



Reserve Study Project No. 10014

Prepared for
Miller Ranch Property Owners' Association
Edwards, Colorado

Prepared by
Bornengineering
8310 South Valley Highway, 3rd Floor
Englewood, Colorado 80112

November 18, 2010

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Miller Ranch Property Owners' Association

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November 18, 2010

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Re: Miller Ranch Property Owners' Association, Edwards, Colorado
Reserve Study – Project No. 10014

Dear Members of the Board of Directors:

Bornengineering has been commissioned by Slifer Management Company, Inc. to prepare a Reserve Study. The purpose of this Reserve Study is to evaluate the common-area components for major repair, maintenance and replacement items that are the responsibility of the Miller Ranch Property Owners' Association. This Study provides a limited-scope evaluation of the existing condition and remaining life of the common-area components. The Study also includes estimated costs for the major repair, maintenance and replacement items to enable the Association to establish an adequate level of reserve funds for the upkeep of the property.

Community Description

Miller Ranch Property Owners' Association consists of 118 one- and two-family residences built between 2003 and 2005. The Association maintenance responsibilities consist of asphalt parking areas, concrete sidewalks, concrete curb and gutter, concrete drain pans, utility concrete slabs, MSE block retaining walls, boulder retaining walls, dog stations, site furniture, street lights, irrigation, and landscaping.

Approach

To prepare this Reserve Study, Bornengineering has completed the necessary research, the component report, the cost estimates, the financial projections, and the projection interpretation.

The Study identifies each reserve component, estimates the quantities of the reserve components and assigns major action items to those components. A major action item is defined as anything estimated to be over \$1,000. Reserve cost estimates were determined from bids received from similar projects, unit costs obtained from projects of similar size and scope, past expenditures on similar work and cost estimating guides (RS Means, Walkers Builders Estimators Reference Book, Dodge Unit Cost Guide). We use typical useful lives and unit costs, presuming the systems were properly installed in compliance with local code requirements, manufacturer installation requirements and original construction documents. This Reserve Study is not intended to be a construction compliance assessment or maintenance manual. The Study

was prepared based on visual observations. The Study comments on the locations, physical description, the component condition, age, expected useful life, effective useful life, recommendations, and assigns action items to the components during the term of the Study.

The projections were assembled using the cash flow method. This method develops a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until a desired funding program is achieved.

The assigned action items and replacement costs for the component items are entered into our in-house projection software and the reserve projections include the following information:

- A summary page with general information about the Association and the projection summary results.
- The starting reserve fund balance and a projection starting date.
- Inflation factor, interest rate, tax rate (on interest earned), and loan rate if applicable.
- Monthly, bi-annual, annual, or special assessment contributions to the fund.
- A 30-year projection graph that displays the reserve fund balance and incorporates the assessment contribution, future estimated expenditures, inflation, interest, tax (on interest earned if applicable).
- A report detailing the estimated expenditures assigned to the individual reserve items.
- A chronological breakdown of the estimated reserve items in a calendar format.

There are three different reserve projections in the Study that were prepared in the following ways:

Existing Reserve Projection

The existing reserve projection is based upon current reserve fund contribution levels.

Preliminary Reserve Projection

The preliminary reserve projection is identical to the existing reserve projection except the reserve fund contributions are modified to allow the funds to cover the expenses over the term of the Study.

Final Reserve Projection

The final reserve projection is produced after the board of directors and/or management has had the opportunity to review and comment on the existing and preliminary reserve projections. Since the Study is to be a working plan that the Association will endorse and utilize, input is requested on the following items:

- Reserve items or estimated expenditures listed in the existing and preliminary projections.
- Timing of estimated expenditures listed in the existing and preliminary projections.
- Homeowner contributions, either through special assessments or regular assessments.

Note: Although costs for projects are beyond the control of Bornengineering, suggestions can be made for alternative materials or repair methods as requested by the Board of Directors or the Property Management Company.

Bornengineering recommends updating the Reserve Study annually or at least every two years to account for changes in inflation, reserve account interest rates, product life and other variables.

Reference Material

The following references were provided to Bornengineering for this Reserve Study by the Management Company and/or the Board of Directors:

- March 2010 financial balance sheet
- Interest rate earned on invested capital funds
- Historical expense and past capital project information

Exclusions

Items not included in this Study are:

- Non-common or non-limited common area components.
- Association components with work that have estimated costs below the reserve component threshold amount of \$1,000.
- Long lasting items with estimated economic lives exceeding 30 years, such as sanitary sewers or building structural components. However, these items are included if they are known to have a fairly predictable anticipated useful life that falls within the span of the projection.
- Normal monthly operating items, i.e., taxes, insurance, snow plowing, utilities, cleaning and landscape maintenance, etc., are typically not funded by the reserve account.

Disclaimer

This Reserve Study was prepared specifically for Miller Ranch Property Owners' Association. The information contained within this document has been assembled in conjunction with the client and is intended to assist the client with its reserve planning and funding. Bornengineering has performed visual site observations of the project to identify components and action items. These observations are non-invasive in nature and do not include any testing, verification of the original intent of the designer, or compliance with industry standards. Bornengineering does not guarantee, either explicitly or implied, that all repair and replacement items have been identified, the accuracy of the probable costs or the product lives associated with these items.

