

CAPITAL
IMPROVEMENT
PROGRAM

2016 - 2017

FY 2016 - 2017 to FY 2020-2021

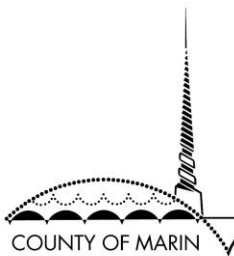


COUNTY OF MARIN

FY 2016 - 17 Capital Improvement Plan (CIP)

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Matthew H. Hymel
COUNTY ADMINISTRATOR

Daniel Eilerman
ASSISTANT COUNTY
ADMINISTRATOR

Angela Nicholson
ASSISTANT COUNTY
ADMINISTRATOR

Marin County Civic Center
3501 Civic Center Drive
Suite 325
San Rafael, CA 94903
415 473 6358 T
415 473 4104 F
CRS Dial 711
www.marincounty.org/cao

June 20, 2016

Marin County Board of Supervisors
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Proposed Fiscal Year 2016-17 Capital Improvement Program

Dear Board Members:

It is our pleasure to submit the proposed Fiscal Year (FY) 2016-17 Capital Improvement Program (CIP) for your review and adoption. The CIP is a multi-year planning tool used to identify and implement the County's short-term and long-term capital needs. In FY 2016-17, we recommend a capital program of \$29.7 million which includes projects in four major areas for County Facilities (including Parks and Libraries), Road Maintenance, Gross Field Airport, and Water Resources. In addition, we recommend that later in FY 2016-17 that the County appropriate funds from the Certificates of Participation (COPs) and Fire Facilities reserve in the total amount of \$31.5 million, as discussed later in this letter.

The CIP is submitted to your Board pursuant to the Marin County Code requirement that a long-term plan of capital improvements be recommended to your Board. It is the result of significant collaboration between Capital Projects staff in the Department of Public Works (DPW) and the County Administrator's Office, and also reflects input from multiple County departments.

FY 2015-16 Capital Improvement Program Accomplishments

The County continues to benefit from significant capital investments in County facilities and infrastructure. There have been many accomplishments in capital projects over the past year. The "Overview" section at the beginning of the attached Capital Improvement Program highlights the projects implemented or completed in each of the four major areas. Major accomplishments during FY 2015-16 include:

- Completed first phase of the County Jail Roof Replacement
- Civic Center Drive Improvement project received National Environmental Policy Act (NEPA) and Authorization for Construction approvals from Caltrans (construction to begin in 4th quarter FY 2015-16)
- Initiated the facility assessment for the General Services Administration (GSA) complex, including the analysis of the County's fuel management systems
- Design completed and the project was awarded for the third phase of the Stafford Lake/Novato Bike Path stabilization project
- Substantially completed the first phase of accessible restroom retrofits in the Court floor jury deliberation rooms

- Completed the emergency generator upgrades at 3260 Kerner within the H&HS Health Campus
- Completed construction on the dormitory renovations at Woodacre Fire Station
- Completed design and bid project for the Lagoon Park Water Main Replacement (construction of Phase I scheduled for early 1st quarter FY 2016-17)
- Design completed and bidding underway for Hall of Justice - Room 145 renovation for the District Attorney
- Substantially completed interior Sheriff’s space improvements at the Pt. Reyes Station substation
- Design underway for County Jail inmate pods showers accessibility retrofits
- Coordinated with the County Fire Department the project objectives and the A/E consultant selection process for the design of a re-developed Tomales Fire Station
- Relocate Sheriff’s substation at the College of Marin
- Final inspections by the Fire Marshal of the Civic Center Fire Alarm and Public Address System
- Completed conceptual design and community outreach for the West Marin Service Center Renovation
- Initiated the Facility Assessment for the Marin Center complex
- County airport received \$473,184 in FAA Grants for various projects
- Repaired Novato Creek levees that were damaged by storms

FY 2016-17 Capital Improvement Recommendations

The proposed FY 2016-17 CIP totals \$29.7 million and includes recommendations in four categories of projects:

- Gness Field Airport (\$459,000)
- Facility Improvements (\$6,920,000)*
- Water Resources (\$11,764,600)
- Road Maintenance (\$10,550,000)

**In this year’s CIP, the Facility Improvements Section includes the Parks and Library Department’s funds for facility projects from voter approved measures and County Service Area funds, besides the \$4 million recommended funding from the General Fund.*

The Overview section provides a comprehensive detail summary of each of the four categories. Below is a high-level discussion about each area:

Gness Field Airport

During FY 2015-16, the County airport received \$473,184 in Federal Aviation Administration (FAA) Grants for projects. A Wildlife Hazard Assessment is underway with a report expected in July 2016. Likewise the Automated Weather Observation System construction is also under way and is expected to be completed by July 2016. In April 2016 the FAA released a Purpose and Need Working Paper that revised the aviation forecast resulting in a new critical aircraft as the most demanding aircraft to design the future runway extension. The new runway length analysis resulted in a required total runway length of 3,600 feet (300 foot extension) instead of

a 4,400 foot runway previously identified. The Supplemental Environmental Impact Statement (EIS) is underway which will reflect the revised proposed runway length.

