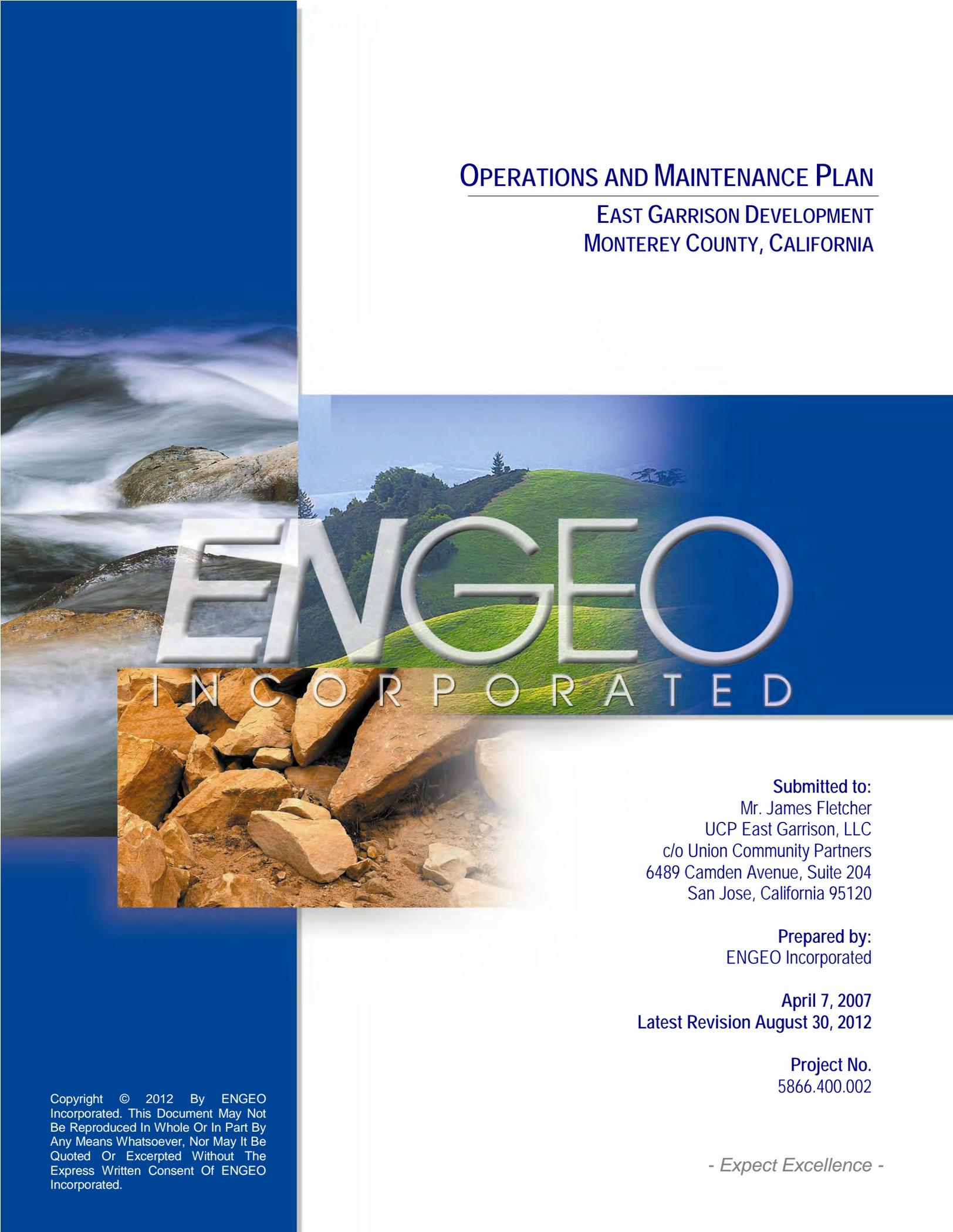


Attachment P

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OPERATIONS AND MAINTENANCE PLAN

EAST GARRISON DEVELOPMENT
MONTEREY COUNTY, CALIFORNIA



ENGEO
INCORPORATED

Submitted to:
Mr. James Fletcher
UCP East Garrison, LLC
c/o Union Community Partners
6489 Camden Avenue, Suite 204
San Jose, California 95120

Prepared by:
ENGEO Incorporated

April 7, 2007
Latest Revision August 30, 2012

Project No.
5866.400.002

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- *Expect Excellence* -

Project No.
5866.400.002

April 7, 2007
Latest Revision August 30, 2012

Mr. James Fletcher
UCP East Garrison, LLC
c/o Union Community Partners
6489 Camden Avenue, Suite 204
San Jose, California 95120

Subject: East Garrison Development
Monterey County, California

OPERATIONS AND MAINTENANCE PLAN

Dear Mr. Fletcher:

ENGEO Incorporated (ENGEO) is pleased to provide this Operation and Maintenance Plan (OMP) for infrastructure facilities and open space areas associated with the East Garrison project in Monterey County, California. This document updates and replaces the previous OMP prepared by ENGEO, dated April 7, 2007 revised February 4, 2008.

The OMP provides a framework for defining the responsibilities, priorities and activities for the maintenance of project infrastructure facilities and improvements. Additionally, the OMP identifies the mechanisms available to fund the operations and maintenance of these facilities. The structure of the OMP allows for changes in the operations and maintenance activities based on modifications in the site design or conditions, which may vary over time.

Sincerely,

ENGEO Incorporated

Jeffrey A. Adams, PhD, PE
Associate

Julia A. Moriarty, GE
Principal

Uri Eliahu, GE
President

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APPENDIX A – Summary of Project Capital Improvements

APPENDIX B – Operations and Maintenance Manual

APPENDIX C – HOA and CSD Maintenance Budgets

APPENDIX D – Maintenance Checklist

1.0 INTRODUCTION

This document sets forth the operations and maintenance activities for infrastructure and improvements within the East Garrison development (Project), located in Monterey County, California. The purpose of this document is to define the public and common area maintenance responsibilities for the Community Services District (CSD) and Homeowners Associations (HOAs) associated with the Project.

The intent of this Operations and Maintenance Plan (OMP) is to create a framework for the maintenance of major infrastructure components for the Project. Some of these components will be maintained by the CSD and HOAs. This framework includes anticipated general maintenance activities, financing plans, and assignment of maintenance responsibilities to the respective entities described herein. Amendments to this Operations and Maintenance Manual (OMM) can be prepared, if requested, once construction of the infrastructure improvements has been completed and more details pertaining to the infrastructure and related amenities are available.

This Operations and Maintenance Plan (OMP) has been prepared to satisfy Conditions of Approval (COAs) 196 and 200 associated with the proposed project. COA 196 and 200, respectively, are as follows:

COA 196 – Prepare an OMP for all CSD facilities subject to the approval of the Director of Public Works. Said OMP shall include a detailed inventory of all facilities, operating requirements of each item, schedules, and proposed maintenance strategies for the perpetuation of the facilities. The OMP shall take into account the phasing of the project over time and the financial needs for completion of the work on schedule. The OMP shall include an estimated cost for completion of the operating and maintenance strategy requirements, capital replacement, and an operating reserve over time for completion of each phase of the development and at completion of the development.

COA 200 – Prepare an OMP for all infrastructure not included in the CSD inventory subject to the approval of the Director of Public Works. Develop, execute, and record an agreement subject to the approval of the Director of Public Works with the suitable or appropriate entity for acceptance, use, operation, and maintenance of the infrastructure in accordance with the approved operation and maintenance plan.

An Urban Services Agreement (USA) has been agreed upon between the County of Monterey and the East Garrison Community Services District (CSD) (adopted on July 18, 2006). The CSD was formed following a duly noticed public hearing on October 10, 2005. Further, the CSD, UCP East Garrison, LLC (Developer), and the County of Monterey have cooperated in the formation of the East Garrison Public Financing Authority to act as a Community Facilities District (CFD) for the purposes of financing certain public improvements within the proposed development. The CFD has imposed a special tax in order to finance CSD maintenance of public improvements, as outlined in later sections of this document. The Developer has agreed to form one or more HOAs and “sub”-HOAs. The HOAs will levy an assessment on homeowners to

provide financing for several public and private services and maintenance activities not assumed by the CSD or the County of Monterey for the Project. The specific maintenance activities for each of these entities are presented within later sections of this document.

2.0 BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The property is situated within a portion of the inactive Fort Ord military base, specifically located south and east of Reservation Road off the intersection of Reservation Road and Inter-Garrison Road in East Garrison, California. The current Project consists of 244 acres that are situated within the greater East Garrison site of 800 acres.

The site is situated on top of a steeply sloping bluff for the eastern portion and at the base of a depression for the western portion. Elevations range from about 25 feet above mean sea level (msl) at the base of the bluff slope along the eastern boundary to about 225 feet above msl along the western and southwestern boundaries. The interior portions form three gently sloping plateaus at elevations of roughly 150, 175, and 200 feet above msl within the eastern, southern, and northern areas, respectively. Moderately steep interior slopes to create the elevation differences are located between the plateaus (ENGEO, 2005).

Prior to redevelopment, the site was occupied by old military buildings, including officers' quarters, mess halls, ammunition buildings, a chapel, a theatre, a battle simulation building, an abandoned wastewater treatment facility, a small above-ground water tank, latrines, open-space exercise ranges, random additional buildings, and numerous concrete slabs where former buildings were sited. A few perimeter retaining walls were also found along the top of slope along the eastern bluff up to 8 feet in exposed height. Internal paved roads, parking areas, and dirt roads were situated within the site, as well as numerous trees and ground covering (ENGEO, 2005).

The Project consists of numerous land uses. Approximately 1,400 residential units and up to 70 carriage units are situated within the Project. These residences consist of single-family homes, townhomes, apartments, condominiums, mixed-use units, and live-work spaces. Several historic buildings within the project have been refurbished and prepared for new uses. The Project includes nearly 13 acres of parks and approximately 35 acres of non-park open space/common area, including the Witcher Family Cemetery. Additionally, a fire station and a library have been constructed within the Project boundaries. Other planned improvements include water detention, water quality, and flood control facilities; public roads, private roads, and lanes; wet and dry utilities; transit facilities; and a County Sheriff field office.

3.0 MAINTENANCE AND OWNERSHIP ENTITIES

As described above, the Conditions of Approval and the Urban Services Agreement have directed the formation of several entities for the operations and maintenance of Project

infrastructure and improvements. The entities and their maintenance responsibilities are presented in detail in later sections of this document. The maintenance delineation by parcel for the CSD, HOA, and Monterey County is presented in Exhibits A-F. The Urban Services Agreement includes a table describing public services and the respective funding sources. This table is presented below.

TABLE 1
Summary of Public Services and Proposed Funding Sources

Public Service	Proposed Funding Source
Recreation Maintenance and Programs Library Services/Maintenance Sheriff Custody Operations/Coroner/Public Administrator Other General Fund Expenses	County General Fund
East Garrison Perimeter Public Roadways and Right-of-Ways Drainage, Stormwater and Flood Control Systems in Public Right-of-Ways or Easements Community Park and Open Space, including Whitcher Family Cemetery Sheriff Protection Select Fencing	CFD Special Tax/CSD
Fire Protection	SRFD Special Tax
Private Roadways and Right-of-Ways Common Area Property Select Private Homeowner Property Transit Stop Facilities Neighborhood Parks and Select Open Space Entry Statements Drainage and Stormwater Systems in Private Right-of-Ways or Easements	HOA Fees

3.1 COMMUNITY SERVICES DISTRICT (CSD)

The Community Services District (CSD) was formed on October 10, 2005, at a duly noticed public meeting in order to provide certain public services in a cost efficient manner. The maintenance delineation by parcel for the CSD is presented in Exhibits A-F. The CSD shall be responsible for the following functions:

- Provide funding and maintenance of all right-of-way in County-owned public streets per Exhibits A-F.
- Ownership and maintenance of drainage, stormwater, and flood control systems in public right-of-ways or easements.
- Ownership and maintenance of the Community Park and open space.

- Maintenance of County-owned open space parcels H1 and H2, including detention basin facilities.
- Landscaping on common areas and open space areas not owned by the HOA.
- Ownership and maintenance of most detention basins.
- Portions of fencing: Area along West Camp Street to Youth Camp; areas within open space, parks, detention basins and/or common areas.
- Ownership and Maintenance of the Whitcher Family Cemetery.

3.2 HOMEOWNER'S ASSOCIATION

One or more HOAs shall be formed to provide for services and maintenance activities not provided by the CSD or other entities. The HOA system shall provide maintenance activities for large portions of common space and improvements within the Project. The HOAs shall represent the following landowner groups: single-family homes (Groves, Garden, Bungalow, Bluffs, Courtyards, Village), townhomes, town center, town center lofts, and live-work units. Additionally, the HOAs will provide specialized maintenance for other homeowner/tenant groups. HOAs will be formed for the following groups: condominiums, townhomes, and town center (mixed-use, live-work, and parking lots). The maintenance delineation by parcel for the HOAs is presented in Exhibits A-F. The HOAs shall perform the following functions on private HOA parcels or easements.

- Maintenance of common area property.
- Maintenance of privately owned property where appropriate (possible examples include yards in clusters, mailboxes, front yards, etc.).
- Ownership and maintenance of select parks and open space.
- Landscape maintenance (not including certain affordable units or lane landscaping).
- Ownership and maintenance of right-of-way in all private roads and lanes, including all fixtures, select landscaping and irrigation, sidewalks and drainage; not including other underground utilities or lane landscaping.
- Street name signs.
- Traffic control signs.
- Street lighting (nighttime illumination).

- Maintenance of sound wall extending along Reservation Road (outside facing toward Reservation Road; maintenance includes structural elements to preserve the structural integrity of the wall).

Depending on the residence type, HOAs may be required to provide maintenance to the following facilities, where appropriate:

- Structures
- Painting
- Roofs
- Fire alarms
- Fire sprinklers
- Porches/decks
- Landscaping at townhomes, condominiums, town center, live/work, or otherwise designated

3.3 MONTEREY COUNTY

Monterey County shall provide several services to the East Garrison project. The County shall assume the obligation of these services and provide funding; details regarding these services are not provided within this document. The maintenance delineation by parcel for Monterey County and/or the Monterey County Redevelopment Agency is presented in Exhibits A-F. Monterey County will provide the following functions:

- Ownership of all right-of-way in County-owned public streets per Exhibits A-F.
- Inspection and maintenance of traffic signal systems.
- Ownership of CSD-maintained H1 and H2 parcels.
- Library ownership and operation.
- County Sheriff custody operations.
- Coroner services.
- County Public Administrator services.
- Recreational services and programs.
- Other basic County services not otherwise allocated to any other entity.
- Monterey County Sheriff – law enforcement services.

3.4 OTHER ENTITIES

Other entities shall be responsible for providing services to the East Garrison project. These include the following:

- Monterey County Regional Fire District (MCRFD) – fire protection services, maintenance, and ownership of fire station.
- Marina Coast Water District (MCWD) – water and wastewater services.

- Dry Utilities – including, but not limited to, electricity, natural gas, and telecommunications.

4.0 COMMUNITY SERVICES DISTRICT (CSD) RESPONSIBILITIES

4.1 ROADS

Roads associated with the Project shall include perimeter roads, interior streets, and lanes. Exhibits A-F presents details regarding ownership and maintenance funding/responsibilities of respective public roads, private roads, and lanes. Perimeter public roads, private roads, and lanes constitute an area of approximately 74 acres within and surrounding the Project.

Public perimeter roads associated with the Project include portions of Inter-Garrison Road, Sherman Boulevard, West Camp Street, and Watkins Gate Road. These roads shall be owned by Monterey County; however, maintenance and funding will be provided by the CSD through collection of CFD special tax. According to the Urban Services Agreement, the CSD shall also be responsible for funding the following maintenance activities associated with project public perimeter roads: select areas of landscaping, signals, signage, lighting, monuments, other noise mitigation measures, buffers, grade separations, bridges, sidewalks, multi-purpose paths, and community and neighborhood entries into public roads. A summary of the maintenance responsibilities is presented in Exhibits A-F. A table summarizing capital improvements related to roadway construction is presented in Appendix A.

The following is a summary of anticipated on-going maintenance activities associated with the public perimeter roads associated with the Project.

- Pavement Sweeping – Sweeping and debris collection along streets, lanes, bicycle lanes, shoulders, and sidewalks shall be the responsibility of the CSD.
- Pavement Repair – The CSD will be responsible for periodic inspections of pavement areas in public right-of-ways. In the event that distressed pavement areas are identified, these areas shall be repaired in an appropriate manner. Possible remedies include pavement overlays, slurry seals, or “point and-patch” activities. It is anticipated that pavement would have a useful life of 20 years. Seal coats are anticipated to be applied once every three years.
- Drainage Facilities – Drainage facilities associated with public right-of-ways, including curb-and-gutter structures, inlets, and manholes shall be inspected on a semi-annual basis. Storm drains shall be inspected on an annual basis. Debris removal from inlets and catch basins/traps shall be performed on a semi-annual basis; once in the spring and once in the fall prior to the onset of the wet season.
- Sidewalk and Curb-and-Gutter Repair – The CSD will be responsible for periodic inspection of sidewalks and curb-and-gutter structures. Sidewalks and curb-and-gutter structures shall be inspected for distressed conditions. In the event that distressed pavement is observed, repairs will be performed on an as-needed basis if the situation poses a threat to public safety.

- **Street Lighting System** – Street lights within public right-of-ways shall be inspected and/or repaired in a manner consistent with maintaining public safety. It is anticipated that light fixtures would have a useful life of 20 years and that light bulbs would be replaced every four years.
- **Landscaping** – Landscaping will be provided along public street medians as well as in other locations within public road right-of-ways. Typical landscaping maintenance activities (mowing, leaf control, pruning, planting, weed/invasive species removal, irrigation system maintenance, and fertilizing) should occur on a regular basis consistent with proper care guidelines for specific plant species that are used in landscaped areas. Irrigation system components include controllers, backflow controls, and remote control valves. These components are expected to have a 10- to 12-year useful life.
- **Signage** – Street signs in public streets shall be maintained to prevent public safety from being compromised. Damaged or stolen signage shall be replaced on an as needed basis. Signs are expected to have a 20-year useful life.
- **Pavement Markings** – Pavement markings in public streets (e.g. striping) shall be inspected to protect public safety. Damaged or worn striping shall be replaced on an as-needed basis.

Table 2 outlines the on-going maintenance program for the interior and exterior roads associated with the project. This table as well as subsequent annual maintenance cost tables presented in this document has been prepared based on estimated annual maintenance costs provided by RBF Consulting as estimated in May 2006.

TABLE 2
 Estimated Public Road Annual Maintenance Schedule and Costs (Source: PCM Consulting Services, Inc., 2012)

Improvements	Quantity	Unit	Estimated Annual Maintenance/ Replacement Cost	Maintenance Remarks
Public roadway asphalt slurry/striping	346,845	SF	\$7,627	
Public roadway asphalt overlay	346,845	SF	\$48,558	
Street Sweeping	346,845	SF	\$20,031	Regular maintenance
Concrete curb and gutter repair	16,710	SF	\$1,671	Repair
Public sidewalk concrete repair	29,700	SF	\$2,970	Repair
Public Traffic Signals	4	EA	\$18,726	Replacement Cost and electricity
Public Roadside Signs	86	EA	\$430	Replacement

Table 3, also presented in Appendix D, presents a checklist for annual roadway maintenance activities.

TABLE 3
Road Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Street Pavement	Have streets been swept or are in need of sweeping?				
	Are areas of street pavement exhibiting signs of distress? If so, to what degree?				
	Are pavement markings coherent and visible? Are bicycle lanes clearly delineated?				
	Does maintenance need to be scheduled to repair street pavement sections?				
Drainage Facilities	Are curb and gutters in good condition and capable of directing surface flows?				
	Are inlets and catch basins free of debris?				
	Is there any evidence of ponding water or flow obstructions at or near inlets?				
	Are any grates of safety devices missing or damaged at inlets? If so, what is degree of damage?				
	Does maintenance need to be scheduled repair drainage facilities?				
Signage	Are any street signs missing or in need of replacement?				
	Are street signs clean and visible from a proper distance?				
	Do additional or replacement signs need to be ordered?				
Sidewalks	Are sidewalks in need of sweeping or any type of debris removal?				
	Are curb cuts and sidewalk access points free of debris and accessible?				
	Is there any evidence of sidewalk pavement distress? If so, to what degree?				
	Does maintenance need to be				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
	scheduled to remediate any noted problems?				
Street Lights	Are streetlights/electroliers functioning? Are any structures in disrepair or danger of collapse?				
	Are traffic signals in an operable condition? Have bulbs or LED matrices been replaced or are in need of replacement?				
	Is there any evidence of damage that warrants maintenance or replacement?				

4.2 STORMWATER AND FLOOD CONTROL

Drainage, stormwater, and flood control systems shall be maintained by the CSD. With the exception of Parcels H1 and H2 per Exhibits A-F (County-owned), the CSD also owns these systems. A Stormwater Management Plan (SWMP) and Operations and Maintenance Manual (Balance OMM) have been completed for the Project by Balance Hydrologics, Inc. The Balance OMM is attached in Appendix B. The purpose of the SWMP is to identify opportunities and constraints for stormwater management at the site, control objectives for peak stormwater flows, presentation of stormwater basins to control site runoff, and identify Best Management Practices (BMPs) for the treatment of stormwater runoff (Balance Hydrologics, 2006, 2011).

As presented in the SWMP, the East Garrison storm drainage system required near total replacement to accommodate the Project. A conventional gravity flow pipe network was designed to direct runoff to a series of stormwater basins. These basins are used for water detention, groundwater recharge, and stormwater quality management (Balance Hydrologics, 2006, 2011).

