

**MOORPARK CITY COUNCIL  
AGENDA REPORT**

**TO:** The Honorable City Council

**FROM:** Jeremy Laurentowski, Parks and Recreation Director *SL*

**DATE:** January 21, 2015 (CC Meeting of February 4, 2015)

**SUBJECT:** Consider the Renovation of the Tierra Rejada Road Streetscape; and Resolution Amending the Fiscal Year 2014/15 Budget

**BACKGROUND**

On February, 19, 2014, staff prepared an agenda report in response to the on-going drought conditions. The purpose of the report was to update the City Council regarding staff's current and future work concerning irrigation water use and water conservation efforts. Many professionals believe that 2013 was the driest year on record in California since 1894, and several California cities recorded the lowest rainfall totals since 1850. The Sierra Nevada snow pack that provides approximately one third of the state's water was only twenty percent of normal towards the end of 2013 and on January 17, 2014, Governor Jerry Brown declared a drought emergency in the State of California and urged Californians to reduce water consumption by at least 20%. Many professionals are predicting normal or above-normal rainfall totals in California during 2015. However, it may be several years before the drought conditions are lifted and reserves are back to normal.

For several years, the City Council has discussed the need to initiate a City wide plan to address water conservation. On May 21, 2014, the City Council adopted the City of Moorpark Mission Statement, Priorities, Goals, and Objectives for FY 2014/2015. Although several Departmental objectives address the City Council's desire to reduce water consumption, the following objective is specific to the Tierra Rejada Road (Tierra Rejada) streetscape:

***V. B. 5. Develop design plans to refurbish median landscaping and hardscape on Tierra Rejada Road, from Spring Road to Los Angeles Avenue, and Campus Park Drive from Princeton Avenue to Collins Drive, including cost estimates, financing, phasing and water conservation measures.***

In 2013, staff had an opportunity to coordinate a demonstration project consisting of native landscaping on Tierra Rejada, within the property owned by Southern California Edison (SCE), east of Walnut Creek. This project was the result of work necessary to install transmission equipment and was funded by Verizon. The result is a meadow of native grasses and shrubs specifically chosen to compliment the meadow appearance of the streetscape on Tierra Rejada. Due to the success of the project, the City Council approved a 12,000 s.f. project along the north side of Tierra Rejada, from the SCE property to Walnut Creek Road. The project included the same plant types installed within the SCE property, which primarily consisted of Meadow Sedge (*Carex pansa*), a low growing bunch grass native to central California, as well as *Coffee Berry* (*Rhamnus californica*) and Western Redbud (*Cercis occidentalis*), both native to the California foothills of southern California. The project also included retrofitting the existing irrigation system with low volume spray heads and the installation of a drip irrigation system. Staff estimates a 30% to 50% reduction in water use based on the type of California native plant material and the installation of the low volume irrigation system. The total cost of this work was approximately \$34,000.

During the February 19, 2014 City Council meeting, staff also discussed the need to develop a comprehensive plan to renovate all of the landscaping on Tierra Rejada, including the slopes, parkways, and median islands, with drought tolerant and California native plant material, or other low water use options. The majority of the Tierra Rejada streetscape lies within LMD Zone 2 (Steeple Hill Area Tract 2865), LMD Zone 5 (Pheasant Run Tracts 3019 & 3525) and LMD Zone 10 (Mountain Meadows Planned Community). LMD Zone 2 is fully funded and there is funding available for normal maintenance procedures, and improvements can generally be completed with funding from the LMD reserve account. However, funding for general maintenance procedures in LMD zones 5 and 10, which includes the cost of irrigation water, has historically been supplemented by the General Fund. These two zones were accepted by the City prior to the passage of Proposition 218 (*The Right to Vote on Taxes Act*) in 1996. Historically, LMD Zones 5 and 10 have exhibited negative fund balances of approximately \$41,437 and \$51,118 respectively, resulting in substantial funding from the general fund to supplement normal maintenance procedures. The cost of water for these two zones in FY 14/15 is estimated at \$87,000, which is equivalent to approximately 94% of the negative fund balance. Clearly aggressive water conservation measures and a reduction in maintenance procedures will be necessary to lessen the impact on the general fund in the future.