Facility Improvements

The FY2016-17 CIP includes \$4 million from the General Fund in new funding for improvements to County facilities such as the Civic Center campus, and buildings at Juvenile Services Center, 120 North Redwood Dr., 920 Grand Ave., and 1600 Los Gamos Dr. Improvements include renovations, major deferred maintenance repairs, condition assessment for future improvements and disability access program priorities. In addition, there is \$400,000 toward Library facilities improvements from the 2015 voter approved measure, \$1.2 million toward Parks facility projects from the voter approved measure in 2012, and \$1.3 million in Parks facility projects in various County Service Areas.

Water Resources

Some of the most significant recent capital accomplishments for the Water Resources Division include obtaining \$9.1 million in grants and making progress towards construction on major projects, including the Phoenix Lake Integrated Regional Water Management Retrofit Project and U.S. Army Corps of Engineers Corte Madera Creek Flood Control Project in Ross Valley, and Deer Island Basin Improvements in Novato. Since the fish passage and creek restoration program was authorized by the Board in 2005, Public Works has completed on average one project per year. Projects benefitting coho salmon and steelhead have been implemented on many of the major tributaries within the San Geronimo Creek, Redwood and Novato Creek watersheds and designs have been prepared for 2-3 additional projects.

Road and Bridge Maintenance

Maintaining infrastructure for all modes of public mobility is an essential service and affects nearly every county resident. The Department of Public Works maintains 421 miles of road, consisting of 845 lane miles and 151 bridges, with most bridges more than 50 years old and many in need of substantial repairs to ensure their continued safe service. The proposed budget allocates an additional \$7 million towards road maintenance and other road improvements. In addition to General Fund contributions, we will be leveraging \$35 million in grant funds over the next few years for improvements to roads in Muir Woods and Point Reyes, and utilizing \$13 million in TAM funding to resurface Sir Francis Drake Blvd. from Greenbrae to the Town of Ross.

COPs Funds and Fire Facility Reserves

In July 2015, the Department of Finance and County Administrator refinanced a 2010 issue of Certificates of Participation (COPs) which successfully raised \$25.5 million for renovations, repairs, construction, and improvements to County facilities having a life of at least 30 years. In addition, in prior years, your Board had set aside \$6 million of one-time General Fund reserves for fire station improvements. Staff from the Department of Public Works and the County Administrator’s Office presented recommendations to your Board at the March 2016 Budget Hearings on how the COPs proceeds and reserves, together totaling \$31.5 million, might be allocated to capital projects, as outlined below:

Recommended Projects and Cost Estimates

- Civic Center Roof Replacement: \$21.0 million
- Fire Station Replacements: \$6.5 million
- West Marin Service Center: \$3.0 million
- Marin Center Priority Repairs: \$1.0 million

These projects were listed in prior fiscal year's CIPs as major emerging issues, which now funding has been identified and addressed.

Large Capital Projects, Programs and Emerging Issues

Capital projects or programs that are underway and funded partially or totally outside of this fiscal years' CIP Program are listed below. The Overview section provides a comprehensive summary of each of these major areas broken out.

- Civic Center Drive safety, intermodal, and accessibility improvements between the future SMART station and Civic Center
- Partnership with the Agricultural Institute of Marin to design a farmers' market at the Christmas Tree lot
- Future implementation of Fire Department Facilities Vision Plan
- Master planning and backfilling of vacated Sheriff office space in the Hall of Justice
- Closing County office leases and relocating staff, and leasing space at 1600 Los Gamos
- 250 Bon Air Drive building refurbishment in Greenbrae

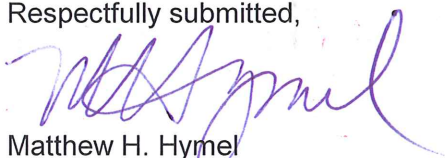
Emerging Issues:


- 920 Grand Avenue H&HS building refurbishment and conversion of laboratory to office space
- Civic Center and Marin Center parking repairs and refurbishment
- Marin Center facilities renovation strategies
- Parks and Libraries facilities infrastructure refurbishment
- General Services Building and associated parking lot renovations

Conclusion

The projects recommended in the Proposed FY 2016-17 Capital Improvement Program represent the County's continuing commitment to invest in our facilities for the benefit of the public and employees. County staff remains committed to the search for outside grant funding from federal, state, and regional sources to supplement the County's budget and further enhance our facilities and infrastructure. Inter-department collaboration will continue to be a priority to ensure that capital funding will be allocated appropriately and implemented on projects that will provide the greatest benefit to the County. Your Board's commitment to the long-term maintenance of the historic Civic Center campus and other capital infrastructure is providing a strong and effective service to our public.

Respectfully submitted,


 Matthew H. Hymel
 County Administrator


 Raul M. Rojas
 Director of Public Works

Overview of FY 2016-17 Capital Improvement Program

The County's Capital Improvement Program (CIP) is a multi-year planning tool to identify and implement short-term and long-term capital needs. Capital projects in the CIP include acquisitions, additions, improvements, and non-routine maintenance to County-owned facilities, roads, bridges and flood control facilities.