A total of six basins are within and adjacent to the Project. The pipe network between select basins is used to route low flows and high flows into appropriate storage areas. Because of its proximity to relatively steep slopes and its use as a retention basin with pump system, Basin 3 is provided with a geosynthetic liner. Detention and infiltration of runoff occurs in other pond locations, and surface runoff or pumped runoff that enters into Basin 1A, at the northwestern extent of the Project, infiltrates into the subsurface at this location (Balance Hydrologics, 2006, 2011). Capital improvements related to on-site stormwater management are summarized in Appendix A. This summary, as well as subsequent capital expenditure tables presented in this document was prepared based on an inventory developed by Carlson, Barbee, and Gibson, Inc. in August 2006.

The infiltration of the stormwater runoff accomplishes dual objectives: groundwater recharge and stormwater quality management. In order to facilitate infiltration at the dual use sports fields, an infiltration gallery consisting of sand and gravel soil layers is located at Basin 2B to handle

nuisance flows and small storm flows. Additional source control BMPs are incorporated into the Project, including street sweeping, chemical application guidelines for public landscape management, public education materials, stenciling at catch basins and inlets, and covered dumpsters and loading dock areas (Balance Hydrologics, 2006, 2011).

The Marina Coast Water District (MCWD) shall operate Well No. 34 in the vicinity of the Project. On intermittent occasions, discharge of up to 2,500 gallons per minute (gpm) and indeterminate flows shall be routed to the Project storm drainage system and basin system. No additional maintenance is expected as a result of these intermittent flows.

The purpose of this version of the Balance Hydrologics Operations and Maintenance Manual (Balance OMM) is to present operations and maintenance guidelines for the detention basins at the Project (Balance Hydrologics, 2006, 2011). Several monitoring and maintenance activities presented in the Balance OMM are summarized below. The CSD shall be responsible for performing monitoring and maintenance activities. CSD funding shall be used to finance these activities. Table 4 presents a summary of maintenance and monitoring activities as well as associated schedules and costs, and Table 5 presents a checklist for maintenance activities. Table 5 is also presented in Appendix D, which includes checklists for other improvements associated with the Project.

4.2.1 Monitoring Program

- Water surface drawdown – Routine inspections after rain events to verify that the surface of retained water is dropping with time, indicating infiltration.
- Litter and coarse debris – Inspections to observe the relative quantity of deleterious materials that could interfere with stormwater conveyance.
- Condition of inlets and outlets – Inspection to assess if any obstructions or evidence of erosion is present at outlets.
- Erosion (general) – Inspection to determine if erosion or bank failures have occurred around the perimeter of the basins.
- Sediment deposition – Inspection during dry months to determine the extent of sediment deposition on basin floors.
- Vegetation – Inspection to determine the presence of vegetation greater than 5 feet in height or the presence of woody vegetation.
- Leakage through Basin 3 liner – Inspections to qualitatively assess the integrity and performance of the geosynthetic liner installed at Basin 3.

- Public safety – Inspections to determine the condition of basin signage, barriers, and evidence of improper encroachment.
- Vector control – Periodic inspection to observe if ponded water that could serve as mosquito habitat is present within the detention basins.
- Pump monitoring – Periodic observations to assess pumping performance and back-up generator system. Response to alarm system on an as-needed basis.

4.2.2 Monitoring Schedule

- Routine monitoring – Two full monitoring events per year; one during wet season following a storm resulting in 0.2 inch or more of precipitation.
- Extreme event monitoring – Monitoring events following a storm resulting in 2 inches or greater of precipitation in a 24-hour period.

Routine Maintenance Activities

- Removal of litter and coarse debris.
- Vegetation control and management.
- Cleaning of stormwater basin outlet structures.
- Stormwater Basin 2b junction box maintenance.

Non-Routine Maintenance

- Emergency outlet maintenance
- Bank repairs
- Sediment removal
- Geotextile liner repair
- Improper encroachment

TABLE 4

Stormwater/Flood Control Annual Maintenance Costs (Source: Balance Hydrologics, Inc.)

Monitoring / Maintenance Activity	Frequency	Estimated Annual Maintenance / Replacement Cost	Maintenance Remarks
Water surface drawdown observation	Following rainfall events	\$350	Observe that water level falls at end of rain.
Inlet/outlet inspection	2 per year	\$350	Clean obstructions immediately if more than ¼ of pipe is obstructed

Monitoring / Maintenance Activity	Frequency	Estimated Annual Maintenance / Replacement Cost	Maintenance Remarks
Erosion observation	2 per year	\$350	Repairs likely if slump of 5 cubic yards or more
Sediment deposition observation	2 per year	\$350	Accumulations greater than 1 foot to be removed
Basin 3 liner inspection	2 per year	\$350	Check for wetting along adjacent bluff
Public safety inspection	2 per year	\$350	Check fences, barriers, and signage
Vector control	2 per year	\$350	Check for stagnant water or odor problems
Pump monitoring observation	2 per year	\$350	Pump maintenance schedule to be presented in separate report
Removal of litter and coarse debris	At least 2 per year; more during extreme events	\$2,800	Performed by hand when basins are dry
Vegetation control and management	At least 2 per year; more during extreme events	\$11,200	Prune when vegetation 5 feet or taller covers at least 30 percent of basin area
Cleaning of stormwater basin outlet structures	At least 2 per year; more during extreme events	\$2,240	Optimal to clean during or after summer visit
Stormwater Basin 2b junction box maintenance	At least 2 per year; more during extreme events	\$1,400	Requires annual summer maintenance
Emergency outlet maintenance	As needed	\$3,724	Remediate immediately as needed
Bank repairs	As needed	\$2,800	Optimally performed in late-summer
Sediment removal	As needed	\$10,260	Sediments to be tested using TCLP procedure
Geotextile liner repair	As needed	\$1,000	Repairs needed if significant leakage observed
Improper encroachment	As needed	\$2,800	Repair breaches in fencing as necessary

TABLE 5
Stormwater/Flood Control Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Inlet/Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Is there large vegetation growing within 6 feet of inlet opening?				
	Are the inlets functioning in a satisfactory manner?				
	Are there any obstructions blocking the opening of the topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to stabilize the slopes or embankments?				
Infiltration Obstructions	Is there a buildup of algae or silt on the floor of the basin? To what degree?				
	Does maintenance need to be scheduled to remove the buildup?				
	Can the buildup be removed by hand or will vehicles be required?				
Infiltration Rate Monitoring	Is there evidence of long-term (more than a week) ponding of water? Describe in the notes.				
	Have direct observations been made of standing water in the				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
	basin for longer than 48 hours after the last pump cycle?				
	What is believed to be the cause of the standing water?				
	Does maintenance need to be scheduled to remediate the problem?				
Human Encroachment	Is there evidence of encroachment, vandalism, or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed encroachment?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

4.3 PARKS/OPEN SPACE

Eight parks are included within the Project. The parks located throughout the Project, total about 12.7 acres in area and range in size from 0.3 acre to 6.8 acres. One park is owned and maintained by the CSD, and seven parks are owned and maintained by the HOA.

The CSD owns and maintains the Community Park. Community Park/Lincoln Park, identified as Parcel P1.4, is located near the intersection of Sherman Boulevard and Reynolds Street. The park features landscaping, various pedestrian ways, seating areas, one soccer field, one baseball diamond, two playgrounds, one basketball court, picnic areas, a concession building, restrooms, drinking fountains, a large lawn area, and on-street parking facilities. Utilities include electrical service, storm and sanitary sewerage, irrigation, and potable water. The CSD also maintains Parcels H1 and H2 (owned by Monterey County).

Approximately 35 acres are dedicated to non-park open space within the Project; non-park open space parcels are owned and maintained by the CSD and HOA, respectively. Additionally, the CSD owns and maintains the Witcher Family Cemetery. Several improvements/safety features are associated with the open space, including perimeter walls and gates, and detention basin fencing. A summary of capital improvements related to parks and open space is presented in Appendix A.

The Whitcher Family Cemetery is a small family burial plot (Burial Plot) that consists of five headstones and a large wooden cross. The Burial Plot contains the remains of members of the Whitcher family, one of the earliest families to settle in the greater Monterey Peninsula area. UCP East Garrison LLC (UCP) will provide a simple picket fence surrounding the Burial Plot, with a gate, and will also provide a memorial plaque and concrete bench identifying those buried in the Burial Plot and recognizing the Family's historic significance in the area (collectively, the "Improvements"). UCP shall maintain the Burial Plot, including its Improvements, until such time as the Burial Plot is transferred to the CSD.

Consistent with, and subject to, UCP's construction activities on the Property, and, after the transfer to the CSD, the obligations of the CSD to maintain the open space of which the Burial Plot is a part, the Family Members will have reasonable access to the Burial Plot for visitation purposes. The Family Members and/or their guests will not add or leave any permanent or temporary structures or other items at the Burial Plot, except for reasonable floral displays.

UCP will pay all costs associated with the Burial Plot until such time as the Burial Plot is transferred to the CSD. Thereafter, the CSD shall bear such costs as part of its open space maintenance costs. The Family Members shall bear no costs. The CSD shall accept title to the Burial Plot from UCP as part of the Phase 3 property transfer. Upon transfer of the Burial Plot to the CSD, the CSD shall maintain the Burial Plot and the Improvements as part of the Property in perpetuity.

Undeveloped and underdeveloped open space areas are located within the project. Many of these areas are utilized for stormwater control and water quality purposes, including detention basins and Best Management Practices (BMPs). Other open space areas are landscaped, typically with native vegetation to reduce the need for extensive irrigation.

The majority of open space is owned and maintained by the CSD. The following parcels dedicated to non-park open space will be owned and maintained by the CSD: Z1.9, Z1.10, Z1.11, Z3.1, Z3.2, Z3.3, Z3.4, Z3.6, Z3.8, and D1.1. Monterey County owns two open space areas (Parcels H1 and H2) at the western extent of the property, adjacent to Inter-Garrison Road. These areas, however, are maintained by the CSD. Additionally, drought-resistant temporary vegetation will be planted within Reservation Road right-of-way owned by Monterey County. The vegetation within the right-of-way, measuring approximately 28,000 square feet in area, will be serviced by a temporary drip irrigation system. Both the vegetation and the irrigation will be removed after approximately eight years. While in place, the CSD shall maintain the vegetation and temporary irrigation system.

Table 6, presented below, outlines costs associated with annual maintenance activities for parks and open space. Table 7, also presented below and in Appendix D, is a checklist for maintenance of these improvements. Although inspection and maintenance schedules have not been finalized as of yet for individual items, some ongoing maintenance activities are to include the following:

- Landscaping – Landscaping activities such as mowing, weeding/invasive species removal, pruning, fertilizing, transplanting, irrigation system monitoring and maintenance, and leaf removal should be performed on a regular basis based on proper care guidelines for the plant species selected for the project.
- Sports facilities – Activities such as baseball infield maintenance, baseball diamond and soccer field marker striping, court sweeping/refinishing, bocce court maintenance, and general sports equipment maintenance should be performed on a regular basis based on level of use and the resulting wear. Additionally, routine inspections should be performed to identify if any damaged equipment poses a hazard.
- Playgrounds – Inspection and maintenance of playground equipment, safety equipment (i.e., wood chips, padding) should be performed on a regular basis depending on the level of use and resulting wear.
- Structures – Ongoing inspection and maintenance should be performed for the pavilion stage and seating area, the gazebo, drinking fountains, restrooms and restroom fences, the interactive fountain, and table/seating areas. Additionally, garbage should be collected on a regular basis from the facilities, and walls should be inspected and cleaned if graffiti or other staining is present.

TABLE 6

Open Space/Park Annual Maintenance Costs Source: PCM Consulting Services, Inc., 2012)

Improvements	Qty.	Unit	Responsible Entity	Estimated Annual Maintenance / Replacement Cost	Maintenance Remarks
Acres of open space (CSD)	34	Acres	CSD	\$178,173	
Acres of open space (HOA)	1	Acre	HOA	\$5,240	
Acres of community parks	7	Acres	CSD	\$73,480	
Acres of neighborhood parks/Town Center	6	Acres	HOA	\$159,060	
Community building	1		HOA	\$55,671	Yearly operating expense
Square feet of perimeter walls	7,000	SF	HOA	\$5,639.40	Monthly inspection; clean up graffiti/markings, etc.
Square feet of temporary vegetation and irrigation	28,000	SF	CSD	\$17,500	Installed within Monterey County ROW along Reservation Road; to

Improvements	Qty.	Unit	Responsible Entity	Estimated Annual Maintenance / Replacement Cost	Maintenance Remarks
					be removed after approximately 8 years.
Acres of multi-use path	2	Acres	CSD	\$26,136	
Acres of detention basins	13	Acres	N/A	\$ -	Included in common area maintenance

TABLE 7
 Park/Open Space Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Sports Facilities	Are basketball courts and goals in an operable condition? If not, what repairs are needed?				
	Have baseball/softball infields been raked? Are foul lines present and legible?				
	Have turf areas been mowed to a playable height? Are there areas of turf in need of repair?				
	Have soccer field markings been striped? Are goals and nets in a useable condition?				
Vegetation	Are lawn/native ground cover areas in need of mowing?				
	Do trees need to be pruned? Is there any need for a tree maintenance service?				
	Have flower beds been planted and weeded?				
	Do leaves and other dead vegetation need to be culled and/or collected?				
	Do hedges and other low lying shrubs need to be trimmed or pruned?				
	Are irrigation systems in need of repair?				
Playground Equipment	Is any playground equipment in an unsafe condition (i.e., exposed sharp corners, broken swings)?				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
	Is cushion material (padding, wood chips) in a safe condition?				
	Does any equipment need to be cleaned or painted?				
	Does maintenance need to be scheduled to remediate any problems?				
Whitcher Family Cemetery	Is bench/plaque in a clean condition?				
	Is fencing in need of painting/repair?				
	Does any vegetation need to be pruned or collected?				
	Is there any evidence of an unsafe condition?				
Picnic Areas/Other	Are benches and tables in a clean, safe condition?				
	Is there any evidence of vandalism or graffiti? To what degree?				
	Are restrooms clean? Are fixtures in an operable condition?				
	Are water fountains functioning properly?				
	Are game tables in proper condition?				
	Is the interactive fountain free of debris? Is it operating and draining properly?				
	Are trash bins and barbecue facilities in an operable, clean condition?				
Pavilion	Are seating surfaces in a safe, useable condition?				
	Is the fire pit in an operable, clean condition?				
	Is the stage area and equipment in a clean and operating condition?				

5.0 HOMEOWNERS ASSOCIATION (HOA) RESPONSIBILITIES

5.1 ROADS

Interior streets and lanes shall be owned and maintained by the HOA. The HOA will also be responsible for the maintenance of all right-of-way improvements, including drainage and stormwater systems but excluding other underground utilities, within the interior streets and lanes in the Project. Additionally, the HOA will be responsible for maintenance of transit stops within the project.

For a typical street, the HOA will own the entire right-of-way as outlined above; this includes the paved street section, the verge (space between back of curb and sidewalk edge), and the sidewalk. For a lane, the HOA will own a 20-foot-wide right-of-way that includes the 16-foot-wide lane and a two-foot extension on either side (a total of 20 feet in width; however, the two-foot extension as well as an adjacent five-foot-wide PUE) shall be maintained and irrigated by the respective homeowner for a given cross section. The HOA will maintain private street landscaping. A table summarizing capital improvements related to roadway construction is presented in Appendix A.

The following is a summary of anticipated on-going maintenance activities associated with the interior roads associated with the Project.

- Pavement Sweeping – Sweeping and debris collection along streets, lanes, bicycle lanes, shoulders, and sidewalks shall be the responsibility of the HOA.
- Pavement Repair – The HOA will be responsible for periodic inspections of pavement areas. In the event that distressed pavement areas are identified, these areas shall be repaired in an appropriate manner. Possible remedies include pavement overlays, slurry seals, or “point and-patch” activities. It is anticipated that pavement would have a useful life of 20 years. Seal coats are anticipated to be applied once every three years.
- Drainage Facilities – Drainage facilities associated with private right-of-ways, including curb-and-gutter structures, inlets, and manholes shall be inspected on a semi-annual basis. Storm drains shall be inspected on an annual basis. Debris removal from inlets and catch basins/traps shall be performed on a semi-annual basis; once in the spring and once in the fall prior to the onset of the wet season.
- Sidewalk and Curb-and-Gutter Repair – The HOA will be responsible for periodic inspection of sidewalks and curb-and-gutter structures. Sidewalks and curb-and-gutter structures shall be inspected for distressed conditions. In the event that distressed pavement is observed, repairs will be performed on an as-needed basis if the situation poses a threat to public safety.

- **Street Lighting System** – Streetlights shall be inspected and/or repaired in a manner consistent with maintaining public safety. It is anticipated that light fixtures would have a useful life of 20 years and that light bulbs would be replaced every four years.
- **Landscaping** – Landscaping will be provided along street medians and parkways within road right-of-ways. Typical landscaping maintenance activities (mowing, leaf control, pruning, planting, weed/invasive species removal, irrigation system maintenance, and fertilizing) should occur on a regular basis consistent with proper care guidelines for specific plant species that are used in landscaped areas. The master HOA will provide irrigation in condominium open space areas. Irrigation in front yards up to the house structure will be maintained by the respective homeowner. Irrigation system components include controllers, backflow controls, and remote control valves. These components are expected to have a 10- to 12-year useful life.
- **Transit Stops** – Facilities will be provided at proposed transit stops to accommodate waiting passengers. Anticipated maintenance should include trash removal, sweeping, and graffiti removal, as necessary.
- **Signage** – Street signs shall be maintained to prevent public safety from being compromised. Damaged or stolen signage shall be replaced on an as needed basis. Signs are expected to have a 20-year useful life.
- **Pavement Markings** – Pavement markings (i.e. striping) shall be inspected to protect public safety. Damaged or worn striping shall be replaced on an as-needed basis.

Table 8 above outlines the on-going maintenance program for the interior roads associated with the project. This table as well as subsequent annual maintenance cost tables presented in this document has been prepared based on estimated annual maintenance costs provided by RBF Consulting as estimated in May 2006. Table 3, also presented in Appendix D, presents a checklist for annual roadway maintenance activities.

TABLE 8
 Estimated HOA Road Annual Maintenance Schedule and Costs (Source: PCM Consulting Services, Inc., 2012)

Improvements	Quantity	Unit	Estimated Annual Maintenance/ Replacement Cost	Maintenance Remarks
Asphalt-paved surface	1,272,031	SF	\$137,225	Annualized reserve
Concrete-paved surface	299,902	SF	\$6,940	Annualized reserve
Street sweeping			\$57,984	Yearly maintenance
Storm drain maintenance			\$19,954	Yearly maintenance
Private sidewalk concrete repair	316,970	SF	\$31,697	Yearly maintenance

Improvements	Quantity	Unit	Estimated Annual Maintenance/ Replacement Cost	Maintenance Remarks
Entry monument - reserve	3	EA	\$3,036	Annualized reserve
Private street lights - reserve	260	EA	\$29,353	Annualized reserve
Private pedestrian lights - reserve	198	EA	\$2,024	Annualized reserve
Lighting maintenance			\$12,001	Yearly maintenance
Private roadside signs -reserve			\$1,301	Annualized reserve
Landscape – maintenance and misc.			\$445,512	Yearly maintenance
–Backflow testing and maintenance			\$433	Yearly maintenance
–Irrigation repair			\$18,364	Yearly maintenance
Tree maintenance			\$60,298	Yearly maintenance
Landscape/irrigation - reserve	338	EA	\$24,292	Annualized reserve

5.2 PARKS AND OPEN SPACE

The HOA owns most parks and select open space. The HOA owns and maintains seven parks identified with the following Parcels: P1.1, P1.2, P1.3, P2.1, P2.2, P3.1, and P3.2.

All parks feature landscaping, various pedestrian ways, and seating areas. Additionally, each of the parks feature additional attractions/amenities as described below.

Town Center Park is identified as Parcel P1.3 and is located at the intersection of Sherman Boulevard and Ord Avenue. This park, measuring one acre in area, includes an amphitheater with adjacent stage and seating areas, fire pit, drinking fountains, game tables, and an interactive fountain. Utilities include electrical service, natural gas, storm and sanitary sewerage, irrigation, and potable water.

Neighborhood Park “A”, identified as Parcel P1.2, is located at the intersection of Thomas Lane and Warren Avenue. This park, measuring approximately 0.8 acre in area, includes tot lots, basketball courts, seating areas, drinking fountains, a barbecue area, picnic tables, and a large lawn area. Neighborhood Park “B” is identified as Parcel P1.1 at the intersection of Warren Avenue and McClellan Circle. This park, measuring one acre in area, includes a gazebo, drinking fountains, and an adjacent lawn area. Utilities include electrical service, storm and sanitary sewerage, irrigation, and potable water.

Neighborhood Park “C”, identified as Parcel P2.2, is located at the intersection of Logan Street and Breckinridge Avenue. This park, measuring approximately 0.6 acre in area, includes a trellis/pavilion, playground equipment, seating areas, and a lawn area. West Camp Park is

identified as Parcel P2.1 and is situated adjacent to Wilcox Street. This park, measuring less than one-half acre in area, includes playground equipment, a half basketball court, and seating areas.

Arts Park, identified as Parcel P3.1, is located between Sherman Avenue and Burnside Avenue. This park, measuring approximately 0.4 acre in area, includes a lawn area, sculptures, park structures, and seating areas. Bluff Park/Courts is identified as Parcel P3.2 and is located adjacent to Ord Avenue. This park, measuring approximately 0.7 acre in area, includes playground equipment, two basketball courts, drinking fountains, picnic tables, and seating areas. Utilities include sanitary sewerage, irrigation, and potable water.

