00

FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10

Service
Main on Enterprise
Existing Main Improvements

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 28A

MMCIC

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
3526020	Main	10	17AUG10	30AUG10	2,286.00
Gas					
3528010	Service	5	29JUN10	05JUL10	524.00
3528020	Main	5	22JUN10	28JUN10	1,756.00
Road Improvements					
3531010	Infrastructure-Enterprise Court	15	28SEP10	18OCT10	5,583.00
3531020	Pavement Removal	5	19OCT10	25OCT10	6,352.00
Road Lighting					
3532010	Light & Pole Assembly	10	19OCT10	01NOV10	4,248.00
Lot 36					
Site					
Water					
3625010	Service	5	14SEP10	20SEP10	782.00
3625020	Main on Enterprise	30	03AUG10	13SEP10	27,609.00
Waste Water					
3626010	Lateral	5	12OCT10	18OCT10	745.00
3626020	Main	30	31AUG10	11OCT10	18,153.00
Gas					
3628010	Service	5	17AUG10	23AUG10	524.00
3628020	Main	10	03AUG10	16AUG10	9,353.00
Stormwater - Sewer					
3630010	Infrastructure	15	03AUG10	23AUG10	10,858.00
Road Improvements					
3631010	Infrastructure-Enterprise Court	30	03AUG10	13SEP10	51,569.00
3631020	Pavement Removal	5	14SEP10	20SEP10	3,753.00
Formal Landscaped Areas					
3637010	Formal Landscaped Areas	15	19OCT10	08NOV10	4,461.00
Natural Landscaped Areas					
3638010	Natural Landscaped Areas	15	19OCT10	08NOV10	9,161.00
Lot 37					
Building 100					
Building Modifications & Code					
3720010	Tenant Improvements	45	03OCT05 *	02DEC05	205,320.00
3720020	Improve dumpster pad/screening	20	03OCT05	28OCT05	7,080.00
Plumbing/Mechanical/Electrical Upgrade					
3721010	Renovate Building Sprinkler Systems	45	08DEC03 *	06FEB04	49,277.00

FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10

Tenant Improvements

Improve dumpster pad/screening

Renovate Building Sprinkler Systems

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 29A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
3721020	Add Back flow Preventer @ Water Main	20	08DEC03 *	02JAN04	16,992.00
Building Demolition					
3724010	Replace roof membrane and flashing	30	03OCT05	11NOV05	41,064.00
Site					
Water					
3725010	Main on Enterprise	50	13JUL10	20SEP10	148,763.00
3725020	Existing Main Improvements	10	01APR08 *	14APR08	987.00
Waste Water					
3726010	Main	30	01APR08 *	12MAY08	14,293.00
3726020	Remove Pump Station	20	15APR08	12MAY08	7,080.00
Electric					
3728010	Service	5	29APR08	05MAY08	6,597.00
3728020	Main	20	01APR08 *	28APR08	8,527.00
Stormwater - Sewer					
3730010	Infrastructure	20	13JUL10	09AUG10	1,358.00
Road Improvements					
3731005	Infrastructure-Enterprise Court	15	13JUL10	02AUG10	9,176.00
3731010	Pavement Removal	15	03AUG10	23AUG10	9,176.00
Formal Landscaped Areas					
3737010	Formal Landscaped Areas	20	21SEP10	18OCT10	39,789.00
Natural Landscaped Areas					
3738010	Natural Landscaped Areas	20	21SEP10	18OCT10	33,984.00
Lot 383					
Site					
Water					
3825010	Service	5	06JUL09	10JUL09	1,838.00
3825020	Main	30	25MAY09	03JUL09	51,581.00
Waste Water					
3826010	Lateral	5	25MAY09	29MAY09	1,240.00
Electric					
3827010	Site Distribution	20	25MAY09	19JUN09	13,523.00
Gas					
3828010	Main	5	25MAY09	29MAY09	575.00
Road Improvements					
3831010	Infrastructure-C Street	10	25MAY09	05JUN09	10,454.00
3831020	Pavement Removal	10	06JUN09	19JUN09	16,608.00

FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10

► Add Back flow Preventer @ Water Main

► Replace roof membrane and flashing

► M

Existing Main Improvements

Main

► Remove Pump Station

► Service

Main

► Infr

► Infra

► Pav

► F

► N

► Service

► Main

► Lateral

► Site Distribution

► Main

► Infrastructure-C

► Pavement Remo

Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	30A

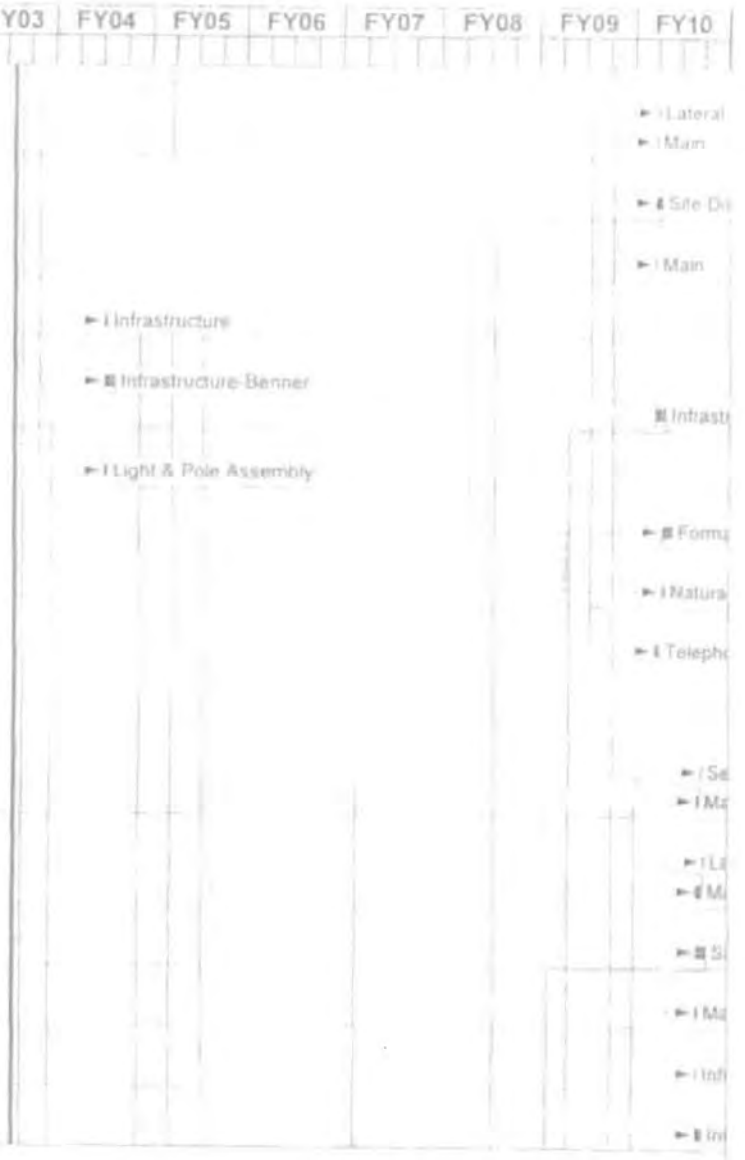
Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Road Lighting					
3832010	Light & Pole Assembly	10	22JUN09	03JUL09	4,248.00
Formal Landscaped Areas					
3837010	Formal Landscaped Areas	20	13JUL09	07AUG09	21,594.00
Natural Landscaped Areas					
3838010	Natural Landscaped Areas	20	13JUL09	07AUG09	4,692.00
Telephone/Information Technology					
3839010	Telephone/Information Technology	20	25MAY09	19JUN09	12,744.00
Lot 39					
Site					
Water					
3925010	Service	5	25MAY09	29MAY09	1,838.00
3925020	Main	45	23MAR09	22MAY09	62,360.00
Waste Water					
3926010	Lateral	5	23MAR09	27MAR09	1,240.00
Gas					
3928010	Main	5	23MAR09	27MAR09	575.00
Stormwater - Sewer					
3930010	Infrastructure	30	23MAR09	01MAY09	38,609.00
Road Improvements					
3931010	Infrastructure-Benner	45	03MAY04	02JUL04	189,944.00
3931015	Infrastructure-C Street	45	23MAR09	22MAY09	189,944.00
3931020	Pavement Removal	15	05JUL04	23JUL04	35,413.00
Road Lighting					
3932010	Light & Pole Assembly	20	05JUL04	30JUL04	21,240.00
Formal Landscaped Areas					
3937010	Formal Landscaped Areas	60	01JUN09	21AUG09	59,967.00
Natural Landscaped Areas					
3938010	Natural Landscaped Areas	15	01JUN09	19JUN09	16,709.00
Telephone/Information Technology					
3939010	Telephone/Information Technology	30	23MAR09	01MAY09	53,100.00
Lot 40					
Site					
Water					
4025010	Service	5	29MAR10	02APR10	1,838.00
4025020	Main	5	22MAR10	26MAR10	523.00