The recommended FY 2016-17 CIP includes a total of \$29.7 million in four categories of projects. The proposed total amount represents an increase in funding as compared to FY 2015-16 approved funding. The chart below identifies funding for these categories in the current year and recommended funding for FY 2016-17:

Category	Actual FY 2015-16 Budget	Planned FY 2016-17 Funding	% change
Airport	\$685,000	\$459,500	-33%
Facility Improvements*	\$4,000,000	\$38,420,000*	860%
Water Resources	\$6,635,000	\$11,764,600	77%
Road Maintenance	\$9,550,000	\$10,550,000	10%
Total	\$20,870,000	\$61,194,100	193%

**Facility funding from General Fund remains at \$4,000,000. This year, and going forward in future capital budgets, non-general fund facility projects are included from Marin County Free Library and Marin County Parks and Open Space in the amount of \$2,920,000. In addition, Facility Improvements Planned Funding includes \$25.5 million in funds from Certificates of Participation (COPs) and \$6 million from Fire Facilities reserves that are expected to be appropriated later in FY 2016-17.*

The CIP uses four categories to separate the projects into various service areas: Airport, Facility Improvements, Water Resources and Road Maintenance. These funds come from a range of sources including the County General Fund, user fees, various state and federal grants and loans, taxes, voter approved measures and special districts.

I. Airport Projects

During FY 2015-16, the County Airport received \$473,184 in Federal Aviation Administration (FAA) Grants for projects. The proposed FY 2016-17 airport CIP budget of \$344,500 will continue to include annual facility maintenance, completion of the runway extension environmental review, beginning of the runway extension and mitigation design, and beginning design of a runway resurfacing project. Other than the \$100,000 designated for annual facility maintenance needs in order to preserve the integrity of the facility, the other capital projects are dependent on award of grant funds from the FAA in the years identified in the project details. Generally, the grants are 90% federal funds and 10% local match. The Airport Runway Extension project Environmental Impact Report (EIR) was certified by the Board of Supervisors on February 11, 2014. The FAA issued its Final Environmental Impact Statement (EIS) in June 2014. However, after public review and FAA internal review, the FAA requested that additional study be accomplished prior to a final federal project decision. Carry forward funds and FY 2015-16 funds are identified to complete the EIS process. In May 2016 the FAA released a purpose and need working paper that determined a lower level of aviation traffic will result in a Final Supplemental EIS analysis of a shorter runway alternative.

Airport Accomplishments/Highlights during FY 2015-16

- Completed a runway crack seal and marking painting project
- Installed new pilot information signage for the County building
- Installed new noise abatement signage at the runway thresholds
- Received FAA Grants totaling \$473,184 (net)

- Managed Wildlife Hazard Assessment, Airport Pavement Management Plan, and AWOS replacement projects



Pilot information signage



Noise abatement signage

II. Facility Improvement Projects

The FY 2015-16 CIP included \$4 million in new funding for improvements to County facilities such as the Civic Center campus, Marin Center, Juvenile Hall, 920 Grand Ave. and 1600 Los Gamos Drive. Improvements include renovations, major deferred maintenance repairs, roofing projects and disability access program priorities. Facility improvement requests were prioritized with a continued emphasis on safety and accessibility of County facilities.

Facility Improvement Accomplishments/Highlights during FY 2015-16

- Completed first phase of the County Jail Roof Replacement
- Civic Center Drive Improvement project received National Environmental Quality Act (NEPA) and Authorization for Construction approvals from Caltrans (construction to begin in 4th quarter FY 2015-16)
- Initiated the facility assessment for the General Services Administration (GSA) complex, including the analysis of the County's fuel management systems
- Design completed and project bids received for the third phase of the Stafford Lake/Novato Bike Path stabilization project
- Substantially completed the first phase of accessible restroom retrofits in the Court floor jury deliberation rooms
- Completed design and bidding for the Board of Supervisors Chambers seating rehabilitation project (construction schedule for 1st quarter of FY 2016-17)
- Completed the emergency generator upgrades at 3260 Kerner within the H&HS Health Campus
- Completed construction on the dormitory renovations at Woodacre Fire Station
- Design complete for the Lagoon Park Water Main Replacement (construction of Phase I scheduled for early 1st quarter FY 2016-17)
- Design and bidding complete for Hall of Justice - Room 145 renovation for the District Attorney
- Design underway for the HOJ – Room 266 tenant improvements for Probation Department (bidding and start of construction anticipated 1st quarter of FY 2016-17)
- Design and bidding completed for Marin Center – Exhibition Hall Fire Alarm project (construction scheduled for 1st quarter FY 2016-17)

- Substantially complete with the tenant improvements for the Sheriff's space at the Pt. Reyes Station substation
- Design underway for accessibility retrofits to the showers located within the County Jail inmate pods
- Substantial design and roofing systems analysis work completed for the Civic Center Roof Replacement project
- Coordinated with the County Fire Department the project objectives and the A/E consultant selection process for the design of a re-developed Tomales Fire Station
- Temporary repairs made at Miller Creek erosion within the Juvenile Services complex
- Final agreement with SMART on station upgrades for the Civic Center train station
- Completed office modifications for CDA Room 303
- Relocate Sheriff's substation at the College of Marin
- Final inspections by the Fire Marshal of the Civic Center Fire Alarm System
- Completed conceptual design and community outreach for the West Marin Service Center Renovation
- Replaced the water main for the County Jail fire system
- Initiated the Facility Assessment for the Marin Center complex
- Installed LED light fixtures in Room 404 and 304 conference room as a test case for potentially replacing all existing fixtures within the Administration Building as part of the Climate Action Plan
- Completed the renovation of office and work bench areas for the Radio Shop
- Coordinated with the Marin County Free Library a 5-year Work Plan for various improvements to their facilities to begin in FY 2016-17
- Completed sidewalk repairs to North San Pedro Road to improve accessibility
- Completed design and bidding phases for the creation of a Court storage area within the former HOJ 1st floor Sheriff's area
- Completed installation of a new enclosed / controlled entrance within the County Counsel 1st floor space
- Substantially complete with the IST backbone fiberoptic upgrade for the HOJ