Undeveloped and underdeveloped open space areas are located within the project. Many of these areas are utilized for stormwater control and water quality purposes, including detention basins and Best Management Practices (BMPs). Other open space areas are landscaped, typically with native vegetation to reduce the need for extensive irrigation.

Select parcels of open space are owned and maintained by the HOA. The following parcels dedicated to non-park open space will be owned and maintained by the HOA: Z1.1, Z1.2, Z1.3, Z1.4, Z1.5, Z1.6, Z1.7, Z1.8, Z1.12, Z2.1, Z2.2, Z2.3, Z2.4, Z2.5, Z2.6, Z2.7, and Z3.5.

Table 6, presented above in Section 4.3, outlines costs associated with annual maintenance activities for parks and open space. Table 7, also presented above and in Appendix D, is a checklist for maintenance of these improvements. Although inspection and maintenance schedules have not been finalized as of yet for individual items, some ongoing maintenance activities are to include the following:

- Landscaping – Landscaping activities such as mowing, weeding/invasive species removal, pruning, fertilizing, transplanting, irrigation system monitoring and maintenance, and leaf removal should be performed on a regular basis based on proper care guidelines for the plant species selected for the project.
- Sports facilities – Maintenance of sports facilities in neighborhood parks should be performed to identify if any damaged equipment poses a hazard.
- Playgrounds – Inspection and maintenance of playground equipment, safety equipment (i.e., wood chips, padding) should be performed on a regular basis depending on the level of use and resulting wear.
- Structures – Ongoing inspection and maintenance should be performed for the pavilion stage and seating area, the gazebo, drinking fountains, restrooms and restroom fences, the interactive fountain, and table/seating areas. Additionally, garbage should be collected on a regular basis from the facilities, and walls should be inspected and cleaned if graffiti or other staining is present.

5.3 RESIDENTIAL STRUCTURES

The HOAs have maintenance responsibility for residential structures and appurtenant landscaping in common areas not covered by individual homeowners. The HOA will provide maintenance near other common areas not covered by individual owners. Additionally, the HOAs shall maintain mailboxes throughout the Project. Neither the apartments nor the arts space/habitat will be part of the Master HOA.

Sub-HOAs will be formed for the following groups: condominiums and town center (mixed-use, live-work, and parking lots) where applicable. These HOAs will provide additional maintenance services for their respective constituent properties, including exterior and common interior areas. Some items include architectural finishes, such as paint/wall coverings, floor coverings, windows and window treatments; roofs, HVAC systems, stairways and elevators, parking lots, driveways, fire alarms/sprinklers, and porches/decks. As defined in Sub-HOA governing documents, the condominium HOA will provide maintenance at the condominium locations. It is anticipated that the HOA will provide routine maintenance on a regular basis based on the individual maintenance scope for a particular item. Additionally, it is anticipated that the HOA will complete large-scale replacement projects for facilities during the life cycle of the project. Once conceptual architecture plans become available, a maintenance schedule and specific budget will be prepared in separate documents.

6.0 OTHER INFRASTRUCTURE/SERVICES

Infrastructure and improvements in addition to those described in preceding sections shall be constructed in association with development of the Project. Some examples include domestic water services, irrigation water service, sanitary sewer service, public safety facilities and services, and dry utilities.

6.1 WATER AND WASTEWATER FACILITIES

Capital improvements associated with water and wastewater service are presented in Appendix A. The developer has funded the construction of the improvements; however, these facilities have been granted to Marina Coast Water District (MCWD). MCWD will be responsible for maintenance and replacement and related budgeting of these facilities.

6.2 PUBLIC SAFETY FACILITIES

According to the Urban Services Agreement and Project Condition of Approval 74, the project will include a fire station. The fire station shall be located within the Project (Parcel R1.2). The fire station and property on which it is located shall be owned and occupied by the Monterey County Regional Fire District (MCRFD). The fire station and property will be operated and maintained by MCRFD. According to the Urban Services Agreement, the MCRFD shall provide an “urban level of fire protection services”. The MCRFD will fund the service through the

imposition of a special tax. Neither a financial analysis of capital expenditures nor an operating budget regarding fire protection has been prepared for this document.

As presented in Condition of Approval 143, of the project will include a Monterey County Sheriff Community Field Office. According to the USA, the Monterey County Sherriff's office shall provide law enforcement operations to the Project. As with fire protection operations and facilities, neither a financial analysis of capital expenditures nor an operating budget regarding law enforcement services has been prepared for this document.

6.3 DRY UTILITIES

Construction of dry utilities has been funded by the developer within the Project, and in several instances, off-site of the Project. Upon completion of construction activities, these facilities have been granted to respective utility operators for operation, including, but not limited to electrical service, natural gas, and telecommunications. These operators shall be responsible for maintenance and replacement of these facilities as well as ongoing budget responsibility for these activities. Capital improvements associated with on-site and off-site dry utility installation is provided in Appendix A.

7.0 OPERATING BUDGETS

Operating budgets (including maintenance and replacement costs) have been prepared for two time frames – five years and fifty years – for both the HOAs and the CSD. At this stage, one budget has been developed for the HOAs. In developing the budgets, maintenance costs prepared by RBF Consulting and PCM Consulting Services, Inc. (2006 dollars) have been extrapolated over the timeframe of the given budget. Additionally, line items have been incorporated to reimburse annual fees related to staffing, administration, accounting, attorneys, and consultants.

To account for inflation, a discount rate of 3 percent has been chosen to represent a construction price index indicative of historic economic conditions in Northern California. Future intermittent capital expenditures to cover costs associated with infrastructure and improvement replacement as previously identified by CBG have been incorporated on an annualized basis within the budgets.

The budgets are established to create an ongoing financial reserve. These reserves are to be maintained in general accordance with California Civil Code. Only the HOAs will levy an assessment; the CSD will not levy an assessment but will rely on special taxes levied by the CFD. Details pertaining to the timing of funding for the entities are presented in the Urban Services Agreement. The reserve will be used to finance future large-scale capital improvement projects, which are represented in the budgets on an annualized basis. The cumulative reserve will be invested in a conservative financial portfolio to allow for further reserve accumulation. An eight-year absorption period has been assumed for the budgets. The budgets are presented in Appendix C.

SELECTED REFERENCES

Balance Hydrologics, Inc., Stormwater Management Plan, East Garrison Project, Monterey County, California; August 22, 2006; Project No. 203035.

Balance Hydrologics, Inc., Operations and Maintenance Manual, East Garrison Project, Monterey County, California; December 16, 2011; Project No. 203035.

ENGEO Incorporated, Geotechnical Exploration, East Garrison, Fort Ord, Monterey, California; July 28, 2005; Project No. 5866.3.001.01.

RBF Consulting, East Garrison Conditions of Approval, September 1, 2006.

Urban Services Agreement by and between the County of Monterey and the East Garrison Community Services District Relating to East Garrison, July 18, 2006.

DRAFT

EXHIBITS A-F

**E
X
H
I
B
I
T

A**





PHASE 1

PHASE 3

PHASE 2

LEGEND

- MONTEREY COUNTY OWNED CSD MAINTAINED (ROADS)
- CSD OWNED & MAINTAINED CFD FUNDED (PARK/OPEN SPACE PARCELS)
- MASTER HOA OWNED & MAINTAINED (ROADS)
- MASTER HOA OWNED AND MAINTAINED (PARK/OPEN SPACE PARCELS)
- SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (TOWNHOMES)
- MONTEREY COUNTY OWNED CSD MAINTAINED (OPEN SPACE/DETENTION BASINS)
- SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (CONDOMINIUMS)
- APARTMENTS (NOT A PART OF MASTER HOA)
- ARTSPACE/ARTS HABITAT PARCELS (NOT A PART OF MASTER HOA)
- MONTEREY COUNTY OWNED AND MAINTAINED
- TOWN CENTER SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (MIXED USE/LIVE-WORK/PARKING LOTS)
- 168 LOT PART OF MASTER HOA
- MONTEREY COUNTY REGIONAL FIRE DISTRICT
- MARINA COAST WATER DISTRICT
- SUBDIVISION BOUNDARY
- INFRASTRUCTURE PHASE BOUNDARY
- SOUNDWALL/DECORATIVE FENCE

NOTES:
 1. MASTER HOA WILL BE RESPONSIBLE FOR FRONT YARD MAINTENANCE ON ALL PRIVATE SINGLE FAMILY LOTS AND TOWNHOME UNITS
 2. /// DELINEATES AN EASEMENT



Mar 16, 2012
 Sheet 1 of 1



EXHIBIT 'A'
OVERALL OWNERSHIP/MAINTENANCE EXHIBIT
EAST GARRISON
 MONTEREY COUNTY, CA

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 9699 Blue Larkspur Lane | Suite 105 | Monterey, CA 93940 | 831 649-5225 | F 831 373-5065
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PHASE 1

PHASE 3

MONTEREY COUNTY
PARCEL 1
28 RS 144

TRAVEL CAMP
PARCEL 1
21 RS 89

MONTEREY COUNTY
19 RS 1

PHASE 2

LEGEND

- MASTER HOA OWNED & MAINTAINED (ROADS)
- MASTER HOA OWNED AND MAINTAINED (PARK/OPEN SPACE PARCELS)
- SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (TOWNHOMES)
- SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (CONDOMINIUMS)
- APARTMENTS (NOT A PART OF MASTER HOA)
- TOWN CENTER SUB HOA OWNED AND MAINTAINED/PART OF MASTER HOA (MIXED USE/LIVE-WORK/PARKING LOTS)
- LOT PART OF MASTER HOA
- SUBDIVISION BOUNDARY
- INFRASTRUCTURE PHASE BOUNDARY
- SOUNDWALL/DECORATIVE FENCE

- NOTES:
1. MASTER HOA WILL BE RESPONSIBLE FOR FRONT YARD MAINTENANCE ON ALL PRIVATE SINGLE FAMILY LOTS AND TOWNHOME UNITS
 2. /// DELINEATES AN EASEMENT



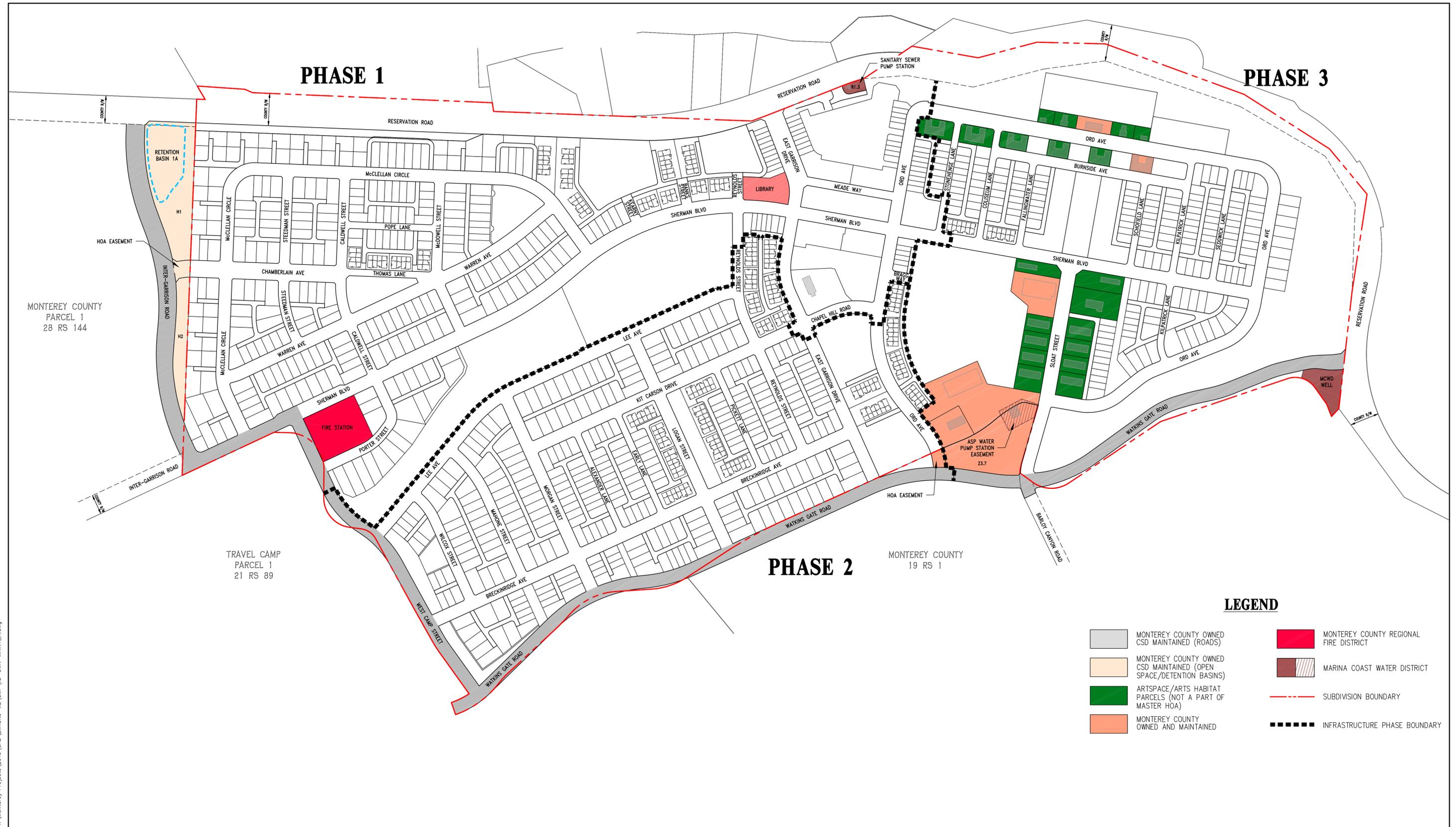
EXHIBIT 'C'
HOA OWNERSHIP/MAINTENANCE EXHIBIT
EAST GARRISON
MONTEREY COUNTY, CA

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PHASE 1

PHASE 3

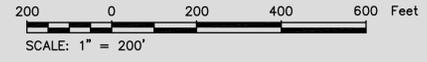
PHASE 2

LEGEND

- MONTEREY COUNTY OWNED CSD MAINTAINED (ROADS)
- MONTEREY COUNTY OWNED CSD MAINTAINED (OPEN SPACE/DETENTION BASINS)
- ARTSPACE/ARTS HABITAT PARCELS (NOT A PART OF MASTER HOA)
- MONTEREY COUNTY OWNED AND MAINTAINED
- MONTEREY COUNTY REGIONAL FIRE DISTRICT
- MARINA COAST WATER DISTRICT
- SUBDIVISION BOUNDARY
- INFRASTRUCTURE PHASE BOUNDARY

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EXHIBIT 'D'
MONTEREY COUNTY OWNERSHIP/MAINTENANCE EXHIBIT
EAST GARRISON
 MONTEREY COUNTY, CA



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Mar 16, 2012
 Sheet 1 of 1



PHASE 1

PHASE 3

PHASE 2

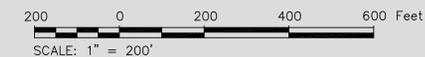
STREET LANDSCAPE IRRIGATION/MAINTENANCE AREA SUMMARY

MAINTENANCE LEGEND

- CSD STREET LANDSCAPE AREA
OWNER = MONTEREY COUNTY
FUNDING = CSO
IRRIGATION TYPE = RECYCLED WATER
- MASTER HOA STREET LANDSCAPE AREA
OWNER = HOA
FUNDING = HOA
IRRIGATION TYPE = RECYCLED WATER
- TOWN CENTER HOA LANDSCAPE AREA
OWNER = TOWN CENTER
FUNDING = TOWN CENTER SUB-HOA
IRRIGATION TYPE = RECYCLED WATER

- NOTES:
- 1) AREAS ARE IN ACRES AND PORTIONS THEREOF.
 - 2) AREAS ARE FROM BACK OF CURB TO FACE OF SIDEWALK OR RIGHT-OF WAY.
 - 3) AREAS INCLUDE HARDSCAPE FEATURES SUCH AS STREET LIGHTS, FIRE HYDRANTS, WATER METERS, JT BOXES, IRRIGATION CONTROLLERS, ETC.
 - 4) PHASE 3 LANDSCAPE AREAS ARE PRELIMINARY.

PHASE	PARCEL	CSD AREAS	MASTER HOA AREAS	TOWN CENTER HOA AREAS
PHASE 1				
PARCEL S1.1		0.27		
PARCEL S1.2		0.42		
PARCEL S1.3		0.41		
PARCEL S1.3 (OFF-SITE)		0.04		
PARCEL S1.4		0.11		
PARCEL S1.5		0.11		
PARCEL S1.6		0.11		
PARCEL S1.7		0.22		
PARCEL S1.8		0.18		
PARCEL S1.9		0.08		
PARCEL S1.10		0.21		
PARCEL S1.11		0.33		
PARCEL S1.12		0.13		
PARCEL S1.13		0.34		
PARCEL S1.14		0.04		
PARCEL S1.15		0.30		
PARCEL S1.16				
PARCEL S1.17				
PARCEL S1.18				
PARCEL S1.19			0.01	
PARCEL S1.20				0.01
PARCEL S1.21				
PARCEL S1.22		0.10		
PARCEL S1.23		0.08		
PARCEL S1.24		0.11		
PARCEL S1.25		0.03	0.01	
PARCEL S1.26			0.03	
PARCEL S1.27		0.14		
PARCEL S1.28		0.14		
PARCEL S1.29		0.33		
INTER-GARRISON (PUBLIC)		0.39		
SHERMAN BLVD (PUBLIC)		0.09		
RESERVATION (PUBLIC)		0.76		
WEST CAMP (PUBLIC)		0.12		
PARKING LOT (N)			0.15	
PARKING LOT (S)			0.56	
SUBTOTAL		1.36	4.24	0.77
PHASE 2				
PARCEL S2.1				0.27
PARCEL S2.2				0.15
PARCEL S2.3				0.40
PARCEL S2.4				0.31
PARCEL S2.5				0.30
PARCEL S2.6				0.41
PARCEL S2.7				
PARCEL S2.8				
PARCEL S2.9				0.46
PARCEL S2.10				0.16
PARCEL S2.11				
PARCEL S2.12				0.14
PARCEL S2.13				0.17
PARCEL S2.14				0.19
PARCEL S2.15				0.15
PARCEL S2.15 (OFF-SITE)				0.02
WEST CAMP (PUBLIC)				0.39
WATKINS GATE (PUBLIC)				0.53
SUBTOTAL				0.92 3.13
PHASE 3				
PARCEL S3.1				
PARCEL S3.2				
PARCEL S3.3				
PARCEL S3.4				0.66
PARCEL S3.5				0.27
PARCEL S3.6				
PARCEL S3.7				
PARCEL S3.8				
PARCEL S3.9				0.35
PARCEL S3.10				0.12
PARCEL S3.11				0.60
WATKINS GATE (PUBLIC)				0.05
SUBTOTAL				0.05 2.00
PROJECT TOTAL				2.33 9.37 0.77
TOTAL ACREAGE: 12.47 AC				



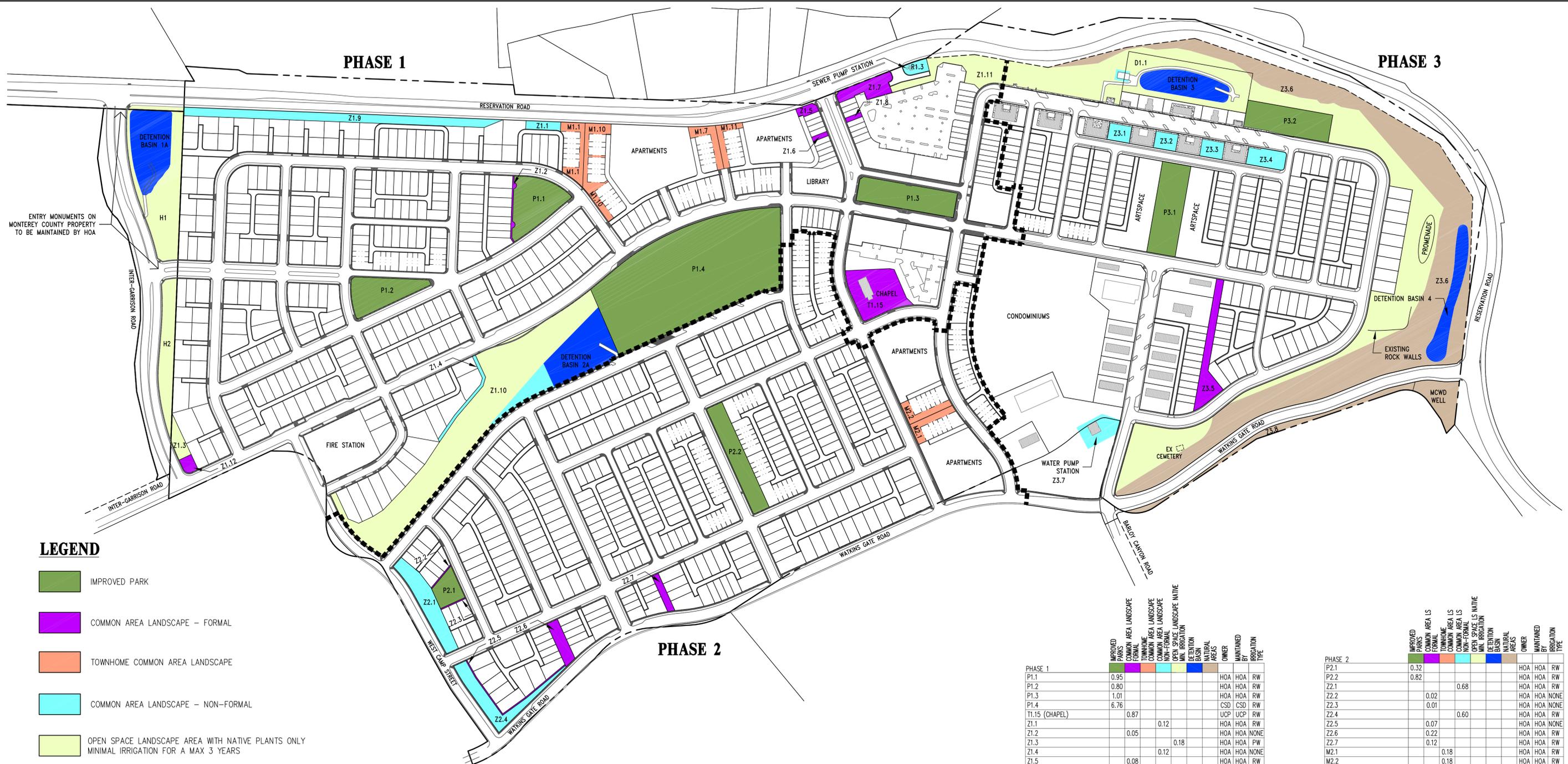
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Sheet 1 of 1



EXHIBIT 'E'
STREET LANDSCAPE IRRIGATION/
MAINTENANCE EXHIBIT
EAST GARRISON
MONTEREY COUNTY, CA

Whitson Engineers
9699 Blue Larkspur Lane | Suite 105 | Monterey, CA 93940 | 831 649-5225 | F 831 373-5065
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LEGEND

- IMPROVED PARK
- COMMON AREA LANDSCAPE - FORMAL
- TOWNHOME COMMON AREA LANDSCAPE
- COMMON AREA LANDSCAPE - NON-FORMAL
- OPEN SPACE LANDSCAPE AREA WITH NATIVE PLANTS ONLY
MINIMAL IRRIGATION FOR A MAX 3 YEARS
- DETENTION BASIN
- NATURAL OPEN SPACE

NOTES:

- 1) AREAS ARE IN ACRES AND PORTIONS THEREOF.
- 2) UNLESS OTHERWISE NOTED PARCEL AREAS INCLUDE HARDSCAPE AND OTHER NON-IRRIGATED FEATURES.
- 3) LANDSCAPE AREAS DO NOT INCLUDE EXISTING STRUCTURES OR PAVING AS SHOWN BY HATCHING.
- 4) PARKING LOT LANDSCAPE IS NOT INCLUDED.
- 5) TOWNHOME COMMON AREA LANDSCAPING INCLUDES AREA UP TO LOT ENVELOPE, NOT TO THE ACTUAL BUILDING.