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 31A

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Waste Water					
4026010	Lateral	5	29MAR10	02APR10	372.00
4026020	Main	5	22MAR10	26MAR10	1,500.00
Electric					
4027010	Site Distribution	20	22MAR10	16APR10	27,753.00
Gas					
4028010	Main	5	22MAR10	26MAR10	822.00
Stormwater - Sewer					
4030010	Infrastructure	10	05JUL04	16JUL04	8,417.00
Road Improvements					
4031010	Infrastructure-Benner	30	05JUL04	13AUG04	90,981.00
4031015	Infrastructure-D Street	30	22MAR10	30APR10	90,981.00
Road Lighting					
4032010	Light & Pole Assembly	10	05JUL04	16JUL04	12,744.00
Formal Landscaped Areas					
4037010	Formal Landscaped Areas	30	19APR10	28MAY10	46,445.00
Natural Landscaped Areas					
4038010	Natural Landscaped Areas	10	19APR10	30APR10	2,832.00
Telephone/Information Technology					
4039010	Telephone/Information Technology	15	22MAR10	09APR10	15,249.00
Lot 41					
Site					
Water					
4125010	Service	5	20SEP10	24SEP10	1,836.00
4125020	Main	10	06SEP10	17SEP10	10,688.00
Waste Water					
4126010	Lateral	5	04OCT10	08OCT10	249.00
4126020	Main	20	06SEP10	01OCT10	19,940.00
Electric					
4127010	Site Distribution	30	06SEP10	15OCT10	41,843.00
Gas					
4128010	Main	10	06SEP10	17SEP10	12,976.00
Stormwater - Sewer					
4130010	Infrastructure	5	06SEP10	10SEP10	7,013.00
Road Improvements					
4131010	Infrastructure-D Street	20	06SEP10	01OCT10	31,950.00



Start date	18FEB03
Finish date	26NOV10
Data date	31JUL03
Run date	12NOV03
Page number	32A

Early bar
Progress bar
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Summary bar
Start milestone point
Finish milestone point

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Road Lighting					
4132010	Light & Pole Assembly	10	04OCT10	15OCT10	8,496.00
Formal Landscaped Areas					
4137010	Formal Landscaped Areas	5	18OCT10	22OCT10	1,487.00
Natural Landscaped Areas					
4138010	Natural Landscaped Areas	5	18OCT10	22OCT10	1,756.00
Lot 42					
Site					
Water					
4225010	Service	5	04OCT10	08OCT10	1,838.00
Waste Water					
4226020	Main	15	04OCT10	22OCT10	27,872.00
Road Improvements					
4231010	Infrastructure-D Street	10	04OCT10	15OCT10	12,253.00
Road Lighting					
4232010	Light & Pole Assembly	10	18OCT10	29OCT10	12,253.00
Formal Landscaped Areas					
4237010	Formal Landscaped Areas	10	01NOV10	12NOV10	2,476.00
Lot 43					
Site					
Water					
4225020	Main	10	18OCT10	29OCT10	13,817.00
4325010	Service	5	01NOV10	05NOV10	3,064.00
Waste Water					
4226010	Lateral	5	18OCT10	22OCT10	249.00
Gas					
4228010	Main	15	18OCT10	05NOV10	16,341.00
Road Improvements					
4331010	Infrastructure-D Street	10	18OCT10	29OCT10	9,673.00
Formal Landscaped Areas					
4337010	Formal Landscaped Areas	5	08NOV10	12NOV10	495.00
Natural Landscaped Areas					
4338010	Natural Landscaped Areas	15	08NOV10	26NOV10	17,549.00
Telephone/Information Technology					
4339010	Telephone/Information Technology	5	18OCT10	22OCT10	1,869.00
Lot 44					

FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 33A

Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Site					
Water					
4425010	Service	5	23AUG10	27AUG10	1,838.00
4425020	Main	20	26JUL10	20AUG10	28,069.00
Waste Water					
4425010	Lateral	5	09AUG10	13AUG10	2,479.00
4426020	Main	10	26JUL10	06AUG10	9,220.00
Gas					
4428010	Main	10	26JUL10	06AUG10	13,057.00
Stormwater - Sewer					
4430010	Infrastructure	10	26JUL10	06AUG10	7,013.00
Road Improvements					
4431010	Infrastructure-D Street	30	26JUL10	03SEP10	135,712.00
Formal Landscaped Areas					
4437010	Formal Landscaped Areas	10	06SEP10	17SEP10	1,983.00
Natural Landscaped Areas					
4438010	Natural Landscaped Areas	10	06SEP10	17SEP10	8,432.00
Telephone/Information Technology					
4439010	Telephone/Information Technology	15	26JUL10	13AUG10	13,636.00
Site					
Water					
4525010	Service	5	14JUN10	18JUN10	1,838.00
4525020	Main	30	03MAY10	11JUN10	42,185.00
Waste Water					
4526010	Lateral	5	10MAY10	14MAY10	2,479.00
4526020	Main	5	03MAY10	07MAY10	1,500.00
Gas					
4528010	Main	5	03MAY10	07MAY10	822.00
Stormwater - Sewer					
4530010	Infrastructure	10	03MAY10	14MAY10	14,025.00
Road Improvements					
4531010	Infrastructure-Benner	60	16AUG04	05NOV04	157,775.00
4531015	Infrastructure-D Street	60	03MAY10	23JUL10	157,775.00
Formal Landscaped Areas					
4537010	Formal Landscaped Areas	30	21JUN10	30JUL10	46,445.00

FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10

Infrastructure-Benner

Early bar
Progress bar
Critical bar
Summary bar
Start milestone point
Finish milestone point

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 34A
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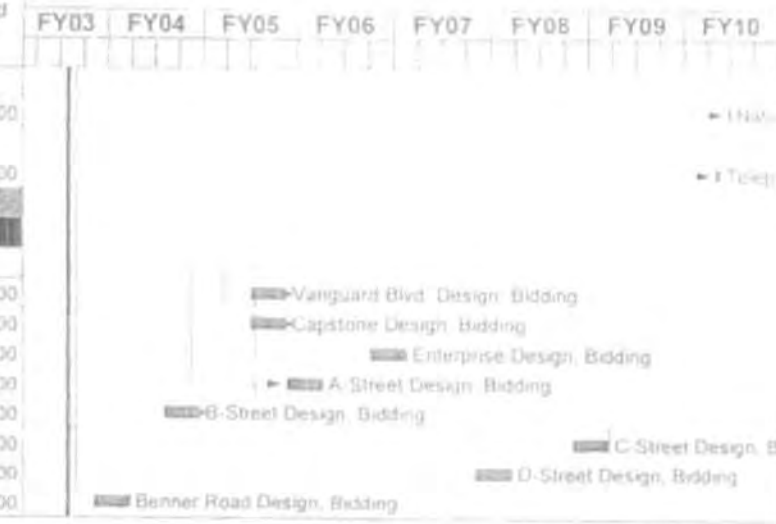
Activity ID	Description	Orig Dur	Early Start	Early Finish	Budgeted Cost
Natural Landscaped Areas					
4538010	Natural Landscaped Areas	10	21JUN10	02JUL10	2,100.00
Telephone/Information Technology					
4539010	Telephone/Information Technology	15	03MAY10	21MAY10	15,123.00
Site Construction					
Site					
Road Improvements					
STDB0010	Vanguard Blvd. Design, Bidding	100	04JUL05	18NOV05	0.00
STDB0015	Capstone Design, Bidding	100	04JUL05	18NOV05	0.00
STDB0020	Enterprise Design, Bidding	100	02OCT06	16FEB07	0.00
STDB0025	A-Street Design, Bidding	100	21NOV05	07APR06	0.00
STDB0030	B-Street Design, Bidding	100	03AUG04	20DEC04	0.00
STDB0035	C-Street Design, Bidding	100	03NOV08	20MAR09	0.00
STDB0040	D-Street Design, Bidding	100	01NOV07	19MAR08	0.00
STDB0045	Benner Road Design, Bidding	100	10NOV03	26MAR04	0.00



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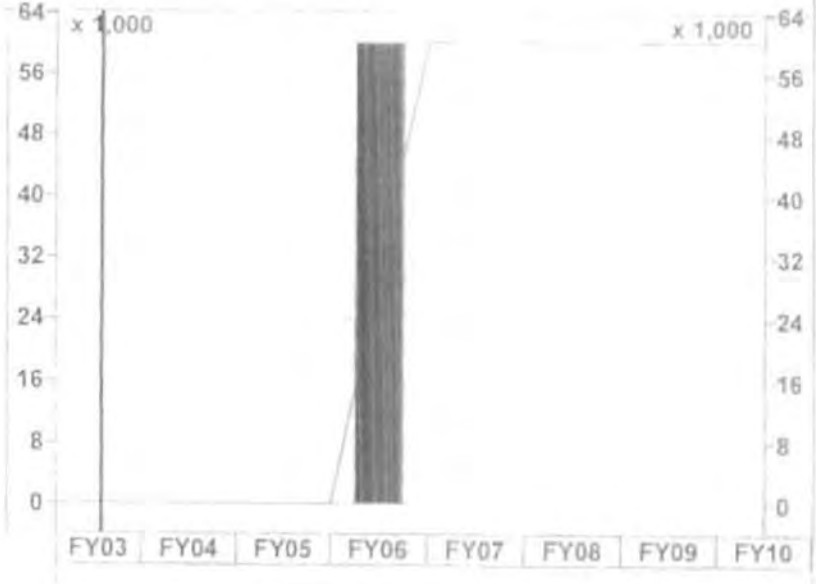

Start date 18FEB03
Finish date 26NOV10
Data date 31JUL03
Run date 12NOV03
Page number 35A

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