Recommended projects in the Facility Improvements category were developed in a collaborative process to increase organizational involvement. A CIP technical working group of key department staff was convened to inform and advise decision-making about County capital investments in maintaining buildings and infrastructure consistent with the County's Strategic Plan and Countywide Goals. Working group members represented the following departments and programs:

- County Administrator's Office
- Cultural Services
- Fire Department
- Parks Department
- Public Defender's Office
- Probation Department
- Health and Human Services Agency
- Department of Public Works
- Sheriff's Office

The CIP technical working group considers facilities and barrier removal projects that are greater than \$25,000 and in general less than \$1 million in total cost. Larger cost projects identified through facilities' assessments and master plans are generally not funded through this process, but are prioritized and planned for over multiple fiscal years. The technical working group reviewed, analyzed, and prioritized 60 capital project requests submitted by County departments. The group

reviewed and prioritized each project using the following criteria, which criteria are each weighted and prioritized:

- Removes or Reduces Hazards or Threats to Health and Safety
- Meets Legal Mandates
- Maintains Operations and Functions
- Prevents Major Repair or Replacement Costs
- Saves Energy
- Meets County Goals
- Provides a Large Functional / Aesthetic Benefit to the Users / Public

Using these evaluation criteria, the County Administrator’s Office and Department of Public Works then worked with department representatives to develop the following list of recommended Facility Improvements projects, funded by the General Fund, to be included in this year’s CIP.

2016-17 CIP FACILITY IMPROVEMENTS SUMMARY – GENERAL FUND		
Project	Location	Amount
Small Projects	Countywide	\$150,000
Accessibility Projects	Countywide	\$1,000,000
VMA Parking Lot Improvements (Funding)	Marin Center	\$200,000
North Civic Center Campus Improvements	Civic Center Campus	\$400,000
Cooling Tower No. 1 Repair & Media Replacement	Civic Center	\$110,000
Fire Alarm Replacement at Juvenile Services Center	Jeanette Prandi Area/Lucas Valley	\$175,000
Roof and HVAC Replacement	920 Grand Avenue, San Rafael	\$420,000
Re-Roof Roof Over Stage & Smoke Hatch Repairs	Marin Center, Veteran’s Memorial Auditorium	\$280,000
Fire Gate Retrofit at Reception Area	3250 Kerner Blvd., San Rafael	\$50,000
Fire Station Traffic Beacon	Marin City Fire Station	\$50,000
Replacement of Main Underground Fire Sprinkler Supply Line	1600 Los Gamos Dr., San Rafael	\$400,000
HVAC System Balancing	120 N. Redwood Dr., San Rafael	\$50,000
Elevator Door Repair	120 N. Redwood, Dr., San Rafael	\$50,000
2 nd Phase of Roof Replacement (Funding)	County Jail	\$465,000
Parapet Wall Repair	10 North San Pedro Dr., San Rafael	\$100,000
Bayside Park Pathway Repairs	Bayside Park, San Rafael	\$100,000
General Fund Total		\$4,000,000

III. Water Resources Projects

Flood Control and Dredging CSAs Update

Capital improvement efforts underway in the Water Resources Division are focused on projects with the following primary objectives:

- Maintenance and improvement of existing flood control channels, pump stations, levees and drainage pipes

- Construction of new stormwater detention basins and weirs
- Dredging of waterways to facilitate navigation for recreational boating
- Creek and wetland restoration, and habitat and water quality improvements

Ross Valley Flow Reduction Projects

Through aggressive pursuit of grant funding and developing the multi-benefit watershed wide approach to project formation we have been successful in obtaining grant funding for the Phoenix Dam IRWM (Integrated Regional Water Management) Retrofit project in Ross Valley which has been awarded a \$7.66 million grant from Prop. 1 E, DWR (California Department of Water Resources). A final agreement with the property owner, required to implement the project, is being negotiated.

In support of the Ross Valley Capital Improvement Plan (RV CIP) implementation and to reduce peak flood flow in Fairfax Creek, the Division is investigating the feasibility of detention basin projects in Ross Valley including Lefty Gomez Field at White Hill School, Loma Alta open space preserve, and the a former nursery site. Similarly the feasibility of a Deer Park Detention Basin, to reduce peak flood flow in San Anselmo Creek, is being investigated. If project implementation is feasible, grant funding will be pursued for these projects.

Another detention basin project called Memorial Park Detention Basin Project was previously included in the RV CIP. That project had received a grant from DWR and was being managed by the Town of San Anselmo. The project has since been withdrawn following a public vote and a replacement project is being sought - the San Anselmo Flood Protection Project. This project is in the early planning stages but will add the necessary infrastructure upstream of or within the Town in order to meet the goals of the Memorial Park Detention Basin Project.

The environmental review process under the California Environmental Quality Act (CEQA) has begun on a programmatic level for the flow reduction projects described above.