In February, 2014, the City Council approved funding for base mapping services for the section of Tierra Rejada from approximately Countrywood Drive to Spring Road. This work was necessary to establish a base layer for the proposed landscape renovation project. The base mapping was completed in July, 2014, at a cost of \$18,500. Staff initially determined that a portion of the renovation project would be completed with in-house staff, primarily the completion of a conceptual landscape plan and phasing plan that would identify general low water use planting concepts, or other water saving

options for each landscape area along Tierra Rejada. However, due to the current workload in the Parks, Recreation and Community Services Department, it has not been possible to complete this portion of the project with in-house staff. In an effort to initiate the landscape renovation project on Tierra Rejada, staff recommends contracting with a landscape architecture company that specializes in streetscape design and has demonstrated significant experience with the use of California native plant material.

## **DISCUSSION**

The Tierra Rejada streetscape extends from Los Angeles Avenue to Hwy 23, and consists of approximately 2.8 miles of roadway. The median islands on Tierra Rejada between Hwy 23 and Spring Road were installed in 2006 and are not being considered at this time. The remaining 2.5 miles of streetscape, between Spring Road and the Arroyo Simi, consists of high water use plant material, primarily Creeping Red Fescue (red fescue) (*Festuca rubra*) and various California native and non-native tree species, such as California Sycamore (*Platanus racemosa*), Coast Redwood (*Sequoia sempervirens*), European White Birch (birch) (*Betula pendula*), Eucalyptus (*Eucalyptus spp.*), Sweet Gum (*Liquidamber styraciflua*) and White Alder (*Alnus rhombifolia*). The median islands generally consist of Gazania (*Gazania spp.*), a short lived non-native perennial groundcover, and several trees species, such as California Sycamore (*Platanus racemosa*) and Brisbane Box (*Lophostemon confertus*). Several of the tree species within the Tierra Rejada streetscape are declining for various reasons, and in addition to the high water use nature of the streetscape design, many areas are in need of renovation.

Over the years, many of the Coast Redwoods that were planted along Tierra Rejada have slowly been in decline due to localized environmental stress conditions. Coast Redwoods are native to the coastal ranges and fog belt regions of northern California and southern Oregon. The coastal climate generally includes mild day time temperatures, rarely exceeding 75°F, long cool winters, a consistent marine influence and moderate to high annual rainfall. Many native plant species utilized for landscape purposes outside their natural range exhibit environmental stress conditions as climate, water availability and soil conditions typically do not provide optimum growing conditions required by these trees. Environmental stress eventually weakens their ability to resist disease and opens the door for pathogens and other plant disorders. In 2011 the City contracted with an arborist to prepare an arborist report and inspect the trees for common pathogens and evaluate the physical site conditions along the Tierra Rejada corridor. The arborist report confirms the presence of a fungal disease commonly called Sequoia canker. The canker disease is the result of the pathogen *Botryodiplodia spp.*, a fungus that infects trees that are exposed to environmental stress or weakened by site conditions. Seasonal rain and wind is responsible for dispersing the fungal spores and infecting neighboring trees. Unfortunately, most trees infected with the canker eventually die and at this time, a cure for this disease has not been identified. To date, 94 sequoia trees have been removed.

In addition, many of the birch trees are also declining. This is due to an infestation of boring beetles, particularly the Bronze Birch Borer (*Agilus anxius*). The larvae of the borer feed on the cambium layer of the tree and ultimately inhibit the flow of water, sap and vital nutrients to the tree. Due to the fact that insecticides are only effective during certain stages of the egg development, treatment and preventative measures are difficult to schedule, and they are ineffective once the infestation progresses to the larvae stage.

Several landscape areas along the Tierra Rejada corridor are also in need of renovation, primarily the north side of Tierra Rejada between Walnut Creek Road and Countrywood Drive, as well as the majority of the median islands. The red fescue on the north side of Tierra Rejada has started to decline, primarily due to reductions in irrigation and the fact that the streetscape is subject to full sun exposure throughout the year. The City will either need to increase the irrigation water use along the north side of Tierra Rejada or replace the red fescue that has started to decline with a low water use alternative. In addition, large sections of gazania within the median islands have outlived their life span. Gazania is a relatively short lived perennial groundcover and although it generally requires minimal supplemental water to thrive, it tends to die out in large sections over time. Staff recommends replacing the gazania with a more permanent low water use alternative, rather than replacing it in-kind.

In order to reduce water use, and lessen the long-term impacts on the General Fund, staff feels that it will be necessary to implement significant changes to the overall streetscape design on Tierra Rejada. Water rates continue to rise and it is uncertain whether water restrictions will be imposed on the City in the future. Severe reductions in water use may ultimately limit our ability to maintain our urban forest and ornamental landscape areas, particularly those landscape areas that require high to moderate supplemental irrigation water. In addition, staff feels that a long-term replacement plan for several of the existing tree species, primarily the Coast Redwoods and European White Birch trees, will be necessary to maintain the tree canopy and aesthetic value that the Tierra Rejada corridor has provided for many years to the residents of Moorpark.