	IMPROVED PARKS	COMMON AREA LANDSCAPE FORMAL	TOWNHOME COMMON AREA LANDSCAPE	COMMON AREA LANDSCAPE NON-FORMAL	OPEN SPACE LANDSCAPE NATIVE	DETENTION BASIN	NATURAL AREAS	OWNER	MAINTAINED BY	IRRIGATION TYPE
PHASE 1										
P1.1	0.95							HOA	HOA	RW
P1.2	0.80							HOA	HOA	RW
P1.3	1.01							HOA	HOA	RW
P1.4	6.76							CSD	CSD	RW
T1.15 (CHAPEL)		0.87						UCP	UCP	RW
Z1.1			0.12					HOA	HOA	RW
Z1.2		0.05						HOA	HOA	NONE
Z1.3				0.18				HOA	HOA	PW
Z1.4								HOA	HOA	NONE
Z1.5	0.08							HOA	HOA	RW
Z1.6	0.03							TC	TC	NONE
Z1.7	0.35							HOA	HOA	RW
Z1.8	0.03							TC	TC	NONE
Z1.9			1.10					CSD	CSD	RW
Z1.10			0.37	4.61	1.18			CSD	CSD	PW
Z1.11				0.74				CSD	CSD	PW
Z1.12	0.09							HOA	HOA	PW
M1.1		0.26						HOA	HOA	RW
M1.7		0.21						HOA	HOA	RW
M1.10		0.38						HOA	HOA	RW
M1.11		0.16						HOA	HOA	RW
R1.3 (SEWER PUMP STATION)			0.12					MCWD	MCWD	RW
H1 (DETENTION BASIN 1A)				1.54	1.16			MC	CSD	PW
H2				0.82				MC	CSD	PW
D1.1			0.01	1.11	0.79	0.01				
SUBTOTAL	9.52	1.50	1.01	1.84	9.00	3.13	0.01			
PHASE 2										
P2.1	0.32							HOA	HOA	RW
P2.2	0.82							HOA	HOA	RW
Z2.1				0.68				HOA	HOA	RW
Z2.2		0.02						HOA	HOA	NONE
Z2.3		0.01						HOA	HOA	NONE
Z2.4				0.60				HOA	HOA	RW
Z2.5		0.07						HOA	HOA	NONE
Z2.6		0.22						HOA	HOA	RW
Z2.7		0.12						HOA	HOA	RW
M2.1			0.18					HOA	HOA	RW
M2.2			0.18					HOA	HOA	RW
SUBTOTAL	1.14	0.44	0.36	1.28						
PHASE 3										
P3.1	1.10							HOA	HOA	RW
P3.2	0.98							HOA	HOA	NONE
Z3.1			0.15					CSD	CSD	RW
Z3.2			0.16					CSD	CSD	RW
Z3.3			0.16					CSD	CSD	RW
Z3.4			0.29					CSD	CSD	RW
Z3.5		0.55						HOA	HOA	RW
Z3.6			0.02	7.20	0.71	8.74		CSD	CSD	PW
Z3.7 (WATER PS)			0.32					MCWD	MCWD	RW
Z3.8							0.56	MCWD	MCWD	NONE
MCWD WELL							0.55	CSD	CSD	NONE
SUBTOTAL	2.08	0.55	1.10	7.20	0.71	9.85				
PROJECT TOTAL	12.74	2.49	1.37	4.22	16.20	3.84	9.86			
TOTAL ACREAGE: 50.72 AC										

LANDSCAPE PARCEL AREA SUMMARY

EXHIBIT 'F'

**LANDSCAPE TYPE EXHIBIT
EAST GARRISON
MONTEREY COUNTY, CA**



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9699 Blue Larkspur Lane | Suite 105 | Monterey, CA 93940 | 831 649-5225 | F 831 373-5065
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APPENDIX A

CARLSON, BARBEE AND GIBSON, INC.

Summary of Project Capital Improvements



Estimated On-Site Road Capital Improvements – Phases 1, 2, and 3 (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
3" AC Paving	1,639,830	SF
6" AB Rock	1,639,830	SF
Town Center Parking Lot	180,000	SF
Decorative Pavement (10' Band at Lanes)	12,900	SF
Decorative Pavement at Town Center	0	SF
Curb and Gutter (w/ Cushion)	77,955	LF
AC Berm	1,690	LF
Rolled Curb (w/ Cushion)	49,850	LF
24" Valley Gutter	105,336	LF
Sidewalk (w/ Cushion)	308,390	SF
Enhanced Sidewalk	0	SF
Handicap Ramp (w/ Cushion)	199	EA
Driveway Apron (w/ Cushion)	129	EA
Driveway Apron on Existing Curb	1	EA
Curb Drains	1,541	EA
Fog Seal	1,639,830	SF
Street Signs	63	EA
Traffic Signs	155	EA
Traffic Messages	90	EA
Landscaping Roads	578,400	SF
Striping	33,500	LF
Painted Curbs	1,280	LF
Monuments	119	EA
Bus Stops	4	LS
Transit Kiosk	4	LS

Estimated Off-Site Road Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
2" AC Overlay	265,100	SF
3" AC Paving	210,275	SF
4" AC Paving	189,000	SF
6" AB Rock	210,275	SF
12" AB Rock	189,000	SF
Fog Seal	664,375	SF
Guardrail	930	SF
Curb and Gutter (w/ Cushion)	28,545	LF
Median Island Surface	10,990	SF
Median Island Landscaping	12,700	SF
Soundwall	3,250	SF
Street Name Signs	20	EA
Traffic Signs	61	EA
Traffic Messages	29	EA
Striping	59,863	LF
Monuments	56	EA
Pavement Markings	51	EA
Traffic Signal	5	EA
Electroliers	0	EA
Catch Basin	9	EA
Catch Basin - Type III w/ MH Base	3	EA
Catch Basin - Type III	2	EA
Catch Basin - Type II	30	EA
18" ADS - N12 Storm Drain	6,360	LF
24" ADS - N12 Storm Drain	315	LF
30" ADS - N12 Storm Drain	1,410	LF
Field Inlets	12	EA
Inlet Structure	1	EA
Manhole	6	EA
Outfall to Basin	4	EA
Sidewalk	27,745	SF
Handicap Ramp (w/ Cushion)	20	EA
Driveway Ramp (w/ Cushion)	1	EA

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April 20, 2007

Revised February 4, 2008

Estimated Stormwater Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
Detention Basin #2 Infiltration Well	1	EA
Detention Basin #3 Liner	42,000	SF
Manholes	41	EA
Catch Basin - Type II	213	EA
Catch Basin - Type III	28	EA
Catch Basin - Type III w/ MH Base	39	EA
Field Inlets	136	EA
18" ADS-N12	24,390	LF
24" ADS-N12	3,890	LF
30" ADS-N12	36,555	LF
36" ADS-N12	2,320	LF
42" ADS-N12	1,350	LF
Outfall to Basin	8	EA
Inlet Structure/Riser	5	EA
Connect to Existing SD Pipe	2	EA
Overland Release Slope Protection	2,800	SF

Estimated Stormwater Force Main/Pump Station Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
160 HP Pumps and Motors	1	LS
Pump Install and Piping	1	LS
Wetwell and Trash Rack	1	LS
Site Excavation	1	LS
Electrical Controls and Power	1	LS
Diesel EG - set	1	LS
CMU Building and Site Work	1	LS
18" PVC C905 Force Main	4,410	LF
Outfall to Basin 1A	1	EA

Estimated Parks and Open Space Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
Landscaping Open Space (native with minimal irrig.)	907,000	SF
Landscaping Common Area	132,000	SF
Landscaping (native w/ irrigation)	109,500	SF
Temporary Landscaping	28,000	SF
Tree Wells	92	EA
Parks (12.7 acres)	553,000	SF
Court	2	LS
Entry Monument	3	EA
Path Lighting	1	LS
Fence at West Camp	1	LS
Detention Basin Fence	2,990	LS
Tubular Steel Gate	70	LS

On-Site Sanitary Sewer Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
Manholes	190	EA
Cleanouts	0	EA
8" SDR-35 PVC Main	36,510	LF
10" SDR-35 PVC Main	630	LF
12" SDR-35 PVC Main	2,170	LF
15" SDR-35 PVC Main	950	LF
Sewer Main > 15' Deep	1,200	LF
4" PVC Laterals	1,049	EA
6" PVC Laterals	8	EA

Off-Site Sanitary Sewer Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
Manholes (Watkins Gate Road)	5	EA
8" SDR-35 PVC Main (Watkins Gate Road)	900	LF
Replace EX 6" FM with 8" FM (Reservation Road)	4,010	LF
Connect to Ex SSMH P34	1	LS
East Garrison Pump Station Upgrade	1	LS

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On-Site Potable Water Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
8" C900 PVC CI 200	38,915	LF
12" C900 PVC CI 200	4,240	LF
16" DIP Class 52	659	LF
20" DIP Class 52	380	LF
24" MCWD Water Line	2,500	LF
Water Services	1,060	EA
6" Fire Services	55	EA
Fire Hydrants - Residential	63	EA
Fire Hydrants - Commercial	20	EA

On-Site Recycled Water Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
8" C900 PVC CI 200 Water Main	17,100	LF
Water Services with Backflow Preventer	43	LF
Irrigation Sleeves	109	LS

Off-Site Water System Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
8" C-900 PVC CL 200 (Watkins Gate Road)	430	LF
12" C-900 PVC CL 200 (Inter-Garrison Rd.) (Watkins Gate Rd.)	660	LF
16" DIP Class 52 (Watkins Gate Road)	2,480	LF
16" DIP Class 52 (West Camp Street)	1,590	LF
24" CML&C Steel Pipe (Reservation Road)	2,970	LF
Irrigation Sleeves	3	EA

On-Site Dry Utilities Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
Dry Utility System (Excluding 65 Apartments)	1,205	EA
Electroliers - Post Top	625	EA
Electroliers - Post Top with Banner	TBD	EA
Electroliers - Post Top with Banner and Flower Pot	TBD	EA

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Off-Site Dry Utilities Capital Improvements (Source: CBG, 2006)

ITEM	QUANTITY	UNIT
SBC/Cable TV Line (In Reservation Road)	10,560	LF
Reservation Road PG&E Connection	3,200	LS

APPENDIX B

BALANCE HYDROLOGICS, INC.

Operations and Maintenance Manual

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**Operations and Maintenance Manual for
the Stormwater Basins at East Garrison
County of Monterey, California**

Report prepared for:
UCP East Garrison, LLC

Prepared by:
Travis Baggett
Eric Riedner, P.E.

Balance Hydrologics, Inc.

December 2011

A report prepared for:

Jim Fletcher
UCP East Garrison, LLC
6489 Camden Avenue Suite 204
San Jose, California 95120
(408) 323-1113 x405

**Operations and Maintenance Manual for the East Garrison Project,
Monterey County, California**

Balance Project Assignment 203035
by



Travis Baggett
Hydrologist/Meteorologist



Eric Riedner, P.E.
Civil Engineer/Hydrologist



©2011 Balance Hydrologics, Inc.
800 Bancroft Way, Suite 101
Berkeley, California 94710
(510) 704-1000
office@balancehydro.com

December 16, 2011

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1. INTRODUCTION

1.1 Purpose

This document sets forth the operations and maintenance guidelines for the stormwater basins at the East Garrison Project in the County of Monterey, California. This 244 - acre residential development project is located approximately 3 miles southwest of the City of Salinas on a portion of the former Fort Ord Military Reservation. The East Garrison site sits atop a prominent bluff that runs along the southern border of the Salinas River Valley, which passes along the northern border of the former military reservation.

The system of basins is designed to ultimately infiltrate the majority of the stormwater. This design of basins and drainages address three concerns raised in the Hydrology and Water Quality Policy section of the Fort Ord Reuse Plan: control of peak flows, groundwater recharge, and stormwater quality management.

1.2 Goals and Objectives of the Plan

A number of interrelated goals have guided the development of this manual and must not be overlooked if it is to truly serve its intended purpose. These goals include the following:

- Set up a monitoring regimen that allows for a general evaluation of the effectiveness of the basins in conveying and ultimately infiltrating the stormwater runoff from the development.
- Monitor the basins to assess whether they continue to function consistent with the highest regard for public safety.
- Identify an appropriate inspection and monitoring schedule to meet the overall goals.
- Set forth the expected routine maintenance functions and associated maintenance schedule that should allow the basins to function as designed.
- Anticipate non - routine maintenance needs that may arise and the appropriate responses to these needs.
- Identify the responsible parties for carrying out the plan and the sources of funding to properly implement the guidelines of the OMM.
- Foster a sense of adaptive management that will allow the OMM to evolve in order to save costs and adjust to changes at the site and/or in regulatory guidance.

1.3 What the East Garrison Stormwater Basins are Not

The stormwater basins at the East Garrison project are not intended to serve as a wetland mitigation feature. Hence, they are subject to the full range of maintenance and monitoring measures needed to maximize their effectiveness with regard to safe and efficient management of stormwater.

2. FUNCTION AND DESIGN OF THE STORMWATER BASINS

2.1 Stormwater Basins Characteristics

A total of six stormwater basins are located within and adjacent to the East Garrison project with the intended functions of retention and infiltration of stormwater. The locations of the basins are shown in Figure 1. By ultimately infiltrating all the stormwater, this system addresses the concerns raised in the Fort Ord Reuse Plan of control of peak flows, groundwater recharge, and stormwater quality management. Five of the six basins work in series where stormwater runoff from the upper points of the watershed is directed to the next basin in the series. Most basins also accept runoff directly from impervious surfaces in their immediate vicinity. Because of this interrelated system, if any one basin is functioning improperly, then the other basins below it in the series could be affected. For this reason the designed functioning of each basin is important to the designed functioning of all the other basins.

A more detailed description of the basin design and the rationale behind the designs can be found in the Stormwater Management Plan for the East Garrison Project, 2006.

2.2 Normal Functioning of the Retention Stormwater Basins

2.2.1 Stormwater Basin 2a

Stormwater Basin 2a is designed to accept runoff from the surrounding development, as well as overflow from the Youth Camp Basin via a pipe. Although some degree of infiltration is expected to occur naturally at this basin, the effect of infiltration was not included in the modeling of this basin. A 2-year design storm is modeled to fill the basin to a maximum depth of 5 feet measured from the 8-inch by 8-inch rectangular orifice at the toe of the bank nearest Basin 2b (eastern bank). A 10-year design storm, with a rainfall intensity of 0.6 inches per hour, is modeled to fill the basin to a depth of 7 feet, above the orifice located on the basin floor. This basin also contains a 3 foot diameter (or larger) raised outlet pipe with a rim elevation about 9 feet above the basin floor to handle flows in the event that the orifice becomes obstructed. This riser is located on the bank nearest Basin 2b (eastern bank). Both of these outflows drain to an underground junction box located below stormwater Basin 2b (see further discussion below.)

2.2.2 Stormwater Basin 2b

Stormwater Basin 2b is a multi - use basin designed to hold stormwater for less than a day. The basin receives stormwater from Basin 2a and the surrounding neighborhood. The basin will be a multi-use sports field and is intended to pond only during wet storms and for less than 24

hours after the end of precipitation. Like Basin 2a, this basin will experience some degree of infiltration, the effects of which were not included in the modeling of the basin. Figure 2 shows the designs for the below ground junction box located in this basin which accepts stormwater from Basin 2a. The junction box is located at the toe of the bank which is furthest from Basin 2a (western bank). Low flows (i.e. landscape irrigation runoff) arriving into the junction box will be allowed to infiltrate directly into the ground from within the junction box by way of a sand topped gravel infiltration well. Higher stormwater flows will exit the box via a 24-inch pipe draining to stormwater Basin 3. In the event that this pipe is obstructed, an open topped riser with a minimum diameter of 4.5 feet will direct stormwater to Basin 3. A 2-year design storm is modeled to fill the basin to a peak depth of 4 feet measured from the top of the junction box. A 10-year design storm is modeled to fill the basin to a depth of 5 feet, measured from the top of the junction box.

The junction box below stormwater Basin 2a accepts inflow from Basin 2a via an underground pipe and from Basin 2b thorough an orifice. Inflow is directed into an underground debris accumulation area to capture larger objects that could obstruct stormwater pipes. From there the water flows into an infiltration chamber where low flows are allowed to infiltrate into the ground. Flows which are not infiltrated are allowed to spill into a pipe connecting to stormwater Basin 3. Especially high flows will inundate the field and eventually drain into the junction box and to stormwater Basin 3.

2.2.3 Stormwater Basin 3

Stormwater Basin 3 will accept stormwater runoff from the surrounding neighborhood as well as from Basins 2a and 2b. A 2-year design storm is modeled to fill the basin to a peak depth of 3.5 feet measured from the basin floor adjacent to the pump sump. A 10-year design storm is modeled to fill the basin to a depth of 6 feet, measured from the basin floor. Stormwater Basin 3 is lined with a geosynthetic liner to nearly eliminate infiltration that could otherwise lead to slope instabilities along the adjacent Reservation Road. As a result, the only release of runoff from the basin will be through a pump installed to convey flow to Basin 1a. The pump has been initially set to begin pumping when the water level in the basin is 2 feet above the floor of the basin adjacent to the pump sump. It will stop pumping when the water level in the sump is 2 feet below the lowest point of the floor of the basin. Because of this range, persistent water levels of less than 2 feet in depth are not unusual. The basin has been designed to have no standing pools separated from the pump sump.

A back-up pump has been installed to provide redundancy in the event that the first pump fails, or requires maintenance. In the event that both pumps fail during high flows, an outlet pipe with a rim elevation 11 feet above the basin floor and a minimum diameter of 41/2 feet, which is connected to the existing storm drain, will provide release of stormwater from the basin to prevent overtopping of the basin.

2.3 Normal Functioning of the Infiltration Stormwater Basins

2.3.1 Stormwater Basin 1 a

Basin 1a is the primary stormwater infiltration basin for the majority of the development. It will receive stormwater directly from the surrounding development area and from the other developed areas via the pumped inflow from stormwater Basin 3. The infiltration at this basin will address concerns raised in the Hydrology and Water Quality Policy section of the Fort Ord Reuse Plan, specifically groundwater recharge and stormwater quality management. The modeled infiltration rate for this basin is 4 inches per hour. A 2-year design storm is modeled to fill the basin to a peak water level just below the overflow connecting to Basin 1b, located along the bank of the of the basin in the corner adjacent to Inter-Garrison Road furthest from Reservation Road (Figure 1). A 10-year design storm is modeled to have a peak water level that overtops the overflow orifice allowing the adjacent sump (Basin 1b) to be utilized.

2.3.2 Stormwater Basin 1 b

Stormwater Basin 1b is an existing sump that will be utilized as an overflow basin to handle occasional runoff from stormwater Basin 1a during the largest storm events. It is a naturally occurring infiltration basin and should be allowed to function with an absolute minimum of interference.

2.3.3 Stormwater Basin 4

Stormwater Basin 4 will accept runoff from the surrounding open space, as well as from an underground storm drain system below Watkins Gate Road. This stormwater basin is designed to completely infiltrate the stormwater it receives with a modeled infiltration rate of 3.8 inches per hour and will have no connection to the other stormwater basins. A 2-year design storm is modeled to fill the basin to a peak depth of 5 feet measured from the floor of the basin. A 10-year design storm is modeled to fill the basin to a depth of 5.5 feet, measured from the floor of the basin. The floor of the basin should be approximately 10 feet below the adjacent Reservation Road.