Corte Madera Creek Projects

Other projects that have been included in the Flood Control Division's RV CIP are bridge replacement projects that are being managed by watershed partner agencies. The replacement of Winship Avenue Bridge in the Town of Ross, the replacement of Azalea Avenue Bridge in Fairfax and the replacement of San Anselmo's Center Boulevard, Nokomis Avenue and Madrone Avenue Bridges that span San Anselmo Creek are managed by the towns and are funded predominantly by Caltrans. These projects are an integral part of the Ross Valley Capital Improvement Plan that will increase flood flow under the new bridge layouts.

Planning is also underway for projects to increase flood capacity along Lower Corte Madera Creek that include sediment removal and measures to improve creek side flood protection and interior drainage. Corte Madera Creek Project - Army Corps' Units 2, 3 and 4 Improvements is an important project in partnership with the Army Corps of Engineers to further increase flood capacity of the creek and has received federal funding to continue the Feasibility Phase of the Project in FY16-17. The project requires a 50:50 cost share between the Army Corps of Engineers and Water Resources Division.

Other Sediment Removal Projects

Flood Control is currently in the design and permitting phase of two other dredging projects which are scheduled for construction over the next few years; Coyote Creek (Tamalpais Valley) and Novato Creek. These sediment removal projects will restore flow capacity and flood protection to the original design levels. The Novato Creek Sediment Removal Project and the Coyote Creek Concrete Channel Sediment Removal Project will be completed in 2016.

The Division is working with regulatory agencies to permit placement of the dredge sediment along the alignment of future sea level rise levees to protect the City of Novato. If successful, the Division would be the first local agency to obtain permission to place sediment at the site of future levees required for sea level rise in wetland areas.

The need for removal of sediment in the lower Coyote Creek earthen channel section is being analyzed along with the potential for reuse of sediment in Coyote Creek to help adjacent Bothin Marsh adapt to rising sea levels.

It is also worth noting the recent successful dredging of the North Cay of Paradise Cay in CSA29 which is completed approximately every 4 years for navigational purposes (see photos below).



*Dredger at Paradise Cay - CSA29
North Cay Channel A*



*Dredger at Paradise Cay – CSA29
North Cay Channel B*

Design of grant-funded improvements to the flood control system in lower Novato Creek is underway. The proposed project will include a permanent engineered overflow weir from the creek into Deer Island Basin and a new levee in the basin. It is designed to prevent flooding in populated areas of Novato, and preclude the need to breach the levee during high flood events. Construction could occur as early as 2018 or 2019 with a \$1.5 million construction grant.

The levee at the weir project site is also scheduled to be repaired in 2016, following its last breach of the levee in December 2014. Nearby levees were repaired following that same storm event in 2015. Photos from construction follow.



Novato Creek Levee Repair between
Lynwood Basin and Duckbill Pond

Novato Creek Levee Failure Repair between
Novato Creek and Heron's Beak Pond

In 2005, Marin County Board of Supervisors voted to establish a County Fisheries Restoration Program aimed at restoring fish passage through county culverts on salmon streams in West Marin. Since 2005, eight fish passage projects have been constructed by the County: One project has received grant funds to be constructed in 2016, two projects are in design phase, and one project is designed and seeking funding for implementation.

IV. Road Maintenance Projects

Road Maintenance Accomplishments/Highlights during FY 2015-16

- Continued development of five bridge replacement projects in anticipation of construction in 2018
- Continued development of FLAP projects with FHWA in anticipation of construction in 2018
- Completed four resurfacing projects throughout the County of Marin
- Completed the Lucas Valley Road Mile Post 1.66 emergency repair
- Completed the Throckmorton Ridge emergency slide repair
- Completed the East Sir Francis Drake resurfacing and drainage project
- Completed the Flamingo Road Bridge ADA improvement project
- Started the Seminary Drive Intersection Improvements project
- Started the Terrace Avenue at Surfers Overlook retaining wall replacement project



Emergency Slide Repair –
Lucas Valley Road Milepost 1.66



Road Rehabilitation Program –
Northern Region



Road Rehabilitation Program – Southern Region



Road Rehabilitation Program – Central Region



Terrace at Surfer's Overlook – Retaining Wall Repair



Central Marin Ferry Connector Bridge

**CAPITAL IMPROVEMENT PROGRAM
FY 2016/17 - FY 2020/21**

Category	Funded** (Prior Year Carry forward)	2016/17	2017/18	2018/19	2019/20	2020/21	TOTALS
AIRPORT	\$875,760	\$459,500	\$1,975,000	\$250,000	\$6,900,000	\$4,750,000	\$15,210,260
FACILITIES*							
Facility Improvements	\$477,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$20,477,000
Parks Improvements		\$2,520,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,520,000
Library Improvements	\$350,000	\$400,000	\$600,000	\$500,000	\$500,000	\$500,000	\$2,850,000
Certificates of Participation		\$25,500,000					\$25,500,000
Fire Facilities Reserves		\$6,000,000					\$6,000,000
TOTAL FACILITIES	\$827,000	\$38,420,000	\$5,600,000	\$5,500,000	\$5,500,000	\$5,500,000	\$61,347,000
WATER RESOURCES							
Flood Control Projects	\$2,758,300	\$11,529,600	\$2,113,200	\$20,091,200	\$27,031,700	\$5,000,000	\$68,524,000
County Service Area Projects				\$800,000			\$800,000
Fish Passage Projects	\$220,000	\$235,000	\$340,000		\$488,000		\$1,283,000
TOTAL WATER RESOURCES	\$2,978,300	\$11,764,600	\$2,453,200	\$20,891,200	\$27,519,700	\$5,000,000	\$70,607,000
ROAD MAINTENANCE							
General Maintenance		\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$8,750,000
Special Projects			\$12,200,000				\$12,200,000
Culvert Replacement		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Traffic Improvements		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Roads & Bridges Program		\$8,000,000	\$9,400,000	\$42,600,000	\$8,800,000	\$8,800,000	\$77,600,000
TOTAL ROAD MAINTENANCE	\$0	\$10,550,000	\$24,150,000	\$45,150,000	\$11,350,000	\$11,350,000	\$102,550,000
GRAND TOTAL	\$4,681,060	\$61,194,100	\$34,178,200	\$71,791,200	\$51,269,700	\$26,600,000	\$249,714,260