In providing the opinions of probable replacement costs, the client understands that Bornengineering has no control over costs or the price of labor, equipment or materials, or over the contractor's method of pricing, and that the opinions of probable replacement costs provided herein are made on the basis of Bornengineering's qualifications and experience. Bornengineering makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

All comments made are based on conditions seen at the time of this visual observation. We do not accept any responsibility for unknown or unknowable conditions within the existing site or structures.

If you have any questions regarding this report, please do not hesitate to contact our office.

Sincerely,

Bornengineering

A handwritten signature in black ink, appearing to read 'NLM', followed by a large, stylized circular flourish.

Neil L. Mekelburg, P.E., R.S.
Principal

Reserve Study Component Report

A. Topography and Grading

A1. Site and Building Grading and Drainage

Location: Adjacent to the building foundation systems for the single family homes, townhomes, and condominium buildings.

Description: The building drainage utilizes gutters, downspouts, and surface slope to force the runoff away from the building foundation system into the overall drainage system. The open landscape common areas utilize ground infiltration along with sloped surface and grass swales to move runoff to the drainage collection systems. We were informed by the Association that they maintain all the landscape for the community which includes the front exterior of the single family and townhomes and along with all the landscape associated with the condominiums.

Condition: The building grading and drainage is in good to fair condition. We noted that most of the buildings have sufficient slope away from the building foundations however, there are several buildings where the surface slope is flat and/or sloped towards the building foundation, the condo buildings in particular. For the condos, it is recommended that perforated piping be installed in place of downspout extensions and discharge the stormwater runoff, via the piping, to the landscape areas away from the foundations of the buildings. This expense will not be included in this Study since it is considered the responsibility of the Miller Ranch Condominium Association and it will be noted in that Association's Study. It is recommended that the Property Owners' Association maintain and regrade the earthen areas adjacent to the foundations to all the buildings in the Miller Ranch Community. The site grading and drainage in common landscape open areas are in good condition.

Age: Varies.

Expected Useful Life: Indefinite, with cyclical regrading and maintenance.

Effective Useful Life: Indefinite, with cyclical regrading and maintenance.

Action(s):

- Cyclically regrade and maintain a portion of the earthen areas adjacent to the building foundation system every 8 years, starting in 2012.
- Cyclically check and clean debris from the inlets to ensure proper function every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



A2. Detention Basins

Location: Southern section of the community, adjacent to property boundary.

Description: The southern drainage basins/grass swales collect stormwater runoff from the Miller Ranch community, via surface slope, and discharge the runoff off-site through culvert pipes.

Condition: Good to fair condition. We were informed by the Property Owners' Association that there are drainage issues relating to snowmelt and the drainage of the snowmelt associated with the southwest drainage basin, adjacent to the south perimeter of the community. The Association informed us the snowmelt water ponds on the concrete apron due to insufficient drainage slope to the basin. We noted within the southwest detention basin that the grass swale lacks sufficient slope to convey runoff water effectively. We recommend a drainage study be performed on the detention area in order to provide a proper design to promote positive drainage.

Age: Estimated 7 years old.

Expected Useful Life: Indefinite, with cyclical regrading and maintenance.

Effective Useful Life: Indefinite with maintenance, including mowing and maintenance to the grasses and vegetation.

Action:

- We recommend that a drainage study be performed on the southwest detention basin in 2011 to determine the best engineered solution to convey runoff/snowmelt water effectively to the detention basin. Engineering fees are included in this component action.
- Cyclically check and clean debris from the culvert pipes to ensure proper function every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.
- Cyclically inspect any erosion or instability of the slopes, clear excessive sedimentation build-up in the basin, monitor settling at bermed areas, and monitor the grass swale conveyance to ensure proper function every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



B. Paving

B1. Asphalt Drive and Parking Areas

Location: Parking areas adjacent to Flat Top Street, Tames Creek Street, Del Rio Street, Marble Street, and Mill Loft Street.

Description: Estimated 19,040 square feet presumed recycled bituminous asphalt pavement.

Condition: Good condition with low grade raveling/weathering and distortion.

Preventative Maintenance

Seal Coating protects asphalt from ultraviolet rays and water, which helps to slow the process of oxidation and raveling. The goal of seal coat is create a waterproof, protective coating that can increase the life of an Associations pavement and improve appearance. *Source: Rocky Mountain Pavement*

Crack seal is a long term, cost effective way to maintain the life of an Associations pavement. It seals the cracks from water intrusion and other damaging factors. Material is applied hot to crate a bond with the existing pavement as a defense against pavement deterioration. *Source: Rocky Mountain Pavement*

Corrective Maintenance

Asphalt overlays are an application of a layer of bituminous material to an existing surface. The benefits of asphalt overlays is that it adds structural strength to the existing surface, can improve drainage, re-establishes proper grade and smooth ride, and can be less expensive than complete removal and replacement. Asphalt milling may be needed in areas where curb and gutters are present. *Source: Rocky Mountain Pavement*

Conventional Patching repairs sub-grade failures by removing existing asphalt, possible excavation of subgrade material, possible addition of compacted fill material, and replacement of asphalt. The benefits to patchwork is that it stabilizes sub-grade material, re-establish proper drainage, and permanent and long lasting. *Source: Rocky Mountain Pavement*

Age: Varies.

Expected Useful Life: Indefinite with preventative and corrective maintenance.

Effective Useful Life: Indefinite with preventative and corrective maintenance.