2.3.4 Youth Camp Basin

This basin should be allowed to mimic natural infiltration conditions as is practicable. The Youth Camp basin is not a necessary element of the overall stormwater management plan. The basin will be created by the restriction of a channel by West Camp Road, marking the western edge of the community south of Inter-Garrison Road. It will have a raised outlet pipe at 3' above ground level. The outlet pipe will direct overflow to Basin 2a should the Youth Camp basin not be able to infiltrate stormwater runoff received from the surrounding open space.

3. MONITORING PROGRAM

3.1 Monitoring Program

The monitoring activities have been selected to assess the performance of the infiltration stormwater basins in relation to the goals set forth in Section 1.2. Details regarding the proposed monitoring activities are presented below. The overall monitoring program is summarized in the maintenance report forms presented in Appendix A.

3.1.1 Stormwater treatment and conveyance

The following inspections will be carried out in order to qualitatively assess whether the stormwater basins are functioning as intended with regard to conveying stormwater runoff:

1. *Water Surface drawdown (Basins 1a and 4).* As explained in Sections 2.2.1 and 2.2.2, the infiltration stormwater basins are designed to infiltrate the majority of the water delivered to them within 72 hours. Routine inspections of the infiltration basins after rainfall events should be focused on observing the water levels and verifying that they are falling after the end of the rain. If water is observed to linger in the basins, then further inspections of the basin floors should be scheduled to identify the obstruction to infiltration.
2. *Litter and coarse debris.* Inspectors should qualitatively estimate the quantity of litter and coarse debris present in the basins. Additionally, coarse debris can become entrained into the stormwater system and cause obstructions to stormwater flow through pipes and orifices. If quantities of coarse debris are found such that they cannot be removed at the time of the monitoring visit, additional maintenance should be scheduled to remove the debris.
3. *Condition of the inlets and outlets.* Visual inspection of the inlets to the basins should be carried out with special attention to noting erosion at, or immediately downslope of the point of discharge. Any obstruction of the inlet should be noted, whether from debris or encroaching vegetation. If more than one quarter of the inlet pipe diameter is obstructed, immediate remedial maintenance should be performed. The outlet risers should also be inspected to assess whether the grating is clear of obstruction. Obstructed grating should be cleared immediately if possible.
4. *Evidence of erosion.* Inspectors should walk the perimeter of the basins to identify any evidence of erosion or bank failures. Small soil slumps may be acceptable, but failures involving more than five cubic yards of material should be noted and will likely need eventual repair or stabilization.

5. *Sediment deposition.* Dry - season inspections should note any accumulation of sediment along the floors of the basins. A coating of sediment in Basins 1a and 4 will reduce infiltration rates and maintenance should be scheduled to remove the coating before the wet - season. Such a coating in the other basins is acceptable, but accumulation which reaches 1 foot in depth should be removed.
6. *Vegetation.* Inspectors should measure the height and extent of vegetation and note the extent of vegetation which is over 5 - feet in height or width. Evidence of woody vegetation should be noted and scheduled for removal. This is especially important in Basin 3 as root growth may damage the geotextile liner.
7. *Leakage from Basin 3 liner.* Both wet and dry - season monitoring visit should check for signs of wetting along the bluff adjacent to Basin 3. The location and extent of any wetting should be noted.

3.1.2 Public safety and vector control

Routine inspections should be performed to monitor several additional general aspects that are important to the safe operation of the stormwater basins. Monitoring program elements addressing these aspects include the following:

1. *Public Safety Issues.* Routine inspections should include careful notation of evidence that the basins are being encroached upon or used in an improper manner. Access barriers (in Basins 1a, 3, and 4) and signage will need to be inspected for their integrity and for damage from vandalism or other causes. Evidence of pathways or other signs of encroachment into Basins 1a, 3, and 4 by unattended minors should be given particular attention and remedial measures to further limit access may need to be provided.
2. *Vector Control.* Inspections will need to be sensitive to concerns related to vector control, especially with respect to limiting habitat suitable for mosquito populations. This will be especially important in Basin 3 which is built with a geosynthetic liner to nearly eliminate infiltration. Sedimentation in other basins could also reduce infiltration and create mosquito habitat. Routine monitoring visits will need to note the extent of ponding and whether areas of stagnant water exist. Whenever such areas are found, maintenance should be scheduled to promptly remove obstructions to improve drainage. Any odor problems should be noted, as they are usually indicative of prolonged ponding of stagnant water. If persistent and repeated ponding is noted in Basin 3, non - routine maintenance may be called for to regrade the basin floor with the objective of draining the basin to the pump sump, or to provide improved drainage pathways.

3. *Pump Monitoring.* Pump monitoring will be done as part of the pump maintenance scheduling separate from this report. It is recommended, however, to observe the operation of the pump while inspecting Basin 3 to verify that it is working as expected. Any observations which raise concern should be forwarded to the person responsible for the pump maintenance.

3.2 Suggested Monitoring Schedule

3.2.1 Routine monitoring activities

Two full routine inspections should take place each year: one during the wet season and one during the dry season. One wet season monitoring inspection should be conducted in December, January, or February, within 48 hours following a rain event which accumulates 0.2 inches or more. The dry season monitoring should take place during June or July. Appendix A includes standard inspection checklists that should be used for the routine monitoring visits during both the wet and dry seasons.

3.2.2 Extreme-event monitoring

In addition to the routine monitoring schedule described above, special monitoring visits should be carried out after each large precipitation event within the contributing watersheds. For these purposes, a large precipitation event is defined as a storm that results in 2 inches or more of rainfall within a 24-hour period.

4. MAINTENANCE PROGRAM

4.1 Routine Maintenance Activities and Schedule

The routine maintenance schedule should include an element of flexibility to respond to situations that may be identified through the routine monitoring program. However, a number of maintenance activities will be required on a routine basis to keep the stormwater basins functioning properly. These include the following:

1. *Removal of litter and coarse debris.* Litter and coarse debris are troublesome from an aesthetic perspective but particularly for the threat of complications from an obstructed drainage pathway that they represent. Maintenance staff should plan to remove large litter and debris by hand during or shortly after the routine monitoring visits following the summer and winter visit if the basins are dry enough to allow access. If litter removal cannot be completed in these time frames, it should be scheduled as soon as the basins have dried sufficiently.
2. *Vegetation control and management.* The need to prune and/or remove excessively tall vegetation will be identified through the routine monitoring. Proper functioning of the stormwater basins depends on having an adequate stormwater retention volume available. Therefore, any large volume of debris and/or vegetation is cause for concern. Inspectors will routinely measure the height of the tallest vegetation with a tape measure. If vegetation greater than five feet in height is found to cover more than 30 percent of the basin floor, maintenance will be scheduled to prune and/or remove it as appropriate. In general, these activities should be scheduled for shortly after the dry - season monitoring in July. Any woody vegetation should be removed while small enough to be done easily. Any woody vegetation found in Basin 3 should be removed promptly.
3. *Cleaning of the stormwater basins outlet structures.* The outlet structures should be cleared as needed during or following the summer monitoring visit. This activity can also be carried out during or just after the winter monitoring visit. Careful attention should be given to removing all debris near the outlet that may cause blockage.
4. *Stormwater Basin 2b Junction Box Maintenance.* The junction box in Basin 2b requires annual summer maintenance to keep it functioning properly. This maintenance will include removal of material from the debris accumulation area of the junction box. The infiltration well should also be inspected. The sand covering the well should be clean and free from excessive sedimentation. If a coating of sedimentation has accumulated, raking and overturning of the sand may suffice to increase infiltration to a desired rate. If the sand is not infiltrating at the desired rate it can be removed, along with the underlying geotextile layer and both can be replaced with new materials to the design specifications (Figure 2.)

4.2 Non-routine Maintenance

Non-routine maintenance should be carried out on an “as needed” basis for problems identified in the monitoring program.

1. *Emergency Outlet Maintenance.* The routine or extreme event monitoring may identify serious problems with the outlet structure such as major blockage by debris. These situations will need to be remedied immediately.
2. *Bank Repairs.* Areas of bank erosion that are deemed to need repair should be dealt with in the late summer, preferably after the July dry - season monitoring. Care should be taken to keep the amount of vehicle use in the infiltration basins to an absolute minimum to help preserve infiltration capacity.
3. *Sediment Removal.* Sediment contaminated with oil or other petroleum hydrocarbons will need to be removed as needed. Should evidence of contamination be present, sediment sampling can be done to quantify the level of contamination or, if preferred, the contaminated sediment can be removed without prior sampling. Sediment to be removed will need to be tested using the toxic characteristics leaching procedure (TCLP) per U.S. EPA regulations (40 CFR Part 261). This procedure is needed to determine whether the sediment is clean enough for use as general fill. This is usually the case, but special disposal criteria per the Resource Conservation and Recovery Act (RCRA) may be needed in exceptional circumstances. Besides remediation contaminated sediments, removal of sediment from the stormwater basins is expected to be a very infrequent activity. The monitoring records should be used to identify trends in sediment deposition, both to establish whether sediment removal is needed and to help locate upstream sediment sources that may be accelerating deposition in the basins. Should a decrease in infiltration be noted in Basins 1a and 4, a percolation test should be scheduled. If the percolation test shows infiltration rates of less than 4 inches per hour for Basin 1a or 3.8 inches per hour for Basin 4, steps to improve infiltration should be taken. As a first response for smaller areas, a crew should enter the basin on foot and hand shovel any coating of sediment which is believed to be inhibiting infiltration. After removal the underlying sand should be raked to aerate it. If this does not improve the infiltration to a satisfactory rate, aeration holes can be created using a variety of tools, to be chosen based on the size of the area which needs to be aerated. A core aerator, one that removes a core of soil/sand is preferable as it is least likely to cause subsurface compaction and most likely to improve infiltration. If aeration measures do not increase infiltration to the desired rate, tilling can be undertaken if compaction is believed to be the problem. If the problem is due to a high amount of clay in the sand, the top layer of sand/clay may be removed and replaced with low/no clay sand.

4. *Geotextile Liner Repairs.* A leaking liner in Basin 3 could lead to bank instabilities in the bluff on the north east side of Reservation Road. If significant wetting is observed, its location in relation to Basin 3 should be noted and the extent, duration, and timing should be noted as well. The location of wetting along the bluff suggests the location of the leak within Basin 3.
5. *Improper Encroachment.* There will be fencing enclosing Basin 1A, Basin 2A, and Basin 3 provided for the proper working of the basins and protection of the public. Any signs of encroachment should be noted and remedial actions should be taken to prevent future encroachment.

4.3 Responsible Parties

Monitoring and maintenance activities shall be performed by the East Garrison Community Services District (CSD). The East Garrison Community Services District (CSD) should be free to delegate and/or contract for services as needed to assure that the monitoring and maintenance program is completed in a thorough and timely manner.

4.4 Funding for Maintenance and Monitoring

Funding for the activities covered in this OMM will come from funds provided by the East Garrison Community Services District (CSD).

4.5 Reporting

A summary report of the previous year's monitoring and maintenance activities should be prepared after the dry season monitoring. The report should compile the monitoring checklists used during every inspection visit to the basins and note any and all maintenance activities that were carried out.

The annual reports should be made available to local and regulatory agency staff as requested. Annual reports should be kept for a period of no less than 5 years to aid in the review of the performance of the basins and detection of trends in maintenance needs.

5. LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice in surface-water hydrology and stormwater quality management existing in Northern California for projects of similar scale at the time the investigations were performed. No other warranties, expressed or implied, are made.

Concepts, findings and interpretations contained in this plan are intended for the exclusive use of William Lyon Homes, under the conditions presently prevailing except where noted otherwise. Their use beyond the boundaries of the East Garrison site could lead to environmental or structural damage, and/or to noncompliance with policies, regulations or permits. The assumptions and findings in this report were developed solely for the design of storm drainage infrastructure at the site as an aid to more detailed civil engineering work. They should not be used for other purposes without great care, updating, review of analytical methods used, and consultation with Balance staff familiar with the site

6. REFERENCES

Balance Hydrologics Inc. 2005, Stormwater Management Plan for the East Garrison Project, Monterey, California

Balance Hydrologics Inc. 2006, Stormwater Management Plan for the East Garrison Project, Monterey, California

Storm Water Quality Task Force, 1993, California storm water best management practice handbook, multi-paged

FIGURES



**Figure 1. Post-Project drainage figure,
East Garrison, County of Monterey**

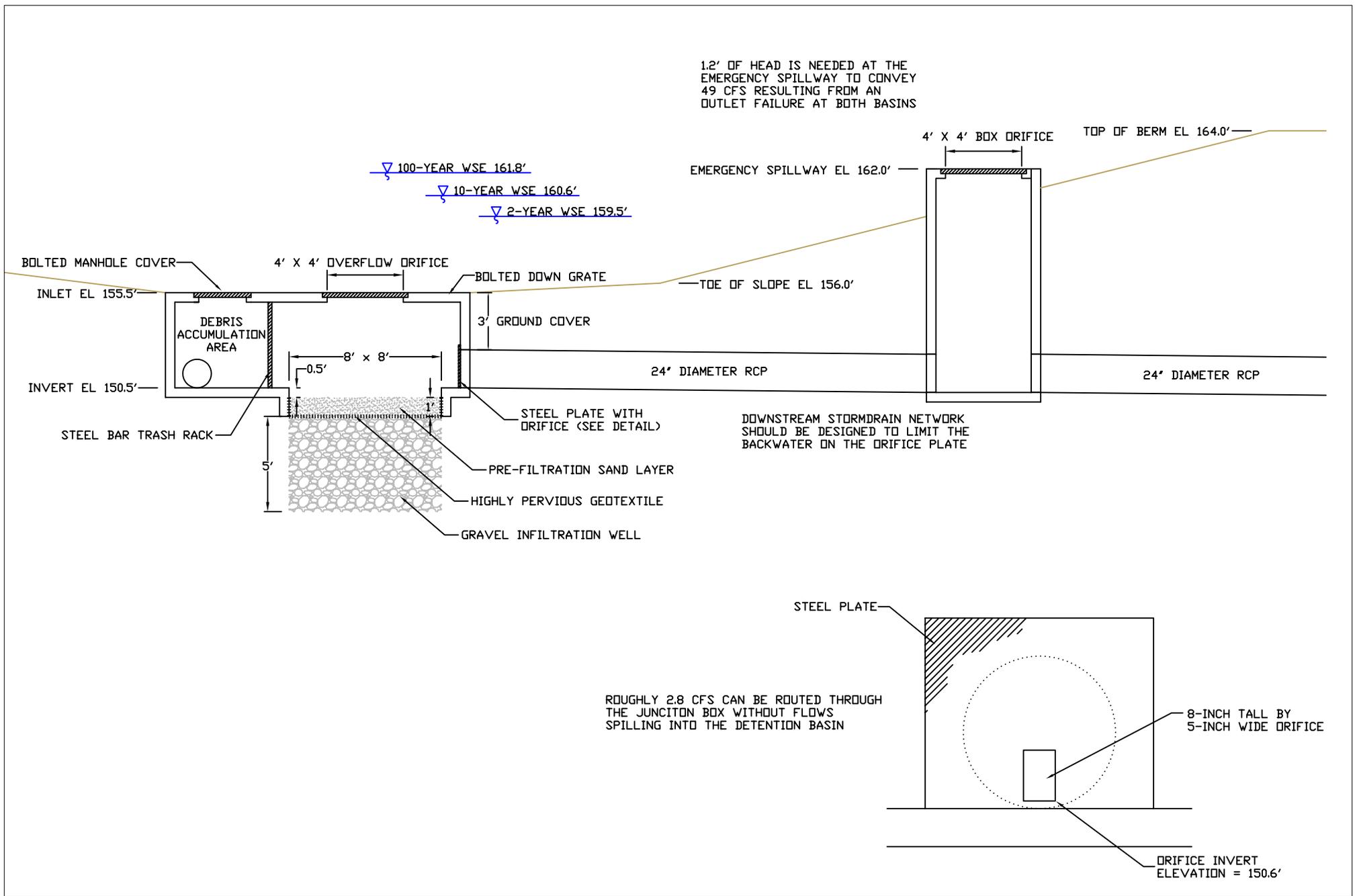


Figure 2. Proposed Basin 2b junction box configuration with infiltration well, East Garrison, Monterey County, California

APPENDICES

APPENDIX A

Maintenance Report Forms

East Garrison Stormwater Basins
SITE INSPECTION AND MAINTENANCE SCHEDULE

Monitoring/Maintenance Activity	Frequency
Water surface drawdown observation	Twice annually after rainfall event greater than 0.2 inches in 24 hours, as well as in the event of rainfall at least 2 inches in 24 hours.
Inlet/outlet inspection	Twice annually
Erosion Observation	Twice annually
Sediment deposition observation	Twice annually
Basin 3 liner inspection	Twice annually
Public safety inspection	Twice annually
Vector control	Twice annually
Removal of litter and course debris.	Twice annually
Vegetation control and management.	Twice annually
Cleaning of stormwater basin outlet structures.	Twice annually
Stormwater Basin 2b junction box inspection/maintenance	Twice annually
Bank repairs	As needed
Sediment removal	As needed
Geotextile liner repair	As needed
Improper encroachment remediation	As needed

East Garrison Stormwater Basin 1a and 1b

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin

Inspector: _____ Date: _____

Weather conditions: _____

Days since last rainfall: _____ Date of last visit: _____

	ELEMENT	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
Inlet/Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Is there large vegetation growing within 6 feet of the inlet opening?				
	Are the inlets functioning in a satisfactory manner?				
	Are there any obstructions blocking the opening of the open topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to stabilize the slopes or embankments?				
Infiltration Obstructions	Is there a buildup of algae or silt on the floor of the basin? To what degree?				
	Does maintenance need to be scheduled to remove the buildup?				
	Can the buildup be removed by hand or will vehicles be required?				

East Garrison Stormwater Basin 1a and 1b

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin

Infiltration Rate Monitoring	Is there evidence of long term (more than a week) ponding of water? Describe in the notes.				
	Have direct observations been made of standing water in the basin for longer than 48 hours after the last pump cycle?				
	What is believed to be the cause of the standing water?				
	Does maintenance need to be scheduled to remediate the problem?				
Human Encroachment	Is there evidence of encroachment, vandalism or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed encroachment?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				
Basin 1b	Is there any evidence of prolonged standing water in Basin 1b?				
	Is there an excess of trash or debris in Basin 1b?				
	Has the over flow from basin 1a to basin 1b been overtopped since the last visit?				

East Garrison Stormwater Basin 2a

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Inspector: _____ Date: _____

Weather conditions: _____

Days since last rainfall: _____ Date of last visit: _____

	ELEMENT	YES	NO	N/A	COMMENTS/SUGGESTED MAINTENANCE
Inlet/Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Are the inlets functioning in a satisfactory manner?				
	Are there any obstructions blocking the opening of the open topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to remediate the problem?				
Vandalism	Is there evidence of vandalism or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed vandalism?				

East Garrison Stormwater Basin 2a

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin

Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

East Garrison Stormwater Basin 2b

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Inspector: _____ Date: _____

Weather conditions: _____

Days since last rainfall: _____ Date of last visit: _____

	ELEMENT	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
Inlet /Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Are the inlets functioning in a satisfactory manner?				
	Are there any obstructions blocking the opening of the open topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to remediate the problem?				
Vandalism	Is there evidence of vandalism or improper use of the Multi-use stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed vandalism?				

East Garrison Stormwater Basin 2b

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin

Junction Box	Does the infiltration structure appear to be infiltrating low flows?				
	Has the sand and geotextile been replaced within the last year?				
	Are there any obstructions blocking the inlet or outlet structures?				
	Has the debris collection area been emptied within the last year?				
	Does the junction box require an increase in maintenance activities to function properly?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

East Garrison Stormwater Basin 3

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Inspector: _____ Date: _____

Weather conditions: _____

Days since last rainfall: _____ Date of last visit: _____

	ELEMENT	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
Inlet /Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Are the inlets functioning in a satisfactory manner?				
	Has there been any recent pump maintenance?				
	Are there any obstructions blocking the opening of the open topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to stabilize the embankments?				
Basin Grading	Are there signs of pooling water separate from the pump house?				
	Can the observed pools be drained by digging a channel to the pump inlet?				
	Does maintenance need to be scheduled to regrade the basin floor?				

East Garrison Stormwater Basin 3

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Adjacent Bluff	Are the slopes of the adjacent bluff (Across Reservation Road) showing signs of wetting?				
	Does maintenance need to be scheduled to eliminate bluff wetting?				
Vandalism	Is there evidence of vandalism or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed vandalism?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

East Garrison Stormwater Basin 4

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Inspector: _____ Date: _____

Weather conditions: _____

Days since last rainfall: _____ Date of last visit: _____

	ELEMENT	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
Inlet /Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Is there large vegetation growing within 6 feet of the inlet opening?				
	Are the inlets functioning in a satisfactory manner?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to stabilize the slopes or embankments?				
Infiltration Obstructions	Is there a buildup of algae or silt on the floor of the basin? To what degree?				
	Does maintenance need to be scheduled to remove the buildup?				
	Can the buildup be removed by hand or will vehicles be required?				

East Garrison Stormwater Basin 4

SITE INSPECTION AND MAINTENANCE REPORT FORM

To be completed during each inspection and maintenance visit to the basin.