* For future Fiscal Years total General Fund Baseline Allocation to Facility Improvements does not represent specific projects.

** See Summary sheets for explanation of prior year carry over amounts

Large Capital Projects, Programs and Emerging Issues FY 2016-17 Capital Improvement Program

As the County continues to make improvements in how we serve the community, a number of issues related to capital needs have emerged and have been outlined in prior years' CIP documents. In this upcoming 2016-17 fiscal year, these issues are reviewed and updated in this section to the CIP, as well as any new ones that have been added. The purpose of this section is to provide an overview of the major programs and projects not discussed elsewhere, and to provide a short summary of potential future issues that may require capital funding.

In July 2015, the Department of Finance and County Administrator refinanced a 2010 issue of Certificates of Participation (COPs) which successfully raised \$25.5 million for renovations, repairs, construction, and improvements to County facilities having a life of at least 30 years. In addition, in prior years, the Board had set aside \$6 million of one-time General Fund reserves for fire station improvements. Staff from the Department of Public Works and the County Administrator's Office presented recommendations to the Board of Supervisors at the March 2016 Budget Hearings on how the COPs proceeds and reserves, together totaling \$31.5 million, might be allocated to capital projects, as outlined below:

Recommended Projects and Cost Estimates

- Civic Center Roof Replacement: \$21.0 million
- Tomales Fire Station: \$6.5 million
- West Marin Service Center: \$3.0 million
- Marin Center Priority Repairs: \$1.0 million

Capital projects or programs that are underway and funded partially or totally outside of this years' or prior fiscal years' CIP Program are listed here and then outlined below:

- Civic Center Drive safety, intermodal, and accessibility improvements between the future SMART station and Civic Center
- Partnership with the Agricultural Institute of Marin (AIM) to design a farmers' market at the Christmas Tree lot
- Future implementation of Fire Department Facilities Vision Plan
- Planning and office space renovation of vacated Sheriff space in the Hall of Justice
- Closing County office leases and relocating staff, and leasing space at 1600 Los Gamos
- 250 Bon Air Drive building refurbishment in Greenbrae

Emerging Issues:

- 920 Grand Avenue H&HS building refurbishment and laboratory to office space conversion
- Civic Center and Marin Center parking repairs and refurbishment
- Marin Center facilities renovation strategies
- Parks and Libraries facilities infrastructure refurbishment
- General Services Building refurbishment and associated parking lot renovations

Recommended Projects from March 2016 Budget Hearings:

Roof replacement at the Civic Center: Staff from Public Works have been reviewing various roofing replacement systems and has narrowed the options down to three alternatives, of which adhesion and other testing is occurring at the time of this report. The Marin County Civic Center is comprised of four

primary segments: the Administration Building wing to the south, the Dome at center, the Hall of Justice (HOJ) to the north, and the Tower just northeast of the Dome. Assessment, cleaning or any repair of the Tower is not included in the scope of the report. The Administration Building and the Hall of Justice roofs each include two parallel curved reinforced lightweight concrete shells (the shells have a minimum thickness of 2-1/2 in.). Between the two concrete shells there is a barrel vault skylight assembly with operable portions that function as part of the building smoke evacuation system. The skylight is made of curved, clear Plexiglas panels in an aluminum frame with a 4 foot module of mullions. There are flat roof sections adjacent to the operable skylight sections, at the south end of the Administration Building, and at the north end of the Hall of Justice. These sections of roof are covered with foam insulation under liquid-applied roofing. On top of the concrete shells are decorative elements, referred to as curbs and medallions. These decorative elements are precast concrete shapes placed onto the roof shell. The Dome is a constant curve with precast concrete curbs in a concentric pattern and medallions along the lower portions of the east, north and west sides. There is a publicly accessible deck between the Dome and the Hall of Justice, which is at the third-floor level of the Administration Building and at the roof-level of the Hall of Justice.