Action(s):

- Cyclically seal coat and crack fill of the asphalt surface every 3 years, starting in 2012.
- Mill and overlay and/or full depth patch replace the asphalt associated with the parking areas every 18 years, starting in 2027. Prior to this work, we recommend contacting an engineer to recommend the most cost-effective way to perform the work, i.e., some areas of the asphalt may need full depth patch replacement; and other areas may need to be milled and overlaid. Engineer evaluation fees have been included in this component.



C. Flatwork

C1. Concrete Walkways

Location: Throughout the Miller Ranch community.

Description: Estimated 55,535 square feet of walkways are presumed to be on-grade, non-reinforced slabs.

Condition: Fair condition with extensive cracking and/or deterioration noted. Some of the cracked areas have settled or heaved resulting in differential edges, which can be a tripping hazard if not corrected. We were informed that the Miller Ranch Property Owners' Association has capital improvement projects for 2011 that include extensive sidewalk repair and replacement.

Age: Varies.

Expected Useful Life: Indefinite, with cyclical sectional, replacement. Most communities typically replace damaged sections of concrete walkways as needed rather than 100% replacement.

Effective Useful Life: Indefinite, with cyclical, sectional replacement.

Action(s):

- Cyclically remove and replace damaged sections of the concrete walkways every 3 years, starting in 2014.
- Inspect the surface and repair any cracks or deteriorating concrete walkways every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



C2. Concrete Drain Pan

Location: Adjacent to parking areas associated with Flat Top Street, Tames Creek Street, Del Rio Street, Marble Street, and Mill Loft Street.

Description: Estimated 4,205 square feet of 3 foot wide, reinforced concrete pan, sloped to convey stormwater runoff.

Condition: Good to fair condition with minor cracking and moderate deterioration noted.

Age: Varies.

Expected Useful Life: Indefinite, with cyclical, sectional replacement.

Effective Useful Life: Indefinite, with cyclical, sectional replacement.

Action(s):

- Cyclically remove and replace of the damaged sections of the concrete pan every 6 years, starting in 2014.
- Inspect the surface and repair any cracks or deteriorating concrete pan every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



C3. Curb and Gutter

Location: Adjacent to parking areas. Option - curb and gutter associated roadways throughout the community and south section of the entrance island adjacent to Mill Loft Street.

Description: Estimated 2,790 linear feet adjacent to the parking spaces and 9,394 linear feet adjacent to the roads of 6 inch tall, spill and catch barrier concrete curbs with 1 and 2 foot wide gutters.

Condition: Good to fair condition with areas of significant cracking, deterioration, and damaged sections noted. Most of the damage to the curb and gutters within the Miller Ranch community are mainly from the heavy use of snow-traction aggregate and chemicals along with snow plowing operations. We were informed that the Association is responsible for the curb and gutters associated with the parking areas. We were requested by the Property Owners' Association to include a budget option for all the curb and gutters within the Miller Ranch community, except for curb and gutter associated with the Condominium Association, because it is unclear to the Association if the curb and gutter associated with the streets is the responsibility of the Association or Eagle County. The curb and gutter located adjacent to the roads have been included in this report for informational purposes only and are not included in the financial projections.

Age: Varies.

Expected Useful Life: Indefinite, with cyclical sectional, replacement.

Effective Useful Life: Indefinite, with cyclical sectional, replacement.

Action(s):

- Cyclically remove and replace the damaged sections of the concrete curb and gutters every 6 years, starting in 2011.
- Informational only – Cyclically remove and replace the damaged sections of the concrete curb and gutter every 6 years, starting in 2011.
- Inspect the surface and repair any cracks or deteriorating concrete curbs every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



C4. Concrete Approaches - Option

Location: Driveway approaches to Miller Ranch community alleys.

Description: Estimated 7,805 square feet of concrete approaches, presumed to be 6 inches thick and reinforced.

Condition: Good to fair condition with significant cracking and/or deterioration noted in areas. We were requested by the Property Owners' Association to include a budget option for all the concrete approaches within the Miller Ranch community because it is unclear to the Association if the concrete approaches associated with the alleys is the responsibility of the Association or Eagle County. The concrete approaches have been included in this report for informational purposes only and are not included in the financial projections.

Age: Varies.

Expected Useful Life: Indefinite, with cyclical, sectional replacement.

Effective Useful Life: Indefinite, with cyclical, sectional replacement.

Action(s):

- Informational only – Cyclically remove and replace the damaged sections of the concrete approaches every 6 years, starting in 2011.
- Inspect the surface and repair any cracks or deteriorating concrete curbs every year. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



C5. Concrete Slabs

Location: Throughout the community.

Description: Estimated 961 square feet of concrete pads for small and large electrical transformers, mailboxes, and site furniture.

Condition: Good condition with no significant cracking and/or deterioration noted.

Age: Varies.

Expected Useful Life: Indefinite, with periodic replacement.

Effective Useful Life: Indefinite, with periodic replacement.

Action(s):

- Cyclically remove and replace the damaged sections of the concrete slabs every 6 years, starting in 2017.
- Inspect the surface and repair any cracks or deteriorating concrete slabs every year. This cost is not included in the Study because the cost to perform this action is below the minimum threshold of this Study.



D. Landscaping and Appurtenances

D1. Community Signs

Location: Throughout the community.

Description: Estimated 65 metal address, street, and parking signs.

Condition: Good condition.

Age: Varies.

Expected Useful Life: 15 to 20 years, if maintained properly.

Effective Useful Life: Varies.