Infiltration Rate Monitoring	Is there evidence of long term (more than a week) ponding of water? Describe in the notes.				
	Have direct observations been made of standing water in the basin for longer than 48 hours after the last rain?				
	What is believed to be the cause of the standing water?				
	Does maintenance need to be scheduled to remediate the problem?				
Human Encroachment	Is there evidence of encroachment, vandalism or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed encroachment?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

APPENDIX C
HOA and CSD Maintenance Budgets

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East Garrison HOA
Estimated Budget - August 2012
(Data Source: PCM Consulting Services, Inc., 2012)

YEAR	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058						
Cumulative No. of Units	121	241	362	482	603	723	844	964	1,085	1,205	1,325	1,445	1,565	1,685	1,805	1,925	2,045	2,165	2,285	2,405	2,525	2,645	2,765	2,885	3,005	3,125	3,245	3,365	3,485	3,605	3,725	3,845	3,965	4,085	4,205	4,325	4,445	4,565	4,685	4,805	4,925	5,045	5,165	5,285	5,405	5,525						
A. INCOME																																																				
Assessment	\$ 185,088	\$ 379,430	\$ 563,374	\$ 747,278	\$ 931,182	\$ 1,115,086	\$ 1,298,990	\$ 1,482,894	\$ 1,666,798	\$ 1,850,702	\$ 2,034,606	\$ 2,218,510	\$ 2,402,414	\$ 2,586,318	\$ 2,770,222	\$ 2,954,126	\$ 3,138,030	\$ 3,321,934	\$ 3,505,838	\$ 3,689,742	\$ 3,873,646	\$ 4,057,550	\$ 4,241,454	\$ 4,425,358	\$ 4,609,262	\$ 4,793,166	\$ 4,977,070	\$ 5,160,974	\$ 5,344,878	\$ 5,528,782	\$ 5,712,686	\$ 5,896,590	\$ 6,080,494	\$ 6,264,398	\$ 6,448,302	\$ 6,632,206	\$ 6,816,110	\$ 7,000,014	\$ 7,183,918	\$ 7,367,822	\$ 7,551,726	\$ 7,735,630	\$ 7,919,534	\$ 8,103,438	\$ 8,287,342	\$ 8,471,246	\$ 8,655,150	\$ 8,839,054				
B. PROJECTED EXPENSES																																																				
Corporate Franchise Tax	\$ 14	\$ 30	\$ 46	\$ 62	\$ 78	\$ 94	\$ 110	\$ 126	\$ 142	\$ 158	\$ 174	\$ 190	\$ 206	\$ 222	\$ 238	\$ 254	\$ 270	\$ 286	\$ 302	\$ 318	\$ 334	\$ 350	\$ 366	\$ 382	\$ 398	\$ 414	\$ 430	\$ 446	\$ 462	\$ 478	\$ 494	\$ 510	\$ 526	\$ 542	\$ 558	\$ 574	\$ 590	\$ 606	\$ 622	\$ 638	\$ 654	\$ 670	\$ 686	\$ 702	\$ 718	\$ 734	\$ 750	\$ 766				
Insurance	\$ 1,880	\$ 3,854	\$ 5,828	\$ 7,802	\$ 9,776	\$ 11,750	\$ 13,724	\$ 15,698	\$ 17,672	\$ 19,646	\$ 21,620	\$ 23,594	\$ 25,568	\$ 27,542	\$ 29,516	\$ 31,490	\$ 33,464	\$ 35,438	\$ 37,412	\$ 39,386	\$ 41,360	\$ 43,334	\$ 45,308	\$ 47,282	\$ 49,256	\$ 51,230	\$ 53,204	\$ 55,178	\$ 57,152	\$ 59,126	\$ 61,100	\$ 63,074	\$ 65,048	\$ 67,022	\$ 68,996	\$ 70,970	\$ 72,944	\$ 74,918	\$ 76,892	\$ 78,866	\$ 80,840	\$ 82,814	\$ 84,788	\$ 86,762	\$ 88,736	\$ 90,710	\$ 92,684	\$ 94,658	\$ 96,632			
Electricity	\$ 5,897	\$ 11,879	\$ 17,861	\$ 23,843	\$ 29,825	\$ 35,807	\$ 41,789	\$ 47,771	\$ 53,753	\$ 59,735	\$ 65,717	\$ 71,699	\$ 77,681	\$ 83,663	\$ 89,645	\$ 95,627	\$ 101,609	\$ 107,591	\$ 113,573	\$ 119,555	\$ 125,537	\$ 131,519	\$ 137,501	\$ 143,483	\$ 149,465	\$ 155,447	\$ 161,429	\$ 167,411	\$ 173,393	\$ 179,375	\$ 185,357	\$ 191,339	\$ 197,321	\$ 203,303	\$ 209,285	\$ 215,267	\$ 221,249	\$ 227,231	\$ 233,213	\$ 239,195	\$ 245,177	\$ 251,159	\$ 257,141	\$ 263,123	\$ 269,105	\$ 275,087	\$ 281,069	\$ 287,051	\$ 293,033			
Land Maintenance	\$ 7,204	\$ 14,408	\$ 21,612	\$ 28,816	\$ 36,020	\$ 43,224	\$ 50,428	\$ 57,632	\$ 64,836	\$ 72,040	\$ 79,244	\$ 86,448	\$ 93,652	\$ 100,856	\$ 108,060	\$ 115,264	\$ 122,468	\$ 129,672	\$ 136,876	\$ 144,080	\$ 151,284	\$ 158,488	\$ 165,692	\$ 172,896	\$ 180,100	\$ 187,304	\$ 194,508	\$ 201,712	\$ 208,916	\$ 216,120	\$ 223,324	\$ 230,528	\$ 237,732	\$ 244,936	\$ 252,140	\$ 259,344	\$ 266,548	\$ 273,752	\$ 280,956	\$ 288,160	\$ 295,364	\$ 302,568	\$ 309,772	\$ 316,976	\$ 324,180	\$ 331,384	\$ 338,588	\$ 345,792	\$ 352,996			
Custodial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Landscaping	\$ 427.15	\$ 854.30	\$ 1,281.45	\$ 1,708.60	\$ 2,135.75	\$ 2,562.90	\$ 2,990.05	\$ 3,417.20	\$ 3,844.35	\$ 4,271.50	\$ 4,698.65	\$ 5,125.80	\$ 5,552.95	\$ 5,980.10	\$ 6,407.25	\$ 6,834.40	\$ 7,261.55	\$ 7,688.70	\$ 8,115.85	\$ 8,543.00	\$ 8,970.15	\$ 9,397.30	\$ 9,824.45	\$ 10,251.60	\$ 10,678.75	\$ 11,105.90	\$ 11,533.05	\$ 11,960.20	\$ 12,387.35	\$ 12,814.50	\$ 13,241.65	\$ 13,668.80	\$ 14,095.95	\$ 14,523.10	\$ 14,950.25	\$ 15,377.40	\$ 15,804.55	\$ 16,231.70	\$ 16,658.85	\$ 17,086.00	\$ 17,513.15	\$ 17,940.30	\$ 18,367.45	\$ 18,794.60	\$ 19,221.75	\$ 19,648.90	\$ 20,076.05	\$ 20,503.20	\$ 20,930.35	\$ 21,357.50		
Landscaping Miscellaneous	\$ 18,364.20	\$ 36,728.40	\$ 55,092.60	\$ 73,456.80	\$ 91,821.00	\$ 110,185.20	\$ 128,549.40	\$ 146,913.60	\$ 165,277.80	\$ 183,642.00	\$ 202,006.20	\$ 220,370.40	\$ 238,734.60	\$ 257,098.80	\$ 275,463.00	\$ 293,827.20	\$ 312,191.40	\$ 330,555.60	\$ 348,919.80	\$ 367,284.00	\$ 385,648.20	\$ 404,012.40	\$ 422,376.60	\$ 440,740.80	\$ 459,105.00	\$ 477,469.20	\$ 495,833.40	\$ 514,197.60	\$ 532,561.80	\$ 550,926.00	\$ 569,290.20	\$ 587,654.40	\$ 606,018.60	\$ 624,382.80	\$ 642,747.00	\$ 661,111.20	\$ 679,475.40	\$ 697,839.60	\$ 716,203.80	\$ 734,568.00	\$ 752,932.20	\$ 771,296.40	\$ 789,660.60	\$ 808,024.80	\$ 826,389.00	\$ 844,753.20	\$ 863,117.40	\$ 881,481.60				
Irrigation Repair	\$ 1,836	\$ 3,672	\$ 5,508	\$ 7,344	\$ 9,180	\$ 11,016	\$ 12,852	\$ 14,688	\$ 16,524	\$ 18,360	\$ 20,196	\$ 22,032	\$ 23,868	\$ 25,704	\$ 27,540	\$ 29,376	\$ 31,212	\$ 33,048	\$ 34,884	\$ 36,720	\$ 38,556	\$ 40,392	\$ 42,228	\$ 44,064	\$ 45,900	\$ 47,736	\$ 49,572	\$ 51,408	\$ 53,244	\$ 55,080	\$ 56,916	\$ 58,752	\$ 60,588	\$ 62,424	\$ 64,260	\$ 66,096	\$ 67,932	\$ 69,768	\$ 71,604	\$ 73,440	\$ 75,276	\$ 77,112	\$ 78,948	\$ 80,784	\$ 82,620	\$ 84,456	\$ 86,292	\$ 88,128	\$ 89,964	\$ 91,800		
Tree Maintenance	\$ 6,030	\$ 12,060	\$ 18,090	\$ 24,120	\$ 30,150	\$ 36,180	\$ 42,210	\$ 48,240	\$ 54,270	\$ 60,300	\$ 66,330	\$ 72,360	\$ 78,390	\$ 84,420	\$ 90,450	\$ 96,480	\$ 102,510	\$ 108,540	\$ 114,570	\$ 120,600	\$ 126,630	\$ 132,660	\$ 138,690	\$ 144,720	\$ 150,750	\$ 156,780	\$ 162,810	\$ 168,840	\$ 174,870	\$ 180,900	\$ 186,930	\$ 192,960	\$ 198,990	\$ 205,020	\$ 211,050	\$ 217,080	\$ 223,110	\$ 229,140	\$ 235,170	\$ 241,200	\$ 247,230	\$ 253,260	\$ 259,290	\$ 265,320	\$ 271,350	\$ 277,380	\$ 283,410	\$ 289,440	\$ 295,470			
Backflow Testing and Maintenance	\$ 43	\$ 86	\$ 134	\$ 181	\$ 228	\$ 275	\$ 322	\$ 369	\$ 416	\$ 463	\$ 510	\$ 557	\$ 604	\$ 651	\$ 698	\$ 745	\$ 792	\$ 839	\$ 886	\$ 933	\$ 980	\$ 1,027	\$ 1,074	\$ 1,121	\$ 1,168	\$ 1,215	\$ 1,262	\$ 1,309	\$ 1,356	\$ 1,403	\$ 1,450	\$ 1,497	\$ 1,544	\$ 1,591	\$ 1,638	\$ 1,685	\$ 1,732	\$ 1,779	\$ 1,826	\$ 1,873	\$ 1,920	\$ 1,967	\$ 2,014	\$ 2,061	\$ 2,108	\$ 2,155	\$ 2,202	\$ 2,249	\$ 2,296	\$ 2,343		
Street Sweeping	\$ 5,798	\$ 11,596	\$ 17,394	\$ 23,192	\$ 28,990	\$ 34,788	\$ 40,586	\$ 46,384	\$ 52,182	\$ 57,980	\$ 63,778	\$ 69,576	\$ 75,374	\$ 81,172	\$ 86,970	\$ 92,768	\$ 98,566	\$ 104,364	\$ 110,162	\$ 115,960	\$ 121,758	\$ 127,556	\$ 133,354	\$ 139,152	\$ 144,950	\$ 150,748	\$ 156,546	\$ 162,344	\$ 168,142	\$ 173,940	\$ 179,738	\$ 185,536	\$ 191,334	\$ 197,132	\$ 202,930	\$ 208,728	\$ 214,526	\$ 220,324	\$ 226,122	\$ 231,920	\$ 237,718	\$ 243,516	\$ 249,314	\$ 255,112	\$ 260,910	\$ 266,708	\$ 272,506	\$ 278,304	\$ 284,102	\$ 289,900		
Reserve Study	\$ 680	\$ 1,360	\$ 2,040	\$ 2,720	\$ 3,400	\$ 4,080	\$ 4,760	\$ 5,440	\$ 6,120	\$ 6,800	\$ 7,480	\$ 8,160	\$ 8,840	\$ 9,520	\$ 10,200	\$ 10,880	\$ 11,560	\$ 12,240	\$ 12,920	\$ 13,600	\$ 14,280	\$ 14,960	\$ 15,640	\$ 16,320	\$ 17,000	\$ 17,680	\$ 18,360	\$ 19,040	\$ 19,720	\$ 20,400	\$ 21,080	\$ 21,760	\$ 22,440	\$ 23,120	\$ 23,800	\$ 24,480	\$ 25,160	\$ 25,840	\$ 26,520	\$ 27,200	\$ 27,880	\$ 28,560	\$ 29,240	\$ 29,920	\$ 30,600	\$ 31,280	\$ 31,960	\$ 32,640	\$ 33,320	\$ 34,000		
Minor Repairs	\$ 1,446	\$ 2,892	\$ 4,338	\$ 5,784	\$ 7,230	\$ 8,676	\$ 10,122	\$ 11,568	\$ 13,014	\$ 14,460	\$ 15,906	\$ 17,352	\$ 18,798	\$ 20,244	\$ 21,690	\$ 23,136	\$ 24,582	\$ 26,028	\$ 27,474	\$ 28,920	\$ 30,366	\$ 31,812	\$ 33,258	\$ 34,704	\$ 36,150	\$ 37,596	\$ 39,042	\$ 40,488	\$ 41,934	\$ 43,380	\$ 44,826	\$ 46,272	\$ 47,718	\$ 49,164	\$ 50,610	\$ 52,056	\$ 53,502	\$ 54,948	\$ 56,394	\$ 57,840	\$ 59,286	\$ 60,732	\$ 62,178	\$ 63,624	\$ 65,070	\$ 66,516	\$ 67,962	\$ 69,408	\$ 70,854	\$ 72,300	\$ 73,746	\$ 75,192
Pest Control	\$ 1,027	\$ 2,054	\$ 3,081	\$ 4,108	\$ 5,135	\$ 6,162	\$ 7,189	\$ 8,216	\$ 9,243	\$ 10,270	\$ 11,297	\$ 12,324	\$ 13,351	\$ 14,378	\$ 15,405	\$ 16,432	\$ 17,459	\$ 18,486	\$ 19,513	\$ 20,540	\$ 21,567	\$ 22,594	\$ 23,621	\$ 24,648	\$ 25,675	\$ 26,702	\$ 27,729	\$ 28,756	\$ 29,783	\$ 30,810	\$ 31,837	\$ 32,864	\$ 33,891	\$ 34,918	\$ 35,945	\$ 36,972	\$ 37,999	\$ 39,026	\$ 40,053	\$ 41,080	\$ 42,107	\$ 43,134	\$ 44,161	\$ 45,188	\$ 46,215	\$ 47,242	\$ 48,269	\$ 49,296	\$ 50,323	\$ 51,350		
Lighting Maintenance	\$ 1,207	\$ 2,414	\$ 3,621	\$ 4,828	\$ 6,035	\$ 7,242	\$ 8,449	\$ 9,656	\$ 10,863	\$ 12,070	\$ 13,277	\$ 14,484	\$ 15,691	\$ 16,898	\$ 18,105	\$ 19,312	\$ 20,519	\$ 21,726	\$ 22,933	\$ 24,140	\$ 25,347	\$ 26,554	\$ 27,761	\$ 28,968	\$ 30,175	\$ 31,382	\$ 32,589	\$ 33,796	\$ 35,003	\$ 36,210	\$ 37,417	\$ 38,624	\$ 39,831	\$ 41,038	\$ 42,245	\$ 43,452	\$ 44,659	\$ 45,866	\$ 47,073	\$ 48,280	\$ 49,487	\$ 50,694	\$ 51,901	\$ 53,108	\$ 54,315	\$ 55,522	\$ 56,729	\$ 57,936	\$ 59,143	\$ 60,350		
Maintenance Inspections	\$ 1,446	\$ 2,892	\$ 4,338	\$ 5,784	\$ 7,230	\$ 8,676	\$ 10,122	\$ 11,568	\$ 13,014	\$ 14,460	\$ 15,906	\$ 17,352	\$ 18,798	\$ 20,244	\$ 21,690	\$ 23,136																																				

YEAR	2009	2060	2061	2062
Cumulative No. of Units	1,205	1,205	1,205	1,205
A. INCOME				
Assessment	\$ 5,763,364	\$ 5,907,448	\$ 6,055,135	\$ 6,206,513
B. PROJECTED EXPENSES				
Corporate Franchise Tax	\$ 450	\$ 462	\$ 473	\$ 485
Insurance	\$ 58,534	\$ 59,998	\$ 61,497	\$ 63,035
Electricity	\$ 177,404	\$ 181,839	\$ 186,385	\$ 191,044
Water	\$ 246,744	\$ 252,913	\$ 259,235	\$ 265,716
Custodial	\$ -	\$ -	\$ -	\$ -
Custodial Supplies	\$ -	\$ -	\$ -	\$ -
Landscape Maintenance	\$ 1,330,076	\$ 1,363,328	\$ 1,397,412	\$ 1,432,347
Landscape Miscellaneous	\$ 57,183	\$ 58,613	\$ 60,078	\$ 61,580
Irrigation Repair	\$ 57,183	\$ 58,613	\$ 60,078	\$ 61,580
Tree Maintenance	\$ 187,780	\$ 192,454	\$ 197,265	\$ 202,197
Backflow Testing and Maintenance	\$ 1,351	\$ 1,385	\$ 1,419	\$ 1,455
Street Sweeping	\$ 180,555	\$ 185,069	\$ 189,696	\$ 194,438
Reserve Study	\$ 21,162	\$ 21,691	\$ 22,234	\$ 22,790
Minor Repairs	\$ 45,028	\$ 46,152	\$ 47,300	\$ 48,469
Pest Control	\$ 31,969	\$ 32,768	\$ 33,587	\$ 34,427
Lighting Maintenance	\$ 37,372	\$ 38,306	\$ 39,264	\$ 40,245
Maintenance Inspections	\$ 4,503	\$ 4,615	\$ 4,731	\$ 4,849
Community Web Site	\$ 14,859	\$ 15,230	\$ 15,611	\$ 16,001
Storm Drain Maintenance	\$ 62,136	\$ 63,690	\$ 65,282	\$ 66,914
Holiday Tree Lighting	\$ 31,068	\$ 31,845	\$ 32,641	\$ 33,457
Parks Operating Expenses				
Park A	\$ 67,539	\$ 69,228	\$ 70,959	\$ 72,733
Park B	\$ 71,592	\$ 73,382	\$ 75,216	\$ 77,097
Town Center Park	\$ 91,854	\$ 94,150	\$ 96,504	\$ 98,916
Park C	\$ 76,094	\$ 77,997	\$ 79,947	\$ 81,945
West Camp Park	\$ 34,220	\$ 35,075	\$ 35,952	\$ 36,851
Arts Park	\$ 84,049	\$ 86,766	\$ 89,535	\$ 91,158
Bluff Courts Park	\$ 69,340	\$ 71,074	\$ 72,851	\$ 74,672
Community Building	\$ 173,351	\$ 177,685	\$ 182,127	\$ 186,680
Reserves				
Entry Monument	\$ 9,456	\$ 9,692	\$ 9,934	\$ 10,183
Entry Monument Lighting	\$ 225	\$ 231	\$ 237	\$ 242
Uplights	\$ 225	\$ 231	\$ 237	\$ 242
Pedestrian Lights	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788
Street Lights	\$ 91,403	\$ 93,688	\$ 96,031	\$ 98,431
Cluster Mailboxes	\$ 44,126	\$ 45,229	\$ 46,360	\$ 47,519
Asphalt	\$ 427,299	\$ 437,362	\$ 448,031	\$ 460,155
Concrete	\$ 21,613	\$ 22,153	\$ 22,707	\$ 23,274
Pavers	\$ -	\$ -	\$ -	\$ -
Sign Program	\$ 4,052	\$ 4,154	\$ 4,258	\$ 4,364
Masonry Sound Wall (surface)	\$ 13,058	\$ 13,384	\$ 13,719	\$ 14,062
Masonry Sound Wall (repair)	\$ 4,503	\$ 4,615	\$ 4,731	\$ 4,849
Park A	\$ 42,325	\$ 43,383	\$ 44,467	\$ 45,579
Park B	\$ 8,105	\$ 8,307	\$ 8,515	\$ 8,728
Town Center Park	\$ 21,613	\$ 22,153	\$ 22,707	\$ 23,274
Park C	\$ 17,560	\$ 17,999	\$ 18,449	\$ 18,910
West Camp Park	\$ 5,853	\$ 6,000	\$ 6,150	\$ 6,303
Arts Park	\$ 8,105	\$ 8,307	\$ 8,515	\$ 8,728
Bluff Courts Park	\$ 20,262	\$ 20,768	\$ 21,286	\$ 21,820
Community Building	\$ 112,566	\$ 115,390	\$ 118,264	\$ 121,221
Landscape - SF	\$ 37,822	\$ 38,768	\$ 39,737	\$ 40,730
Irrigation	\$ 37,822	\$ 38,768	\$ 39,737	\$ 40,730
Administration	\$ 337,697	\$ 346,140	\$ 354,793	\$ 363,663
Management	\$ 155,791	\$ 159,696	\$ 163,676	\$ 167,770
Legal Services	\$ 15,759	\$ 16,153	\$ 16,557	\$ 16,971
Accounting	\$ 15,759	\$ 16,153	\$ 16,557	\$ 16,971
Miscellaneous Office	\$ 180,105	\$ 184,608	\$ 189,223	\$ 193,954
Education	\$ 15,759	\$ 16,153	\$ 16,557	\$ 16,971
Community Building Purchase	\$ 694,305	\$ 711,663	\$ 729,454	\$ 747,691
Contingency (3%)	\$ 166,903	\$ 171,076	\$ 175,353	\$ 179,737
SUBTOTAL - EXPENSES	\$ 5,730,351	\$ 5,973,610	\$ 6,020,450	\$ 6,170,361
RESERVE	\$ 33,013	\$ 33,839	\$ 34,685	\$ 35,562
EARNINGS	\$ 113,915	\$ 121,261	\$ 129,016	\$ 137,201
CUMULATIVE RESERVE	\$ 2,425,227	\$ 2,580,327	\$ 2,744,028	\$ 2,916,781