The components of a roof replacement project which were analyzed to develop cost estimates include the following:

- **Roofing System.** DPW has narrowed the range of roofing options to three systems that are the most appropriate for this project.
- **Full- or Partial-Removal of Existing Roofing Materials.** Because much is not yet known about the true cost and feasibility of either the full- or partial-removal, the budget is based on the full removal. Adhesion of roofing material testing will determine if all existing roofing materials will be removed down to the concrete substrate.
- **Skylight Repairs.** The budget developed includes \$1.3 million cost estimate for skylight repairs.
- **Concrete Repairs.** There are several instances where cracking of precast ornaments has split the existing roofing membrane. Also there is evidence that prolonged water ponds occur upslope of most precast ornaments. To provide a place holder for a future contractor's estimate, the budget includes an allowance for concrete repairs.
- **Perimeter Metal Restoration.** The budget includes restoration of sheet metal flashing and ornaments at the eave edge of the roof. Some ornamental globes are damaged and it appears reroofing will require restoration and/or replacement of perimeter metal flashing.

An historical architect will be involved in the planning and implementation of the roof and ornamental repairs in order to maintain the historical significance of the Civic Center and work shall be performed to meet the Secretary of Interior Standards for the treatment of historical properties.

Tomales Fire Station Renovation/Reconstruction: Staff from the Fire Department, Public Works, and the County Administrator Office have prioritized the Tomales Fires Station facility in West Marin to be the initial project to be modified to meet modern essential services standards and accommodate modern equipment. DPW staff developed a review process and solicited proposals from qualified architecture and engineering (A/E) teams, and have awarded a professional services contract to start the design process. It is estimated that the design, permitting, and construction process could take 18 - 24 months.

H&HS West Marin Service Center: A detailed facility and programming assessment of Health & Human Services West Marin Service Center (WMSC) in Point Reyes Station determined that the center is inadequate to provide services mandated by provisions of the Affordable Care Act. In prior years' CIP the Board of Supervisors approved funding for preparing a design for the renovation. In FY 2015-16, staff met with the local community and the project went through the design-review permitting process. Funding for construction, estimated at \$ 3 million, will be funded by COPs proceeds.

Marin Center Priority Repairs: Public Works and Cultural Services staff are currently prioritizing potential projects at the Marin Center and will return to the Board in FY 2016-17 with recommended funding allocations.

Projects Funded Partially or Totally Outside of CIP:

Civic Center Drive Circulation Improvements: In July 2012, the Board approved moving forward with a project to provide Civic Center infrastructure improvements to meet the following goals:

- Integrate new accessible pedestrian connections from the future SMART station to other County facilities at the Marin Center and to the Civic Center campus
- Improve intermodal (pedestrian, bicycle & transit) connectivity along the same corridor
- Improve Civic Center Drive circulation and traffic safety
- Provide a sense of scale and welcoming for the Civic Center Campus northern entrance
- Collaborate, partner with, and integrate multiple agency and entity plans/projects (SMART, Marin Transit, County of Marin, City of San Rafael, the Agricultural Institute of Marin (AIM), and the local community)
- Leverage grants or other funds, and share costs with partners
- Plan and design all potential future improvements in this area concurrently in a comprehensive, complementary approach to encourage a strong connection to the Civic Center, and to meet the *Civic Center Campus Master Design Guidelines*

In May 2016, the County awarded the construction contract for the Civic Center Drive Improvement (CCDI) project, with construction to commence soon thereafter. The first phases of project will focus on the construction of a temporary Civic Center Drive detour to allow construction of the roundabout (Memorial Drive-Peter Behr Drive & Civic center Drive intersection), and the installation of the roundabout itself. It is anticipated that this phase will extend until after the County Fair to mid to late August. Civic Center Drive, adjacent to the Memorial Drive/Peter Behr Drive intersection (and sections north to Avenue of the Flags) will not be accessible throughout this portion of the construction, and the access to the Marin Center via Memorial Drive will not be available. Access will still be provided to the Marin Center through Avenue of the Flags.

The second phase of the project will begin around September 1, 2016, and will extend into mid-November. This portion of the project extends from just north of the future roundabout at Memorial Drive to the Civic Center Drive and McInnis Parkway intersection. The project requires this phasing approach due to environmental requirements associated with the Las Gallinas Creek tidelands. It is anticipated that the landscaping for the project will be completed primarily between early November and the end of the year. We expect all roads will be open to traffic during this phase.

The project will be substantially complete in mid-November, with landscaping to be completed through early 2017. The project received \$1.24 million of state and federal grants funds.

Partnership with the Agricultural Institute of Marin to design a farmers' market at the Christmas Tree lot: In July 2012, in conjunction with the Board approving the Civic Center Drive and north entrance design and improvements project, the County entered into a non-binding Memorandum of Understanding ("MOU") with the Agricultural Institute of Marin ("AIM") to cooperate and to design all of the "Christmas Tree" lot site (inclusive of the General Services Building parking and storage lot, the bus transit connections area, and integration with the future SMART station) to relocate the farmers' market from its current locations, and create a potential future building area for AIM, with design costs shared proportionally.

Among other things, the MOU provides for AIM participation with the County as a partner to provide up to \$1 million to pave the Christmas tree lot and the construction of permanent restrooms, which

AIM will operate and can be used during Marin Center events and the Marin County Fair. The County agreed to match AIM's commitment of funds up to \$1 million to pave the lot. On February 25, 2014, the Board of Supervisors approved putting Measure B on the June 3, 2014 ballot to seek voter approval that would allow AIM to pursue construction of a permanent farmers' market facility with a market building and parking canopy on the Christmas Tree lot. The county-wide measure was approved with 81% of the voters support. Since approval, AIM and County staff have cooperatively developed a Request for Proposal to study the traffic and parking implications of the new farmers' market building. County and AIM have agreed to share the costs of the study equally, estimated to be approximately \$49,000 each.