Action(s):

- Inspection and replacement of address, street, and no parking signs are done on an as needed basis. The cost is not included in the Study because it falls below the minimum fund threshold.



D2. Split Rail Fence

Location: Northwest of condo building D.

Description: Estimated 19 linear feet of split rail wood fencing.

Condition: Good condition.

Age: Estimated 7 years old.

Expected Useful Life: 15 years due to exposure to the mountainous weather.

Effective Useful Life: 8 years.

Action(s):

- Cyclically remove and replace the split rail fencing every 15 years, starting in 2018. This cost is not included in this Study because the removal and replacement cost is below the minimum threshold of this Study.



D3. Street Lights

Location: In grass areas adjacent to streets.

Description: Estimated 25 street lights at an estimated height of 10 feet.

Condition: The site observation was performed during the day, so we cannot verify if lights are in good working condition but aesthetically are in good condition. We were informed by the Association that 90% of the ballasts associated with the lights were replaced in 2009-2010.

Age:

- Ballasts - estimated 1 year old
- Posts - estimated 7 years old.

Expected Useful Life:

- Ballasts - 10 to 15 years. We were informed by the Association their ballasts are only lasting 4 to 5 years
- Posts - 20 to 30 years.

Effective Useful Life:

- Ballasts - 9 to 14 years
- Posts - 13 to 23 years.

Action(s):

- Cyclically remove and replace street light ballasts every 5 years, starting in 2016.
- Remove and replace the street lights in 2029.



D4. Pet Stations

Location: Various locations throughout the community.

Description: Estimated thirteen pet stations that have a waste dispenser, pet sign, and trash receptacle that is attached to a green fiberglass telescoping post.

Condition: Good to fair condition. It was noted that several dog station posts are leaning and/or damaged, most likely due to snow storage from the snow removal during the winter months.

Age: Varies.

Expected Useful Life: 5 to 10 years.

Effective Useful Life: Estimated 3 to 5 years.

Action(s):

- Cyclically remove and replace a portion of the pet stations every 3 years, starting in 2016.



D5. Site Furniture

Location: Throughout common landscape areas within the community.

Description: Estimated thirteen trash receptacles that are constructed of 2" vertical wood/hard plastic slats with steel interior framework. Estimated eleven benches that are constructed of rust proof, cast iron frame with wood/hard plastic slats. Estimated four tables that are constructed of hard plastic framing and boards.

Condition: Good to fair condition. It was noted that there are several trash receptacles with missing and/or damaged vertical slats.

Age: Varies.

Expected Useful Life: 10 to 15 years.

Effective Useful Life: Estimated 5 to 10 years.

Action(s):

- Remove and replace a portion of the benches, trash receptacles, tables every 7 years, starting in 2014.



D6. Vegetation

Location: Landscape features throughout the community.

Description: Various species of trees, plants, and grass cover.

Condition: Good to fair condition with several areas of spotty grass from domestic animals. We were informed that the Property Owners' Association maintains all landscape within the community which includes landscaping associated with the townhomes and condos. We were also informed there is landscape budget within the annual budget and that costs associated with landscaping/vegetation regarding the reserve study should be minimal.

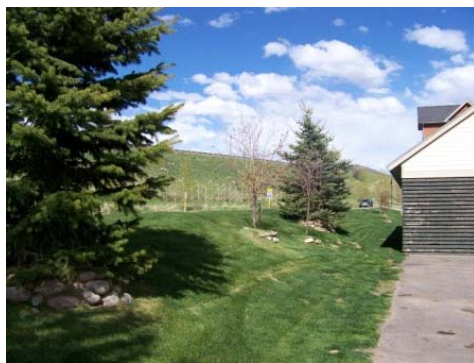
Age: Varies.

Expected Useful Life: 30 to 50 years.

Effective Useful Life: Varies.

Action(s):

- Complete the last year of work from the Association's two-year project in 2011.
- Cyclically remove and replace the diseased or dead trees, plants, and grass cover every year, starting in 2011.



D7. Irrigation System

Location: Throughout landscaped common areas.

Description: Irrigation system composed of drip lines and sprinklers. We were informed by the Association that there are six irrigation clocks with 145 zones.

Condition: Presumed in good condition.

Age: Varies. Irrigation systems are normally repaired as needed and major components are replaced through reserve funds.

Expected Useful Life: Cyclical replacement.

Effective Useful Life: Cyclical replacement.

Action(s):

- The irrigation is maintained every year through the operating budget.