ASSUMPTIONS	Reserve in
Total No. of Units	2013
Absorption Period (yrs)	Dollars: \$ 869,830
Annual Special Tax per Unit	
Total Non-Residential Building Area (sq. ft.)	
Annual Assessment per non-res sq. foot	
Annual Increase in Assessment	
Inflation	
Investment Earnings	
Initial Seed Fund	
Amount Financed	
Borrowing Rate	
Term of Loan (yrs)	
Assessment Cap (per residential unit)	
Expense Absorption Period (Yrs)	

ESTIMATED ANNUAL EXPENSES IN 2013 DOLLAR

Corporate Franchise Tax
Insurance
Electricity
Water
Custodial
Custodial Supplies
Landscape Maintenance
Landscape Miscellaneous
Irrigation Repair
Tree Maintenance
Backflow Testing and Maintenance
Street Sweeping
Reserve Study
Minor Repairs
Pest Control
Lighting Maintenance
Maintenance Inspections
Community Web Site
Storm Drain Maintenance
Holiday Tree Lighting
Parks Operating Expenses
Park A
Park B
Town Center Park
Park C
West Camp Park
Arts Park
Bluff Courts Park
Community Building
Community Building
Landscape - SF
Irrigation
Administration
Management
Legal Services
Accounting
Miscellaneous Office
Education
Community Building Purchase
Contingency (3%)
TOTAL

East Garrison CSD
Estimated Budget - August 2012
(Data Source: PCM Consulting Services, Inc., 2012)

YEAR	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Cumulative No. of Units	140	280	420	560	700	840	980	1,120	1,260	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	
A. INCOME																									
CFD Special Taxes	\$ 208,460	\$ 427,343	\$ 657,040	\$ 897,954	\$ 1,150,504	\$ 1,415,120	\$ 1,692,248	\$ 1,982,347	\$ 2,285,894	\$ 2,603,380	\$ 2,668,464	\$ 2,735,176	\$ 2,803,555	\$ 2,873,644	\$ 2,945,485	\$ 3,019,122	\$ 3,094,600	\$ 3,171,965	\$ 3,251,265	\$ 3,332,546	\$ 3,415,860	\$ 3,501,256	\$ 3,588,788	\$ 3,678,507	\$ 3,770,470
B. PROJECTED EXPENSES																									
Street Lights	\$ 1,830	\$ 3,752	\$ 5,768	\$ 7,883	\$ 10,100	\$ 12,424	\$ 14,856	\$ 17,403	\$ 20,068	\$ 22,855	\$ 23,427	\$ 24,012	\$ 24,613	\$ 25,228	\$ 25,859	\$ 26,505	\$ 27,168	\$ 27,847	\$ 28,543	\$ 29,257	\$ 29,988	\$ 30,738	\$ 31,506	\$ 32,294	\$ 33,101
Traffic Signals	\$ 1,873	\$ 3,839	\$ 5,902	\$ 8,066	\$ 10,335	\$ 12,712	\$ 15,201	\$ 17,807	\$ 20,534	\$ 23,386	\$ 23,971	\$ 24,570	\$ 25,184	\$ 25,814	\$ 26,459	\$ 27,121	\$ 27,799	\$ 28,494	\$ 29,206	\$ 29,936	\$ 30,685	\$ 31,452	\$ 32,238	\$ 33,044	\$ 33,870
Street Signs	\$ 43	\$ 88	\$ 136	\$ 185	\$ 237	\$ 292	\$ 349	\$ 409	\$ 472	\$ 537	\$ 550	\$ 564	\$ 578	\$ 593	\$ 608	\$ 623	\$ 638	\$ 654	\$ 671	\$ 687	\$ 705	\$ 722	\$ 740	\$ 759	\$ 778
Asphalt Slurry/Striping	\$ 763	\$ 1,564	\$ 2,404	\$ 3,285	\$ 4,209	\$ 5,178	\$ 6,191	\$ 7,253	\$ 8,363	\$ 9,525	\$ 9,763	\$ 10,007	\$ 10,257	\$ 10,514	\$ 10,777	\$ 11,046	\$ 11,322	\$ 11,605	\$ 11,896	\$ 12,193	\$ 12,498	\$ 12,810	\$ 13,130	\$ 13,459	\$ 13,795
Asphalt Overlay	\$ 4,856	\$ 9,954	\$ 15,305	\$ 20,917	\$ 26,799	\$ 32,963	\$ 39,419	\$ 46,176	\$ 53,247	\$ 60,642	\$ 62,158	\$ 63,712	\$ 65,305	\$ 66,938	\$ 68,611	\$ 70,326	\$ 72,085	\$ 73,887	\$ 75,734	\$ 77,627	\$ 79,568	\$ 81,557	\$ 83,596	\$ 85,686	\$ 87,828
Street Sweeping	\$ 2,003	\$ 4,106	\$ 6,314	\$ 8,628	\$ 11,055	\$ 13,598	\$ 16,261	\$ 19,048	\$ 21,965	\$ 25,016	\$ 25,641	\$ 26,282	\$ 26,939	\$ 27,613	\$ 28,303	\$ 29,011	\$ 29,736	\$ 30,480	\$ 31,242	\$ 32,023	\$ 32,823	\$ 33,644	\$ 34,485	\$ 35,347	\$ 36,231
Concrete Curb and Gutter Repair	\$ 167	\$ 343	\$ 527	\$ 720	\$ 922	\$ 1,134	\$ 1,356	\$ 1,589	\$ 1,832	\$ 2,087	\$ 2,139	\$ 2,192	\$ 2,247	\$ 2,303	\$ 2,361	\$ 2,420	\$ 2,481	\$ 2,543	\$ 2,606	\$ 2,671	\$ 2,738	\$ 2,807	\$ 2,877	\$ 2,949	\$ 3,022
Concrete Sidewalk Repair	\$ 297	\$ 609	\$ 936	\$ 1,279	\$ 1,639	\$ 2,016	\$ 2,411	\$ 2,824	\$ 3,257	\$ 3,709	\$ 3,802	\$ 3,897	\$ 3,994	\$ 4,094	\$ 4,197	\$ 4,301	\$ 4,409	\$ 4,519	\$ 4,632	\$ 4,748	\$ 4,867	\$ 4,988	\$ 5,113	\$ 5,241	\$ 5,372
Landscaping (Streetscape)	\$ 3,859	\$ 7,910	\$ 12,162	\$ 16,622	\$ 21,296	\$ 26,195	\$ 31,324	\$ 36,694	\$ 42,313	\$ 48,190	\$ 49,395	\$ 50,629	\$ 51,895	\$ 53,193	\$ 54,522	\$ 55,885	\$ 57,283	\$ 58,715	\$ 60,183	\$ 61,687	\$ 63,229	\$ 64,810	\$ 66,430	\$ 68,091	\$ 69,793
Landscaping (Open Space)	\$ 15,918	\$ 32,631	\$ 50,170	\$ 68,566	\$ 87,850	\$ 108,056	\$ 129,217	\$ 151,368	\$ 174,546	\$ 198,789	\$ 203,759	\$ 208,853	\$ 214,074	\$ 219,426	\$ 224,912	\$ 230,534	\$ 236,298	\$ 242,205	\$ 248,260	\$ 254,467	\$ 260,828	\$ 267,349	\$ 274,033	\$ 280,884	\$ 287,906
Landscaping (Detention Basins)	\$ 4,738	\$ 9,712	\$ 14,932	\$ 20,408	\$ 26,147	\$ 32,161	\$ 38,459	\$ 45,052	\$ 51,951	\$ 59,166	\$ 60,645	\$ 62,161	\$ 63,715	\$ 65,308	\$ 66,941	\$ 68,615	\$ 70,330	\$ 72,088	\$ 73,890	\$ 75,738	\$ 77,631	\$ 79,572	\$ 81,561	\$ 83,600	\$ 85,690
Landscaping (Bluff)	\$ 7,956	\$ 16,310	\$ 25,076	\$ 34,271	\$ 43,910	\$ 54,009	\$ 64,586	\$ 75,657	\$ 87,243	\$ 99,360	\$ 101,844	\$ 104,390	\$ 106,999	\$ 109,674	\$ 112,416	\$ 115,227	\$ 118,107	\$ 121,060	\$ 124,086	\$ 127,189	\$ 130,368	\$ 133,628	\$ 136,968	\$ 140,392	\$ 143,902
Youth Camp Fence	\$ 509	\$ 1,043	\$ 1,603	\$ 2,191	\$ 2,807	\$ 3,453	\$ 4,129	\$ 4,837	\$ 5,577	\$ 6,352	\$ 6,511	\$ 6,673	\$ 6,840	\$ 7,011	\$ 7,186	\$ 7,366	\$ 7,550	\$ 7,739	\$ 7,932	\$ 8,131	\$ 8,334	\$ 8,542	\$ 8,756	\$ 8,975	\$ 9,199
MST (Transit)	\$ 9,600	\$ 19,680	\$ 30,258	\$ 41,353	\$ 52,983	\$ 65,169	\$ 77,931	\$ 91,291	\$ 105,270	\$ 119,891	\$ 122,888	\$ 125,960	\$ 129,109	\$ 132,337	\$ 135,645	\$ 139,037	\$ 142,513	\$ 146,075	\$ 149,727	\$ 153,470	\$ 157,307	\$ 161,240	\$ 165,271	\$ 169,403	\$ 173,638
Sheriff	\$ 68,500	\$ 140,425	\$ 215,903	\$ 295,068	\$ 378,056	\$ 465,009	\$ 556,073	\$ 651,400	\$ 751,145	\$ 855,471	\$ 876,858	\$ 898,779	\$ 921,249	\$ 944,280	\$ 967,887	\$ 992,084	\$ 1,016,886	\$ 1,042,309	\$ 1,068,366	\$ 1,095,075	\$ 1,122,452	\$ 1,150,514	\$ 1,179,276	\$ 1,208,758	\$ 1,238,977
Storm Drains	\$ 1,526	\$ 3,127	\$ 4,809	\$ 6,572	\$ 8,420	\$ 10,356	\$ 12,385	\$ 14,508	\$ 16,729	\$ 19,053	\$ 19,529	\$ 20,017	\$ 20,518	\$ 21,031	\$ 21,556	\$ 22,095	\$ 22,648	\$ 23,214	\$ 23,794	\$ 24,389	\$ 24,999	\$ 25,624	\$ 26,264	\$ 26,921	\$ 27,594
Storm Drain Structures	\$ 173	\$ 354	\$ 544	\$ 743	\$ 952	\$ 1,171	\$ 1,400	\$ 1,640	\$ 1,892	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,320	\$ 2,378	\$ 2,437	\$ 2,498	\$ 2,561	\$ 2,625	\$ 2,690	\$ 2,758	\$ 2,827	\$ 2,897	\$ 2,970	\$ 3,044	\$ 3,120
Storm Drain Equipment	\$ 2,804	\$ 5,748	\$ 8,838	\$ 12,078	\$ 15,475	\$ 19,035	\$ 22,762	\$ 26,665	\$ 30,748	\$ 35,018	\$ 35,894	\$ 36,791	\$ 37,711	\$ 38,653	\$ 39,620	\$ 40,610	\$ 41,626	\$ 42,666	\$ 43,733	\$ 44,826	\$ 45,947	\$ 47,095	\$ 48,273	\$ 49,480	\$ 50,717
Minor Repairs	\$ 600	\$ 1,230	\$ 1,891	\$ 2,585	\$ 3,311	\$ 4,073	\$ 4,871	\$ 5,706	\$ 6,579	\$ 7,493	\$ 7,681	\$ 7,873	\$ 8,069	\$ 8,271	\$ 8,478	\$ 8,690	\$ 8,907	\$ 9,130	\$ 9,358	\$ 9,592	\$ 9,832	\$ 10,077	\$ 10,329	\$ 10,588	\$ 10,852
Vector Control	\$ 1,223	\$ 2,506	\$ 3,853	\$ 5,266	\$ 6,747	\$ 8,299	\$ 9,924	\$ 11,625	\$ 13,405	\$ 15,267	\$ 15,649	\$ 16,040	\$ 16,441	\$ 16,852	\$ 17,274	\$ 17,705	\$ 18,148	\$ 18,602	\$ 19,067	\$ 19,543	\$ 20,032	\$ 20,533	\$ 21,046	\$ 21,572	\$ 22,112
Light Maintenance/Supplies	\$ 1,200	\$ 2,460	\$ 3,782	\$ 5,169	\$ 6,623	\$ 8,146	\$ 9,741	\$ 11,411	\$ 13,159	\$ 14,986	\$ 15,361	\$ 15,745	\$ 16,139	\$ 16,542	\$ 16,956	\$ 17,380	\$ 17,814	\$ 18,259	\$ 18,716	\$ 19,184	\$ 19,663	\$ 20,155	\$ 20,659	\$ 21,175	\$ 21,705
Maintenance Inspections	\$ 320	\$ 656	\$ 1,009	\$ 1,378	\$ 1,766	\$ 2,172	\$ 2,598	\$ 3,043	\$ 3,509	\$ 3,996	\$ 4,096	\$ 4,199	\$ 4,304	\$ 4,411	\$ 4,522	\$ 4,635	\$ 4,750	\$ 4,869	\$ 4,991	\$ 5,116	\$ 5,244	\$ 5,375	\$ 5,509	\$ 5,647	\$ 5,788
Storm Drain Maintenance	\$ 2,000	\$ 4,100	\$ 6,304	\$ 8,615	\$ 11,038	\$ 13,577	\$ 16,236	\$ 19,019	\$ 21,931	\$ 24,977	\$ 25,602	\$ 26,242	\$ 26,898	\$ 27,570	\$ 28,259	\$ 28,966	\$ 29,690	\$ 30,432	\$ 31,193	\$ 31,973	\$ 32,772	\$ 33,592	\$ 34,431	\$ 35,292	\$ 36,175
Community Park Maintenance	\$ 21,619	\$ 44,318	\$ 68,139	\$ 93,124	\$ 119,315	\$ 146,757	\$ 175,497	\$ 205,583	\$ 237,063	\$ 269,988	\$ 276,738	\$ 283,656	\$ 290,747	\$ 298,016	\$ 305,467	\$ 313,103	\$ 320,931	\$ 328,954	\$ 337,178	\$ 345,607	\$ 354,248	\$ 363,104	\$ 372,181	\$ 381,486	\$ 391,023
Administration (20%)	\$ 30,875	\$ 63,293	\$ 97,313	\$ 132,994	\$ 170,399	\$ 209,591	\$ 250,636	\$ 293,602	\$ 338,560	\$ 385,582	\$ 395,221	\$ 405,102	\$ 415,230	\$ 425,610	\$ 436,251	\$ 447,157	\$ 458,336	\$ 469,794	\$ 481,539	\$ 493,577	\$ 505,917	\$ 518,565	\$ 531,529	\$ 544,817	\$ 558,438
Misc & Contingency (15%)	\$ 23,156	\$ 47,470	\$ 72,985	\$ 99,746	\$ 127,799	\$ 157,193	\$ 187,977	\$ 220,201	\$ 253,920	\$ 289,186	\$ 296,416	\$ 303,827	\$ 311,422	\$ 319,208	\$ 327,188	\$ 335,368	\$ 343,752	\$ 352,346	\$ 361,154	\$ 370,183	\$ 379,438	\$ 388,923	\$ 398,647	\$ 408,613	\$ 418,828
SUBTOTAL - EXPENSES	\$ 208,404	\$ 427,228	\$ 656,863	\$ 897,712	\$ 1,150,194	\$ 1,414,739	\$ 1,691,792	\$ 1,981,813	\$ 2,285,278	\$ 2,602,678	\$ 2,667,745	\$ 2,734,439	\$ 2,802,800	\$ 2,872,870	\$ 2,944,691	\$ 3,018,309	\$ 3,093,766	\$ 3,171,111	\$ 3,250,388	\$ 3,331,648	\$ 3,414,939	\$ 3,500,313	\$ 3,587,821	\$ 3,677,516	\$ 3,769,454
RESERVE	\$ 56	\$ 115	\$ 177	\$ 242	\$ 310	\$ 381	\$ 456	\$ 534	\$ 616	\$ 702	\$ 719	\$ 737	\$ 756	\$ 774	\$ 794	\$ 814	\$ 834	\$ 855	\$ 876	\$ 898	\$ 921	\$ 944	\$ 967	\$ 991	\$ 1,016
EARNINGS	\$ 3	\$ 3	\$ 9	\$ 18	\$ 31	\$ 48	\$ 70	\$ 96	\$ 127	\$ 165	\$ 208	\$ 254	\$ 304	\$ 357	\$ 413	\$ 474	\$ 538	\$ 607	\$ 680	\$ 758	\$ 840	\$ 929	\$ 1,022	\$ 1,122	\$ 1,227
CUMULATIVE RESERVE	\$ 59	\$ 177	\$ 363	\$ 623	\$ 964	\$ 1,394	\$ 1,920	\$ 2,550	\$ 3,294	\$ 4,160	\$ 5,087	\$ 6,078	\$ 7,138	\$ 8,269	\$ 9,477	\$ 10,764	\$ 12,136	\$ 13,598	\$ 15,154	\$ 16,810	\$ 18,571	\$ 20,443	\$ 22,432	\$ 24,545	\$ 26,789

ASSUMPTIONS

Total No. of Units	1,400
Absorption Period (yrs)	10
Annual Special Tax per Unit	\$1,489
Total Non-Residential Building Area (sq.ft.)	0
Annual Assessment per non-res sq. foot	\$0.00
Annual Increase in Assessment	2.5%
Inflation	2.5%
Investment Earnings	5.0%
Initial Seed Fund	\$0
Amount Financed	\$0
Borrowing Rate	0.0%
Term of Loan (yrs)	0
Assessment Cap (per residential unit)	\$25,000
Expense Absorption Period (Yrs)	10

ESTIMATED ANNUAL EXPENSES IN 2013 DOLLARS

Street Lights	\$ 18,301.00
Traffic Signals	\$ 18,726.00
Street Signs	\$ 430.00
Asphalt Slurry/Striping	\$ 7,627.00
Asphalt Overlay	\$ 48,558.00
Street Sweeping	\$ 20,031.00
Concrete Curb and Gutter Repair	\$ 1,671.00
Concrete Sidewalk Repair	\$ 2,970.00
Landscaping (Streetscape)	\$ 38,587.00
Landscaping (Open Space)	\$ 159,176.00
Landscaping (Detention Basins)	\$ 47,376.00
Landscaping (Bluff)	\$ 79,560.00
Youth Camp Fence	\$ 5,086.00
MST (Transit)	\$ 96,000.00
Sheriff	\$ 685,000.00
Storm Drains	\$