Staff has solicited the services of Architerra Design Group (Architerra) to prepare a landscape master plan for the complete redesign of the Tierra Rejada corridor. Architerra is the landscape architecture company that completed the landscape architecture plans for the Walnut Acres Park project. They have extensive experience with streetscape design and landscape restoration projects and have provided landscape architectural services for many cities and various water agencies throughout Southern California. In addition, as a special consultant to the design team, Architerra has enlisted the assistance of Robert (Bob) Perry of Perry and Associates Collaborative. Bob Perry is a recognized expert in the field of drought tolerant and California native planting design, as well as sustainable landscape development. He is author of the three books on landscape plants and water conservation, including the

most recent, 'Landscape Plants for Western Gardens', and he is Professor Emeritus of Landscape Architecture at California State Polytechnic University, Pomona, where he started his academic career in 1972. Bob Perry will contribute to the project by providing input for planting strategies during the site inventory, analysis and conceptual design phase of the project. The total cost for this phase of the project is \$27,900. Staff will prepare a construction budget and will obtain a proposal from Architerra to prepare landscape construction plans and specifications for the project once the design concept has been finalized and approved by the City Council.

Staff recommends starting the first phase of this project immediately, particularly the renovation of the median islands on Tierra Rejada. In July, 2014, the State Water Resources Control Board (Board) approved an emergency regulation to ensure that water agencies and their customers increase water conservation efforts in urban settings or face possible fines. One of the mandates initiated by the Board was a regulation to put an immediate stop of 'watering outdoor landscapes that cause excess runoff.' In addition, the City's Landscape Design Standards and Guidelines, Resolution 2012-3096, requires that any new irrigation system, or landscape renovation project that exceeds 2,500 s.f., shall not include the use of overhead spray heads unless they are located a minimum of 2' from any hardscape surface to minimize concerns of irrigation runoff onto hardscape surfaces. The irrigation systems within the median islands on Tierra Rejada primarily consist of 4" pop up spray heads that are installed directly adjacent to the curb. These spray heads are generally acceptable in turf or landscape areas with very low growing groundcover, but are not adequate for most landscape areas consisting of groundcover or shrubs that exceed 4" in height. The spray nozzles simply do not pop up high enough to clear the groundcover and the result is excessive irrigation runoff onto Tierra Rejada.

The first phase of the landscape renovation for the median islands on Tierra Rejada will include the removal of all the gazania groundcover within the median islands from Courtney Lane to Spring Road, retrofitting the existing irrigation system to include the installation of an above ground drip irrigation system at each tree location, and the installation of bark mulch provided by the City's contract tree trimming company, prior to the development of a landscape master plan for all of Tierra Rejada. Staff believes that this work will not only eliminate all irrigation runoff onto Tierra Rejada, but will also reduce water use within the median islands by more than 50%. Once this work has been completed, staff anticipates that the median islands will consist of bark mulch and existing trees for approximately one year, or until the landscape master plan and phasing plan has been developed. The future design of the median islands will include California native and/or drought tolerant plant material in combination with natural building materials, such as boulders or river cobble, or other low water use options recommended by the landscape architect. It should be noted that staff does not recommend the installation of a hardscape edge along the length of the median islands unless warranted. A hardscape edge is required when the planting design completely covers the median islands and does not allow adequate access for normal maintenance

activities. Staff anticipates that the future design of the median islands on Tierra Rejada will include selectively placed shrubs and other natural materials to minimize water use and allow access for maintenance activities, while still providing an aesthetically pleasing streetscape design

Staff does not believe that the work to remove the groundcover, retrofit the irrigation system and install bark mulch along the entire 2.5 miles of median islands will inhibit any future plans on Tierra Rejada or incur additional costs due to completing this work at this time. Staff estimates that this portion of the project will cost approximately \$80,644 to complete and will save approximately \$6,844/year due to a reduction in water use, with a cost recovery of approximately 12 years at current water rates. A summary of the associated costs with this phase of the project follows:

<b>Tierra Rejada Streetscape - Phase I Median Islands</b>				
<b>Description</b>	<b>Qty</b>	<b>Cost</b>	<b>Unit</b>	<b>Total</b>
On-grade drip (6-8 emitters/tree)	125	\$ 65.00	each	\$ 8,125.00
Valve conversion (drip irrigation)	20	\$ 125.00	each	\$ 2,500.00
Groundcover removal	130,000	\$ 0.25	sf	\$ 32,500.00
Bark mulch installation (City provided)	130,000	\$ 0.10	sf	\$ 13,000.00
Fine grading	130,000	\$ 0.05	sf	\$ 6,500.00
Traffic control	1	\$ 7,500.00	each	\$ 7,500.00
Sub-total				\$ 70,125.00
15% Contingency				\$ 10,518.75
<b>Total</b>				<b>\$ 80,643.75</b>

Staff will return to the City Council to obtain authorization for this work once bid proposals have been obtained.