Miller Ranch Property Owners' Association Reserve Component Detail

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Site and Building Grading and Drainage								
Regrade and maintain earthen areas	2012	2012	8	0	1	1 UT	5,000.00	<u>5,000</u>
Site and Building Grading and Drainage - Total								\$5,000
Detention Basins								
Engineering evaluation of detention ba..	2011	2011	1	0	0	1 UT	3,500.00	<u>3,500</u>
Detention Basins - Total								\$3,500
Asphalt Drive and Parking Areas								
Engineering evaluation fee for asphalt ..	2024	2024	15	0	13	1 UT	5,000.00	5,000
Mill and overlay and/or full depth patch..	2027	2027	18	0	16	9,520 SF	2.79	26,561
Seal coat and crack fill	2012	2012	3	0	1	19,040 SF	0.24	<u>4,570</u>
Asphalt Drive and Parking Areas - Total								\$36,130
Concrete Walkways								
Remove and replace damaged sections	2014	2014	50	0	3	3,332 SF	11.00	<u>36,653</u>
Concrete Walkways - Total								\$36,653
Concrete Drain Pan								
Remove and replace damaged sections	2014	2014	50	0	3	504 SF	12.00	<u>6,055</u>
Concrete Drain Pan - Total								\$6,055
Curb and Gutter								
Remove and replace damaged sections	unfunded							
Replace curb and gutter adjacent to ro..	unfunded							
Concrete Approaches								
Remove and replace damaged sections	unfunded							
Concrete Slabs								
Remove and replace damaged sections	2017	2017	50	0	6	115 SF	11.00	<u>1,269</u>
Concrete Slabs - Total								\$1,269
Community Signs								
Remove and replace	unfunded							
Split Rail Fence								
Remove and replace	unfunded							
Street Lights								
Remove and replace street light ballasts	2016	2016	5	0	5	25 UT	400.00	10,000
Remove and replace street lights	2029	2029	30	0	18	25 UT	1,600.00	<u>40,000</u>
Street Lights - Total								\$50,000

Miller Ranch Property Owners' Association **Reserve Component Detail**

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Pet Stations								
Remove and replace a portion	2016	2016	10	0	5	3 UT	400.00	<u>1,560</u>
Pet Stations - Total								\$1,560
Site Furniture								
Remove and replace a portion	2014	2014	7	0	3	7 UT	560.00	<u>3,920</u>
Site Furniture - Total								\$3,920
Vegetation								
Complete two-year project	2011	2011	1	0	0	1 UT	20,000.00	20,000
Remove and replace	2012	2012	1	0	1	1 UT	2,500.00	<u>2,500</u>
Vegetation - Total								\$22,500
Irrigation System								
No action from reserve study	<i>unfunded</i>							
Total Asset Summary								<u>\$166,587</u>

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Description										
Site and Building Grading and Drainage										
Regrade and maintain earthen areas		5,150								6,524
Site and Building Grading and Drainage Total:		5,150								6,524
Detention Basins										
Engineering evaluation of detention ba..	3,500									
Detention Basins Total:	3,500									
Asphalt Drive and Parking Areas										
Engineering evaluation fee for asphalt ..										
Mill and overlay and/or full depth patch..										
Seal coat and crack fill		4,707			5,143			5,620		
Asphalt Drive and Parking Areas Total:		4,707			5,143			5,620		
Concrete Walkways										
Remove and replace damaged sections				40,052			43,766			47,824
Concrete Walkways Total:				40,052			43,766			47,824
Concrete Drain Pan										
Remove and replace damaged sections				6,617						7,901
Concrete Drain Pan Total:				6,617						7,901
Curb and Gutter										
Remove and replace damaged sections	<i>unfunded</i>									
Replace curb and gutter adjacent to ro..	<i>unfunded</i>									
Concrete Approaches										
Remove and replace damaged sections	<i>unfunded</i>									
Concrete Slabs										
Remove and replace damaged sections							1,515			
Concrete Slabs Total:							1,515			
Community Signs										
Remove and replace	<i>unfunded</i>									

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Description										
Split Rail Fence										
Remove and replace	<i>unfunded</i>									
Street Lights										
Remove and replace street light ballasts						11,593				
Remove and replace street lights										
Street Lights Total:						11,593				
Pet Stations										
Remove and replace a portion						1,808			1,976	
Pet Stations Total:						1,808			1,976	
Site Furniture										
Remove and replace a portion				4,283						
Site Furniture Total:				4,283						
Vegetation										
Complete two-year project	20,000									
Remove and replace		2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262
Vegetation Total:	20,000	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262
Irrigation System										
No action from reserve study	<i>unfunded</i>									
Year Total:	23,500	12,432	2,652	53,684	7,957	16,299	48,266	8,695	5,143	65,510

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Description										
Site and Building Grading and Drainage										
Regrade and maintain earthen areas								8,264		
Site and Building Grading and Drainage Total:								8,264		
Detention Basins										
Engineering evaluation of detention ba..										
Detention Basins Total:										
Asphalt Drive and Parking Areas										
Engineering evaluation fee for asphalt ..				7,343						
Mill and overlay and/or full depth patch..							42,622			
Seal coat and crack fill	6,141			6,711						8,013
Asphalt Drive and Parking Areas Total:	6,141			14,053			42,622			8,013
Concrete Walkways										
Remove and replace damaged sections			52,259			57,104			62,399	
Concrete Walkways Total:			52,259			57,104			62,399	
Concrete Drain Pan										
Remove and replace damaged sections						9,434				
Concrete Drain Pan Total:						9,434				
Curb and Gutter										
Remove and replace damaged sections		<i>unfunded</i>								
Replace curb and gutter adjacent to ro..		<i>unfunded</i>								
Concrete Approaches										
Remove and replace damaged sections		<i>unfunded</i>								
Concrete Slabs										
Remove and replace damaged sections			1,809						2,160	
Concrete Slabs Total:			1,809						2,160	
Community Signs										
Remove and replace		<i>unfunded</i>								