YEAR	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061
Cumulative No. of Units	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
A. INCOME																								
CFD Special Taxes	\$ 3,864,732	\$ 3,961,350	\$ 4,060,384	\$ 4,161,894	\$ 4,265,941	\$ 4,372,589	\$ 4,481,904	\$ 4,593,952	\$ 4,708,801	\$ 4,826,521	\$ 4,947,184	\$ 5,070,863	\$ 5,197,635	\$ 5,327,576	\$ 5,460,765	\$ 5,597,284	\$ 5,737,216	\$ 5,880,647	\$ 6,027,663	\$ 6,178,354	\$ 6,332,813	\$ 6,491,134	\$ 6,653,412	\$ 6,819,747
B. PROJECTED EXPENSES																								
Street Lights	\$ 33,929	\$ 34,777	\$ 35,647	\$ 36,538	\$ 37,451	\$ 38,388	\$ 39,347	\$ 40,331	\$ 41,339	\$ 42,373	\$ 43,432	\$ 44,518	\$ 45,631	\$ 46,772	\$ 47,941	\$ 49,139	\$ 50,368	\$ 51,627	\$ 52,918	\$ 54,241	\$ 55,597	\$ 56,987	\$ 58,411	\$ 59,872
Traffic Signals	\$ 34,717	\$ 35,585	\$ 36,475	\$ 37,386	\$ 38,321	\$ 39,279	\$ 40,261	\$ 41,268	\$ 42,299	\$ 43,357	\$ 44,441	\$ 45,552	\$ 46,690	\$ 47,858	\$ 49,054	\$ 50,281	\$ 51,538	\$ 52,826	\$ 54,147	\$ 55,500	\$ 56,888	\$ 58,310	\$ 59,768	\$ 61,262
Street Signs	\$ 797	\$ 817	\$ 838	\$ 858	\$ 880	\$ 902	\$ 925	\$ 948	\$ 971	\$ 996	\$ 1,020	\$ 1,046	\$ 1,072	\$ 1,099	\$ 1,126	\$ 1,155	\$ 1,183	\$ 1,213	\$ 1,243	\$ 1,274	\$ 1,306	\$ 1,339	\$ 1,372	\$ 1,407
Asphalt Slurry/Striping	\$ 14,140	\$ 14,494	\$ 14,856	\$ 15,227	\$ 15,608	\$ 15,998	\$ 16,398	\$ 16,808	\$ 17,228	\$ 17,659	\$ 18,100	\$ 18,553	\$ 19,017	\$ 19,492	\$ 19,979	\$ 20,479	\$ 20,991	\$ 21,516	\$ 22,054	\$ 22,605	\$ 23,170	\$ 23,749	\$ 24,343	\$ 24,952
Asphalt Overlay	\$ 90,024	\$ 92,274	\$ 94,581	\$ 96,946	\$ 99,369	\$ 101,854	\$ 104,400	\$ 107,010	\$ 109,685	\$ 112,427	\$ 115,238	\$ 118,119	\$ 121,072	\$ 124,099	\$ 127,201	\$ 130,381	\$ 133,641	\$ 136,982	\$ 140,406	\$ 143,917	\$ 147,515	\$ 151,202	\$ 154,982	\$ 158,857
Street Sweeping	\$ 37,136	\$ 38,065	\$ 39,016	\$ 39,992	\$ 40,992	\$ 42,016	\$ 43,067	\$ 44,143	\$ 45,247	\$ 46,378	\$ 47,538	\$ 48,726	\$ 49,944	\$ 51,193	\$ 52,473	\$ 53,785	\$ 55,129	\$ 56,507	\$ 57,920	\$ 59,368	\$ 60,852	\$ 62,374	\$ 63,933	\$ 65,531
Concrete Curb and Gutter Repair	\$ 3,098	\$ 3,175	\$ 3,255	\$ 3,336	\$ 3,420	\$ 3,505	\$ 3,593	\$ 3,682	\$ 3,775	\$ 3,869	\$ 3,966	\$ 4,065	\$ 4,166	\$ 4,271	\$ 4,377	\$ 4,487	\$ 4,599	\$ 4,714	\$ 4,832	\$ 4,953	\$ 5,076	\$ 5,203	\$ 5,333	\$ 5,467
Concrete Sidewalk Repair	\$ 5,506	\$ 5,644	\$ 5,785	\$ 5,930	\$ 6,078	\$ 6,230	\$ 6,386	\$ 6,545	\$ 6,709	\$ 6,877	\$ 7,048	\$ 7,225	\$ 7,405	\$ 7,590	\$ 7,780	\$ 7,975	\$ 8,174	\$ 8,378	\$ 8,588	\$ 8,803	\$ 9,023	\$ 9,248	\$ 9,479	\$ 9,716
Landscaping (Streetscape)	\$ 71,538	\$ 73,327	\$ 75,160	\$ 77,039	\$ 78,965	\$ 80,939	\$ 82,962	\$ 85,036	\$ 87,162	\$ 89,341	\$ 91,575	\$ 93,864	\$ 96,211	\$ 98,616	\$ 101,082	\$ 103,609	\$ 106,199	\$ 108,854	\$ 111,575	\$ 114,367	\$ 117,224	\$ 120,154	\$ 123,158	\$ 126,237
Landscaping (Open Space)	\$ 295,103	\$ 302,481	\$ 310,043	\$ 317,794	\$ 325,739	\$ 333,882	\$ 342,229	\$ 350,785	\$ 359,555	\$ 368,544	\$ 377,757	\$ 387,201	\$ 396,881	\$ 406,803	\$ 416,973	\$ 427,398	\$ 438,083	\$ 449,035	\$ 460,261	\$ 471,767	\$ 483,561	\$ 495,650	\$ 508,042	\$ 520,743
Landscaping (Detention Basins)	\$ 87,832	\$ 90,028	\$ 92,279	\$ 94,586	\$ 96,951	\$ 99,374	\$ 101,859	\$ 104,405	\$ 107,015	\$ 109,691	\$ 112,433	\$ 115,244	\$ 118,125	\$ 121,078	\$ 124,105	\$ 127,208	\$ 130,388	\$ 133,647	\$ 136,989	\$ 140,413	\$ 143,924	\$ 147,522	\$ 151,210	\$ 154,990
Landscaping (Bluff)	\$ 147,500	\$ 151,187	\$ 154,967	\$ 158,841	\$ 162,812	\$ 166,882	\$ 171,055	\$ 175,331	\$ 179,714	\$ 184,207	\$ 188,812	\$ 193,533	\$ 198,371	\$ 203,330	\$ 208,413	\$ 213,624	\$ 218,964	\$ 224,438	\$ 230,049	\$ 235,801	\$ 241,696	\$ 247,738	\$ 253,931	\$ 260,280
Youth Camp Fence	\$ 9,429	\$ 9,665	\$ 9,907	\$ 10,154	\$ 10,408	\$ 10,668	\$ 10,935	\$ 11,208	\$ 11,489	\$ 11,776	\$ 12,070	\$ 12,372	\$ 12,681	\$ 12,998	\$ 13,323	\$ 13,656	\$ 13,998	\$ 14,348	\$ 14,706	\$ 15,074	\$ 15,451	\$ 15,837	\$ 16,233	\$ 16,639
MST (Transit)	\$ 177,979	\$ 182,428	\$ 186,989	\$ 191,664	\$ 196,455	\$ 201,366	\$ 206,401	\$ 211,561	\$ 216,850	\$ 222,271	\$ 227,828	\$ 233,523	\$ 239,361	\$ 245,346	\$ 251,479	\$ 257,766	\$ 264,210	\$ 270,816	\$ 277,586	\$ 284,526	\$ 291,639	\$ 298,930	\$ 306,403	\$ 314,063
Sheriff	\$ 1,269,952	\$ 1,301,701	\$ 1,334,243	\$ 1,367,599	\$ 1,401,789	\$ 1,436,834	\$ 1,472,755	\$ 1,509,574	\$ 1,547,313	\$ 1,585,996	\$ 1,625,646	\$ 1,666,287	\$ 1,707,944	\$ 1,750,642	\$ 1,794,409	\$ 1,839,269	\$ 1,885,250	\$ 1,932,382	\$ 1,980,691	\$ 2,030,209	\$ 2,080,964	\$ 2,132,988	\$ 2,186,313	\$ 2,240,970
Storm Drains	\$ 28,284	\$ 28,991	\$ 29,716	\$ 30,459	\$ 31,220	\$ 32,000	\$ 32,801	\$ 33,621	\$ 34,461	\$ 35,323	\$ 36,206	\$ 37,111	\$ 38,039	\$ 38,989	\$ 39,964	\$ 40,963	\$ 41,987	\$ 43,037	\$ 44,113	\$ 45,216	\$ 46,346	\$ 47,505	\$ 48,693	\$ 49,910
Storm Drain Structures	\$ 3,198	\$ 3,278	\$ 3,360	\$ 3,444	\$ 3,530	\$ 3,618	\$ 3,709	\$ 3,801	\$ 3,897	\$ 3,994	\$ 4,094	\$ 4,196	\$ 4,301	\$ 4,409	\$ 4,519	\$ 4,632	\$ 4,748	\$ 4,866	\$ 4,988	\$ 5,113	\$ 5,240	\$ 5,371	\$ 5,506	\$ 5,643
Storm Drain Equipment	\$ 51,985	\$ 53,284	\$ 54,616	\$ 55,982	\$ 57,381	\$ 58,816	\$ 60,286	\$ 61,793	\$ 63,338	\$ 64,922	\$ 66,545	\$ 68,208	\$ 69,913	\$ 71,661	\$ 73,453	\$ 75,289	\$ 77,171	\$ 79,101	\$ 81,078	\$ 83,105	\$ 85,183	\$ 87,312	\$ 89,495	\$ 91,733
Minor Repairs	\$ 11,124	\$ 11,402	\$ 11,687	\$ 11,979	\$ 12,278	\$ 12,585	\$ 12,900	\$ 13,223	\$ 13,553	\$ 13,892	\$ 14,239	\$ 14,595	\$ 14,960	\$ 15,334	\$ 15,717	\$ 16,110	\$ 16,513	\$ 16,926	\$ 17,349	\$ 17,783	\$ 18,227	\$ 18,683	\$ 19,150	\$ 19,629
Vector Control	\$ 22,664	\$ 23,231	\$ 23,812	\$ 24,407	\$ 25,017	\$ 25,643	\$ 26,284	\$ 26,941	\$ 27,614	\$ 28,305	\$ 29,012	\$ 29,738	\$ 30,481	\$ 31,243	\$ 32,024	\$ 32,825	\$ 33,646	\$ 34,487	\$ 35,349	\$ 36,233	\$ 37,138	\$ 38,067	\$ 39,018	\$ 39,994
Light Maintenance/Supplies	\$ 22,247	\$ 22,804	\$ 23,374	\$ 23,958	\$ 24,557	\$ 25,171	\$ 25,800	\$ 26,445	\$ 27,106	\$ 27,784	\$ 28,478	\$ 29,190	\$ 29,920	\$ 30,668	\$ 31,435	\$ 32,221	\$ 33,026	\$ 33,852	\$ 34,698	\$ 35,566	\$ 36,455	\$ 37,366	\$ 38,300	\$ 39,258
Maintenance Inspections	\$ 5,933	\$ 6,081	\$ 6,233	\$ 6,389	\$ 6,549	\$ 6,712	\$ 6,880	\$ 7,052	\$ 7,228	\$ 7,409	\$ 7,594	\$ 7,784	\$ 7,979	\$ 8,178	\$ 8,383	\$ 8,592	\$ 8,807	\$ 9,027	\$ 9,253	\$ 9,484	\$ 9,721	\$ 9,964	\$ 10,213	\$ 10,469
Storm Drain Maintenance	\$ 37,079	\$ 38,006	\$ 38,956	\$ 39,930	\$ 40,928	\$ 41,951	\$ 43,000	\$ 44,075	\$ 45,177	\$ 46,306	\$ 47,464	\$ 48,651	\$ 49,867	\$ 51,114	\$ 52,391	\$ 53,701	\$ 55,044	\$ 56,420	\$ 57,830	\$ 59,276	\$ 60,758	\$ 62,277	\$ 63,834	\$ 65,430
Community Park Maintenance	\$ 400,799	\$ 410,819	\$ 421,089	\$ 431,616	\$ 442,407	\$ 453,467	\$ 464,804	\$ 476,424	\$ 488,334	\$ 500,543	\$ 513,056	\$ 525,883	\$ 539,030	\$ 552,505	\$ 566,318	\$ 580,476	\$ 594,988	\$ 609,862	\$ 625,109	\$ 640,737	\$ 656,755	\$ 673,174	\$ 690,003	\$ 707,254
Administration (20%)	\$ 572,399	\$ 586,709	\$ 601,376	\$ 616,411	\$ 631,821	\$ 647,616	\$ 663,807	\$ 680,402	\$ 697,412	\$ 714,847	\$ 732,719	\$ 751,037	\$ 769,812	\$ 789,058	\$ 808,784	\$ 829,004	\$ 849,729	\$ 870,972	\$ 892,746	\$ 915,065	\$ 937,942	\$ 961,390	\$ 985,425	\$ 1,010,061
Misc & Contingency (15%)	\$ 429,299	\$ 440,031	\$ 451,032	\$ 462,308	\$ 473,866	\$ 485,712	\$ 497,855	\$ 510,302	\$ 523,059	\$ 536,136	\$ 549,539	\$ 563,277	\$ 577,359	\$ 591,793	\$ 606,588	\$ 621,753	\$ 637,297	\$ 653,229	\$ 669,560	\$ 686,299	\$ 703,456	\$ 721,043	\$ 739,069	\$ 757,545
SUBTOTAL - EXPENSES	\$ 3,863,690	\$ 3,960,283	\$ 4,059,290	\$ 4,160,772	\$ 4,264,791	\$ 4,371,411	\$ 4,480,696	\$ 4,592,714	\$ 4,707,531	\$ 4,825,220	\$ 4,945,850	\$ 5,069,497	\$ 5,196,234	\$ 5,326,140	\$ 5,459,293	\$ 5,595,776	\$ 5,735,670	\$ 5,879,062	\$ 6,026,038	\$ 6,176,689	\$ 6,331,106	\$ 6,489,384	\$ 6,651,619	\$ 6,817,909
RESERVE	\$ 1,042	\$ 1,068	\$ 1,094	\$ 1,122	\$ 1,150	\$ 1,178	\$ 1,208	\$ 1,238	\$ 1,269	\$ 1,301	\$ 1,333	\$ 1,367	\$ 1,401	\$ 1,436	\$ 1,472	\$ 1,508	\$ 1,546	\$ 1,585	\$ 1,624	\$ 1,665	\$ 1,707	\$ 1,749	\$ 1,793	\$ 1,838
EARNINGS	\$ 1,339	\$ 1,458	\$ 1,585	\$ 1,719	\$ 1,861	\$ 2,011	\$ 2,171	\$ 2,340	\$ 2,519	\$ 2,708	\$ 2,908	\$ 3,120	\$ 3,345	\$ 3,582	\$ 3,833	\$ 4,098	\$ 4,379	\$ 4,675	\$ 4,988	\$ 5,318	\$ 5,668	\$ 6,036	\$ 6,426	\$ 6,837
CUMULATIVE RESERVE	\$ 29,170	\$ 31,696	\$ 34,375	\$ 37,215	\$ 40,226	\$ 43,415	\$ 46,794	\$ 50,372	\$ 54,159	\$ 58,168	\$ 62,410	\$ 66,897	\$ 71,642	\$ 76,660	\$ 81,965	\$ 87,572	\$ 93,497	\$ 99,756	\$ 106,368	\$ 113,352	\$ 120,726	\$ 128,512	\$ 136,731	\$ 145,405

ASSUMPTIONS

Total No. of Units	Reserve in 2013
Absorption Period (yrs)	
Annual Special Tax per Unit	
Total Non-Residential Building Area (sq.ft.)	Dollars:
Annual Assessment per non-res sq. foot	
Annual Increase in Assessment	
Inflation	
Investment Earnings	
Initial Seed Fund	
Amount Financed	
Borrowing Rate	
Term of Loan (yrs)	
Assessment Cap (per residential unit)	
Expense Absorption Period (Yrs)	

ESTIMATED ANNUAL EXPENSES IN 2013 DOLLAR

Street Lights	
Traffic Signals	
Street Signs	
Asphalt Slurry/Striping	
Asphalt Overlay	
Street Sweeping	
Concrete Curb and Gutter Repair	
Concrete Sidewalk Repair	
Landscaping (Streetscape)	
Landscaping (Open Space)	
Landscaping (Detention Basins)	
Landscaping (Bluff)	
Youth Camp Fence	
MST (Transit)	
Sheriff	
Storm Drains	
Storm Drain Structures	
Storm Drain Equipment	
Minor Repairs	
Vector Control	
Light Maintenance/Supplies	
Maintenance Inspections	
Storm Drain Maintenance	
Community Park Maintenance	
Administration (20%)	
Misc & Contingency (15%)	
TOTAL	

YEAR	<u>2062</u>
Cumulative No. of Units	1,400

A. INCOME	
CFD Special Taxes	\$ 6,990,241

B. PROJECTED EXPENSES	
Street Lights	\$ 61,368
Traffic Signals	\$ 62,793
Street Signs	\$ 1,442
Asphalt Slurry/Striping	\$ 25,575
Asphalt Overlay	\$ 162,828
Street Sweeping	\$ 67,169
Concrete Curb and Gutter Repair	\$ 5,603
Concrete Sidewalk Repair	\$ 9,959
Landscaping (Streetscape)	\$ 129,393
Landscaping (Open Space)	\$ 533,761
Landscaping (Detention Basins)	\$ 158,865
Landscaping (Bluff)	\$ 266,787
Youth Camp Fence	\$ 17,055
MST (Transit)	\$ 321,915
Sheriff	\$ 2,296,995
Storm Drains	\$ 51,158
Storm Drain Structures	\$ 5,784
Storm Drain Equipment	\$ 94,026
Minor Repairs	\$ 20,120
Vector Control	\$ 40,994
Light Maintenance/Supplies	\$ 40,239
Maintenance Inspections	\$ 10,730
Storm Drain Maintenance	\$ 67,066
Community Park Maintenance	\$ 724,935
Administration (20%)	\$ 1,035,312
Misc & Contingency (15%)	\$ 776,484
SUBTOTAL - EXPENSES	\$ 6,988,357
RESERVE	\$ 1,884
EARNINGS	\$ 7,270
CUMULATIVE RESERVE	\$ 154,559

ASSUMPTIONS

Total No. of Units

Absorption Period (yrs)

Annual Special Tax per Unit \$ 46,092

Total Non-Residential Building Area (sq.ft.)

Annual Assessment per non-res sq. foot

Annual Increase in Assessment

Inflation

Investment Earnings

Initial Seed Fund

Amount Financed

Borrowing Rate

Term of Loan (yrs)

Assessment Cap (per residential unit)

Expense Absorption Period (Yrs)

ESTIMATED ANNUAL EXPENSES IN 2013 DOLLAR

Street Lights	
Traffic Signals	
Street Signs	
Asphalt Slurry/Striping	
Asphalt Overlay	
Street Sweeping	
Concrete Curb and Gutter Repair	
Concrete Sidewalk Repair	
Landscaping (Streetscape)	
Landscaping (Open Space)	
Landscaping (Detention Basins)	
Landscaping (Bluff)	
Youth Camp Fence	
MST (Transit)	
Sheriff	
Storm Drains	
Storm Drain Structures	
Storm Drain Equipment	
Minor Repairs	
Vector Control	
Light Maintenance/Supplies	
Maintenance Inspections	
Storm Drain Maintenance	
Community Park Maintenance	
Administration (20%)	
Misc & Contingency (15%)	
TOTAL	

DRAFT

APPENDIX D

Maintenance Checklists

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Stormwater/Flood Control Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Inlet/Outlet Obstructions	Are any of the inlets obstructed with debris?				
	Is there large vegetation growing within 6 feet of inlet opening?				
	Are the inlets functioning in a satisfactory manner?				
	Are there any obstructions blocking the opening of the topped riser?				
Overall Basin Condition	Is there coarse debris or trash in the basin?				
	Can the debris be removed by hand or will vehicles be required?				
	Is there an overgrowth of vegetation such that the volume of the basin is diminished?				
	Can the vegetation be removed by hand or will vehicles be required?				
	Are the side slopes and embankments in good condition?				
	Does maintenance need to be scheduled to stabilize the slopes or embankments?				
Infiltration Obstructions	Is there a buildup of algae or silt on the floor of the basin? To what degree?				
	Does maintenance need to be scheduled to remove the buildup?				
	Can the buildup be removed by hand or will vehicles be required?				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Infiltration Rate Monitoring	Is there evidence of long term (more than a week) ponding of water? Describe in the notes.				
	Have direct observations been made of standing water in the basin for longer than 48 hours after the last pump cycle?				
	What is believed to be the cause of the standing water?				
	Does maintenance need to be scheduled to remediate the problem?				
Human Encroachment	Is there evidence of encroachment, vandalism, or improper use of the stormwater basin?				
	Does maintenance need to be scheduled to repair any damage?				
	What efforts can be undertaken to reduce any observed encroachment?				
Additional Maintenance Recommendations	Do any basin structures require maintenance to provide more effective function?				
	Are there remedial or repair tasks that should be undertaken in the near future?				

Park/Open Space Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Sports Facilities	Are basketball courts and goals in an operable condition? If not, what repairs are needed?				
	Have baseball/softball infields been raked? Are foul lines present and legible?				
	Have turf areas been mowed to a playable height? Are there areas of turf in need of repair?				
	Have soccer field markings been striped? Are goals and nets in a useable condition?				
Vegetation	Are lawn/native ground cover areas in need of mowing?				
	Do trees need to be pruned? Is there any need for a tree maintenance service?				
	Have flower beds been planted and weeded?				
	Do leaves and other dead vegetation need to be culled and/or collected?				
	Do hedges and other low lying shrubs need to be trimmed or pruned?				
	Are irrigation systems in need of repair?				
Playground Equipment	Is any playground equipment in an unsafe condition (i.e., exposed sharp corners, broken swings)?				
	Is cushion material (padding, wood chips) in a safe condition?				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
	Does any equipment need to be cleaned or painted?				
	Does maintenance need to be scheduled to remediate any problems?				
Whitcher Family Cemetery	Is bench/plaque in a clean condition?				
	Is fencing in need of painting/repair?				
	Does any vegetation need to be pruned or collected?				
	Is there any evidence of an unsafe condition?				
Picnic Areas/Other	Are benches and tables in a clean, safe condition?				
	Is there any evidence of vandalism or graffiti? To what degree?				
	Are restrooms clean? Are fixtures in an operable condition?				
	Are water fountains functioning properly?				
	Are game tables in proper condition?				
	Is the interactive fountain free of debris? Is it operating and draining properly?				
	Are trash bins and barbecue facilities in an operable, clean condition?				
Pavilion	Are seating surfaces in a safe, useable condition?				
	Is the fire pit in an operable, clean condition?				
	Is the stage area and equipment in a clean and operating condition?				

Road Maintenance Checklist

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Street Pavement	Have streets been swept or are in need of sweeping?				
	Are areas of street pavement exhibiting signs of distress? If so, to what degree?				
	Are pavement markings coherent and visible? Are bicycle lanes clearly delineated?				
	Does maintenance need to be scheduled to repair street pavement sections?				
Drainage Facilities	Are curb and gutters in good condition and capable of directing surface flows?				
	Are inlets and catch basins free of debris?				
	Is there any evidence of ponding water or flow obstructions at or near inlets?				
	Are any grates or safety devices missing or damaged at inlets? If so, what is degree of damage?				
	Does maintenance need to be scheduled repair drainage facilities?				
Signage	Are any street signs missing or in need of replacement?				
	Are street signs clean and visible from a proper distance?				
	Do additional or replacement signs need to be ordered?				

	Monitoring/Maintenance Activity	Yes	No	N/A	Maintenance Remarks
Sidewalks	Are sidewalks in need of sweeping or any type of debris removal?				
	Are curb cuts and sidewalk access points free of debris and accessible?				
	Is there any evidence of sidewalk pavement distress? If so, to what degree?				
	Does maintenance need to be scheduled to remediate any noted problems?				
Street Lights	Are streetlights/electroliers functioning? Are any structures in disrepair or danger of collapse?				
	Are traffic signals in an operable condition? Have bulbs or LED matrices been replaced or are in need of replacement?				
	Is there any evidence of damage that warrants maintenance or replacement?				

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