**FISCAL IMPACT**

The cost for landscape architectural services is \$23,100.00, plus reimbursable expenses of \$1,200.00 and a contingency of \$3,600.00, for a total cost of \$27,900.00. As discussed, the 84-2 Steeple Hill T2865 Fund (2302) for Zone 2 is fully funded and there is enough fund balance to cover 25%, or \$6,975 of the costs of this work, which is equivalent to the proportionate area on Tierra Rejada covered within LMD Zone 2. The remaining costs of \$20,925 will be paid from the General Fund (1000), as there is not funding available within LMD Zone 5 (Pheasant Run Tracts 3019 & 3525) or LMD Zone 10 (Mountain Meadows Planned Community).

A budget amendment is needed from the 84-2 Steeple Hill T2865 Fund (2302) in the amount of \$6,975 and from the General Fund (1000) in the amount of \$20,925 to fund the above described work.

**STAFF RECOMMENDATION (ROLL CALL VOTE)**

1. Adopt Resolution No. 2015-\_\_\_\_\_.

Attachments:

1. Resolution

RESOLUTION NO. 2015-\_\_\_\_\_

A RESOLUTION OF CITY COUNCIL OF THE CITY OF MOORPARK, CALIFORNIA, AMENDING THE FISCAL YEAR 2014/2015 BUDGET BY APPROPRIATING \$20,925.00 FROM THE GENERAL FUND (1000) AND \$6,975.00 FROM THE 84-2 STEEPLE HILL T2865 FUND (2302) TO FUND LANDSCAPE ARCHITECTURAL SERVICES FOR THE RENOVATION OF THE TIERRA REJADA ROAD STREETScape

WHEREAS, on June 18, 2014, the City of Moorpark adopted the Operating and Capital Improvement budget for Fiscal Year 2014/15; and

WHEREAS, on February 4, 2015, a staff report was presented to the City Council requesting approval to obtain landscape architectural services for the renovation of Tierra Rejada Road between the Arroyo Simi and Spring Road; and

WHEREAS, a budget amendment in the amount of \$20,925.00 from the General Fund (1000) and \$6,975.00 from the 84-2 Steeple Hill T2865 Fund (2302) is requested for this work; and

WHEREAS, Exhibit "A", attached hereto and made a part hereof, describes said budget amendment and the resultant impact to the budget line items.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MOORPARK DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. A budget amendment in the amount of \$20,925.00 from the General Fund (1000) and \$6,975.00 from the 84-2 Steeple Hill T2865 Fund (2302) as more particularly described in Exhibit "A", attached hereto, is hereby approved.

SECTION 2. The City Clerk shall certify to the adoption of this resolution and shall cause a certified resolution to be filed in the book of original resolutions.

PASSED AND ADOPTED this 4<sup>th</sup> day of February , 2015.

\_\_\_\_\_  
Janice S. Parvin, Mayor

ATTEST:

\_\_\_\_\_  
Maureen Benson, City Clerk

Exhibit A – Budget Amendment

**EXHIBIT A**

**BUDGET AMENDMENT FOR**

**General Fund (1000) and 84-2 Steeple Hill T2865 Fund (2302) for landscape architectural services for the  
 landscape renovation of Tierra Rejada Road  
 2014/15**

**FUND ALLOCATION FROM:**

<b>Fund</b>	<b>Account Number</b>	<b>Amount</b>
General Fund	1000-5500	\$ 20,925.00
84-2 Steeple Hill T2865 Fund	2302-5500	\$ 6,975.00
Total		\$ 27,900.00

**DISTRIBUTION OF APPROPRIATION TO EXPENSE ACCOUNTS:**

<b>Account Number</b>	<b>Current Budget</b>	<b>Revision</b>	<b>Amended Budget</b>
2302.7900.7901.9601	\$ 6,300.00	\$ 6,975.00	\$ 13,275.00
1000.7900.7901.9601	\$ 2,446.50	\$ 20,925.00	\$ 23,371.50
Total	\$ 8,746.50	\$ 27,900.00	\$ 36,646.50

Approved as to Form: 