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Description										
Split Rail Fence										
Remove and replace	unfunded									
Street Lights										
Remove and replace street light ballasts	13,439					15,580				
Remove and replace street lights									68,097	
Street Lights Total:	13,439					15,580			68,097	
Pet Stations										
Remove and replace a portion		2,159			2,360			2,578		
Pet Stations Total:		2,159			2,360			2,578		
Site Furniture										
Remove and replace a portion	5,268							6,479		
Site Furniture Total:	5,268							6,479		
Vegetation										
Complete two-year project										
Remove and replace	3,360	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384
Vegetation Total:	3,360	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384
Irrigation System										
No action from reserve study	unfunded									
Year Total:	28,208	5,620	57,632	17,725	6,141	86,013	46,634	21,454	136,912	12,397

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Description										
Site and Building Grading and Drainage										
Regrade and maintain earthen areas						10,469				
Site and Building Grading and Drainage Total:						10,469				
Detention Basins										
Engineering evaluation of detention ba..										
Detention Basins Total:										
Asphalt Drive and Parking Areas										
Engineering evaluation fee for asphalt ..								11,440		
Mill and overlay and/or full depth patch..										
Seal coat and crack fill			8,756			9,568		10,455		
Asphalt Drive and Parking Areas Total:			8,756			9,568		21,895		
Concrete Walkways										
Remove and replace damaged sections		68,186			74,508			81,417		
Concrete Walkways Total:		68,186			74,508			81,417		
Concrete Drain Pan										
Remove and replace damaged sections		11,264						13,450		
Concrete Drain Pan Total:		11,264						13,450		
Curb and Gutter										
Remove and replace damaged sections		<i>unfunded</i>								
Replace curb and gutter adjacent to ro..		<i>unfunded</i>								
Concrete Approaches										
Remove and replace damaged sections		<i>unfunded</i>								
Concrete Slabs										
Remove and replace damaged sections					2,579					
Concrete Slabs Total:					2,579					
Community Signs										
Remove and replace		<i>unfunded</i>								

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Spread Sheet**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Description										
Split Rail Fence										
Remove and replace	unfunded									
Street Lights										
Remove and replace street light ballasts	18,061					20,938				
Remove and replace street lights										
Street Lights Total:	18,061					20,938				
Pet Stations										
Remove and replace a portion	2,818			3,079			3,364			3,676
Pet Stations Total:	2,818			3,079			3,364			3,676
Site Furniture										
Remove and replace a portion					7,969					
Site Furniture Total:					7,969					
Vegetation										
Complete two-year project										
Remove and replace	4,515	4,651	4,790	4,934	5,082	5,234	5,391	5,553	5,720	5,891
Vegetation Total:	4,515	4,651	4,790	4,934	5,082	5,234	5,391	5,553	5,720	5,891
Irrigation System										
No action from reserve study	unfunded									
Year Total:	25,394	84,101	13,546	8,013	90,137	46,209	8,756	100,421	27,614	9,568

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2011	
Detention Basins	
Engineering evaluation of detention basins	3,500
Vegetation	
Complete two-year project	20,000
Total for 2011	\$23,500
Replacement Year 2012	
Site and Building Grading and Drainage	
Regrade and maintain earthen areas	5,150
Asphalt Drive and Parking Areas	
Seal coat and crack fill	4,707
Vegetation	
Remove and replace	2,575
Total for 2012	\$12,432
Replacement Year 2013	
Vegetation	
Remove and replace	2,652
Total for 2013	\$2,652
Replacement Year 2014	
Concrete Walkways	
Remove and replace damaged sections	40,052
Concrete Drain Pan	
Remove and replace damaged sections	6,617
Site Furniture	
Remove and replace a portion	4,283
Vegetation	
Remove and replace	2,732
Total for 2014	\$53,684
Replacement Year 2015	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	5,143

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
<i>Replacement Year 2015 continued...</i>	
Vegetation	
Remove and replace	2,814
Total for 2015	\$7,957
 Replacement Year 2016	
Street Lights	
Remove and replace street light ballasts	11,593
Pet Stations	
Remove and replace a portion	1,808
Vegetation	
Remove and replace	2,898
Total for 2016	\$16,299
 Replacement Year 2017	
Concrete Walkways	
Remove and replace damaged sections	43,766
Concrete Slabs	
Remove and replace damaged sections	1,515
Vegetation	
Remove and replace	2,985
Total for 2017	\$48,266
 Replacement Year 2018	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	5,620
Vegetation	
Remove and replace	3,075
Total for 2018	\$8,695
 Replacement Year 2019	
Pet Stations	
Remove and replace a portion	1,976
Vegetation	
Remove and replace	3,167
Total for 2019	\$5,143

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2020	
Site and Building Grading and Drainage	
Regrade and maintain earthen areas	6,524
Concrete Walkways	
Remove and replace damaged sections	47,824
Concrete Drain Pan	
Remove and replace damaged sections	7,901
Vegetation	
Remove and replace	3,262
Total for 2020	\$65,510
Replacement Year 2021	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	6,141
Street Lights	
Remove and replace street light ballasts	13,439
Site Furniture	
Remove and replace a portion	5,268
Vegetation	
Remove and replace	3,360
Total for 2021	\$28,208
Replacement Year 2022	
Pet Stations	
Remove and replace a portion	2,159
Vegetation	
Remove and replace	3,461
Total for 2022	\$5,620
Replacement Year 2023	
Concrete Walkways	
Remove and replace damaged sections	52,259
Concrete Slabs	
Remove and replace damaged sections	1,809
Vegetation	
Remove and replace	3,564
Total for 2023	\$57,632

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2024	
Asphalt Drive and Parking Areas	
Engineering evaluation fee for asphalt evaluation	7,343
Seal coat and crack fill	6,711
Vegetation	
Remove and replace	3,671
Total for 2024	\$17,725
Replacement Year 2025	
Pet Stations	
Remove and replace a portion	2,360
Vegetation	
Remove and replace	3,781
Total for 2025	\$6,141
Replacement Year 2026	
Concrete Walkways	
Remove and replace damaged sections	57,104
Concrete Drain Pan	
Remove and replace damaged sections	9,434
Street Lights	
Remove and replace street light ballasts	15,580
Vegetation	
Remove and replace	3,895
Total for 2026	\$86,013
Replacement Year 2027	
Asphalt Drive and Parking Areas	
Mill and overlay and/or full depth patch replacement	42,622
Vegetation	
Remove and replace	4,012
Total for 2027	\$46,634
Replacement Year 2028	
Site and Building Grading and Drainage	
Regrade and maintain earthen areas	8,264

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
<i>Replacement Year 2028 continued...</i>	
Pet Stations	
Remove and replace a portion	2,578
Site Furniture	
Remove and replace a portion	6,479
Vegetation	
Remove and replace	4,132
Total for 2028	\$21,454
 Replacement Year 2029	
Concrete Walkways	
Remove and replace damaged sections	62,399
Concrete Slabs	
Remove and replace damaged sections	2,160
Street Lights	
Remove and replace street lights	68,097
Vegetation	
Remove and replace	4,256
Total for 2029	\$136,912
 Replacement Year 2030	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	8,013
Vegetation	
Remove and replace	4,384
Total for 2030	\$12,397
 Replacement Year 2031	
Street Lights	
Remove and replace street light ballasts	18,061
Pet Stations	
Remove and replace a portion	2,818
Vegetation	
Remove and replace	4,515
Total for 2031	\$25,394

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2032	
Concrete Walkways	
Remove and replace damaged sections	68,186
Concrete Drain Pan	
Remove and replace damaged sections	11,264
Vegetation	
Remove and replace	4,651
Total for 2032	\$84,101
Replacement Year 2033	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	8,756
Vegetation	
Remove and replace	4,790
Total for 2033	\$13,546
Replacement Year 2034	
Pet Stations	
Remove and replace a portion	3,079
Vegetation	
Remove and replace	4,934
Total for 2034	\$8,013
Replacement Year 2035	
Concrete Walkways	
Remove and replace damaged sections	74,508
Concrete Slabs	
Remove and replace damaged sections	2,579
Site Furniture	
Remove and replace a portion	7,969
Vegetation	
Remove and replace	5,082
Total for 2035	\$90,137
Replacement Year 2036	
Site and Building Grading and Drainage	
Regrade and maintain earthen areas	10,469

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
<i>Replacement Year 2036 continued...</i>	
Asphalt Drive and Parking Areas	
Seal coat and crack fill	9,568
Street Lights	
Remove and replace street light ballasts	20,938
Vegetation	
Remove and replace	5,234
Total for 2036	\$46,209
 Replacement Year 2037	
Pet Stations	
Remove and replace a portion	3,364
Vegetation	
Remove and replace	5,391
Total for 2037	\$8,756
 Replacement Year 2038	
Concrete Walkways	
Remove and replace damaged sections	81,417
Concrete Drain Pan	
Remove and replace damaged sections	13,450
Vegetation	
Remove and replace	5,553
Total for 2038	\$100,421
 Replacement Year 2039	
Asphalt Drive and Parking Areas	
Engineering evaluation fee for asphalt evaluation	11,440
Seal coat and crack fill	10,455
Vegetation	
Remove and replace	5,720
Total for 2039	\$27,614
 Replacement Year 2040	
Pet Stations	
Remove and replace a portion	3,676

**Miller Ranch Property Owners' Association
Reserve Study Annual Expenditure Detail**

Description	Expenditures
<i>Replacement Year 2040 continued...</i>	
Vegetation	
Remove and replace	5,891
Total for 2040	<u>\$9,568</u>

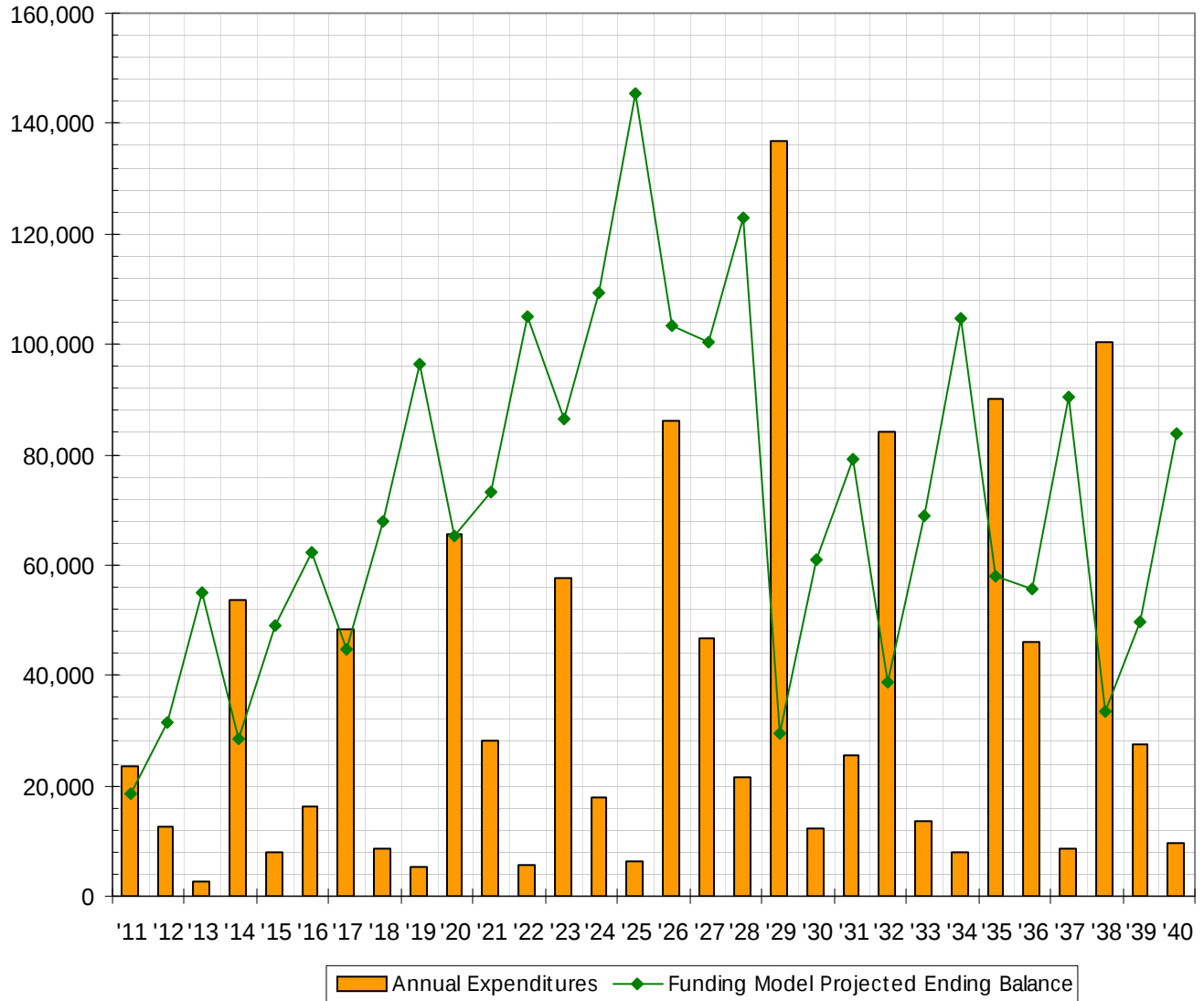
Miller Ranch Property Owners' Association Final Reserve Study Summary

<i>Report Parameters</i>			
Report Date	November 18, 2010	Inflation	3.00%
Account Number	10014	Interest Rate on Reserve Deposit	0.47%
Budget Year Beginning	January 01, 2011	Tax Rate on Interest	0.00%
Budget Year Ending	December 31, 2011	Contingency	1.00%
Total Units	282	2011 Beginning Balance	\$18,000.00

Year	Annual Contribution	Ave. Monthly Per Member	Percentage Increase
2011	24,128	7.13	4%
2012	25,093	7.42	4%
2013	26,097	7.71	4%
2014	27,141	8.02	4%
2015	28,226	8.34	4%
2016	29,355	8.67	4%
2017	30,530	9.02	4%
2018	31,751	9.38	4%
2019	33,021	9.76	4%
2020	34,342	10.15	4%
2021	35,715	10.55	4%
2022	37,144	10.98	4%
2023	38,630	11.42	4%
2024	40,175	11.87	4%
2025	41,782	12.35	4%
2026	43,453	12.84	4%
2027+	43,453	12.84	0%

<i>Final Funding Model Summary of Calculations</i>	
Required Monthly Contribution <i>\$7.13 per unit monthly</i>	\$2,010.67
Average Net Monthly Interest Earned	<u>\$2.97</u>
Total Monthly Allocation to Reserves <i>\$7.14 per unit monthly</i>	\$2,013.63

Miller Ranch Property Owners' Association Final Reserve Study Projection Graph



**Miller Ranch Property Owners' Association
Final Reserve Study Projection**

Beginning Balance: \$18,000

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves
2011	24,128	36	23,500	18,664
2012	25,093	93	12,432	31,418
2013	26,097	202	2,652	55,065
2014	27,141	76	53,684	28,598
2015	28,226	169	7,957	49,036
2016	29,355	229	16,299	62,321
2017	30,530	144	48,266	44,729
2018	31,751	251	8,695	68,036
2019	33,021	380	5,143	96,294
2020	34,342	233	65,510	65,358
2021	35,715	266	28,208	73,131
2022	37,144	413	5,620	105,068
2023	38,630	322	57,632	86,388
2024	40,175	426	17,725	109,264
2025	41,782	592	6,141	145,497
2026	43,453	391	86,013	103,328
2027	43,453	378	46,634	100,525
2028	43,453	483	21,454	123,008
2029	43,453	45	136,912	29,594
2030	43,453	192	12,397	60,842
2031	43,453	278	25,394	79,179
2032	43,453	88	84,101	38,619
2033	43,453	229	13,546	68,755
2034	43,453	397	8,013	104,592
2035	43,453	179	90,137	58,087
2036	43,453	167	46,209	55,498
2037	43,453	331	8,756	90,527
2038	43,453	64	100,421	33,623
2039	43,453	139	27,614	49,601
2040	43,453	299	9,568	83,786