AIM has separately developed the capital and operating costs of its project in order to develop a fundraising plan. In March and April 2016, AIM presented to staff an updated design concept for the market and associated building by a new architectural firm. The Board of Supervisors will have a study session on the proposed design concept in late June 2016. Both the Board of Supervisors and the Board of Directors of AIM will review and approve any designs. Costs to the County to reconfigure the GSA parking lot and provide sidewalks and other improvements to the Civic Center parking areas on the west side of the Civic Center building are still be evaluated and will be reported in the next fiscal year.

Marin County Fire Department Facilities Vision Plan: In October 2010, a firm with expertise in fire station planning and design completed an assessment of and conceptual planning for the Woodacre, Hicks Valley, Tomales, and Point Reyes fire facilities, and the Mt. Barnabe and Mt. Tamalpais fire lookouts. It is estimated that costs could range from \$57 to \$68 million within the next 10-20 years to replace or substantially renovate these facilities. The results of this study included a prioritization of these needs which are incorporated into the Facility Asset Management planning process.

After moving forward with the Tomales fire station modernization plan discussed above, the next highest priorities identified in the Fire Facilities Vision Plan from 2010 are as follows: 1) Identify a future location for the Woodacre headquarters and fire station that provides better access to Sir Francis Drake Boulevard; 2) Renovate or rebuild the Hicks Valley Fire Station; 3) Update the Point Reyes Fire Station to current essential service codes. Fire Department and CAO staff are discussing ideas on how best to identify and plan for these priorities. No funding has been secured for these next steps.

Master planning and backfilling of vacated Sheriff office space in the Hall of Justice: Staff interviewed groups and departments representing 19 separate needs who had indicated interest in space in the Hall of Justice (HOJ). Staff from the Department of Public Works Capital Division, Purchasing, Radio Shop, and Building Maintenance, the County Administrator Facilities Planning and Development Division, and Information Services and Technology (IST) developed a plan for reconfiguring departments and updating infrastructure to more optimally use space in the HOJ. Projects completed to date included reconfiguring the Department of Finance while temporarily housing them in the former Sheriff space in suite 266; moving IST staff out of the Civic Center basement into swing space that had been occupied by the Coroner; expanding the Grand Jury space; and expanding Parks Department space. In FY 2015-16, projects for Probation, the District Attorney, and IST infrastructure upgrades were designed. Initial construction for these departments will take place starting in early FY 2016-17.

Overview of County's Acquisition of 1600 Los Gamos, Closing General Fund Leases, Moving Staff to 1600 Los Gamos; and Leasing of Vacant Space

On November 15, 2011, the Board approved the purchase of 1600 Los Gamos Drive, San Rafael, to construct the Emergency Operations Facility ("EOF"). The County paid \$29.4 million for the 328,000 rentable square foot ("s.f.") building (about \$90 per rentable s.f.), located on a 23.4 acre area, and the payment included \$1 million to separate building systems that were shared with 1650 Los Gamos

Drive, next door. The Board adopted a space use policy to help guide the use of the building. The policy is summarized as follows:

- The property should continue to be managed with uses compatible to existing non-County tenants;
- The Building Management Plan included:
 - Design and construction of EOF;
 - Expansion of existing private tenant(s) as requested;
 - Close County leased space to backfill the north building portion or part of the existing warehouse space for the registrar of voters, providing up to \$1.1 million in General Fund lease savings to be used toward the operating costs of the new building;
 - Provide swing space for County projects (such as the remodel of 20 North San Pedro over the next few years);
 - No other permanent County uses within this 3 year period;
 - Exploration of future compatible Government partners or compatible private tenants at market based rents for additional revenues.

By adopting this plan, the County let the existing and future tenants know that the building would continue to be a professional office environment.

County staff gave an update to the Board of Supervisors on April 12, 2016 about the status and results of the management plan adopted in 2011:

- **New Leases:** Since the County acquired 1600 Los Gamos, there are four new leases totaling 34,679 rentable s.f. The most recent leases are on April 5, 2016 with Avena Technologies for 12,495 rentable s.f. of office space and about 1,500 s.f. of storage space, and the Marin County Free Library expansion of an additional 4,132 square feet on April 12, 2016. In addition, two private tenants remain in the building that were tenants prior to the County's acquisition, including a private child care provider and the Internal Revenue Service, that total 25,294 rentable s.f.
- **Given the County's cost of about \$90 per s.f. on the building purchase, the County acted at the right time in the local real estate market.** There have been a number of recent office building sales in the local San Rafael and nearby Novato markets in 2015. The building next door at 1650 Los Gamos was purchased by Kaiser in August 2015 for about \$149 per s.f., and other buildings in San Rafael sold for a range of \$194 to \$245 per s.f. in 2015. Three notable office building complexes in Novato, including Hamilton Landing and Rowland Way buildings where the County currently or formerly leased space, sold in 2015 for a range of \$174 to \$207 per s.f.
- **The Emergency Operations Facility project came in on time and under budget.** The EOF project included adding 1,700 photovoltaic ("PV") panels to the roof and other energy and water saving measures. The PV panels generate over 700,000 kw-hr annually. The project was awarded the GOLD certified Leadership in Energy and Environmental Design ("LEED" as is commonly known).
- **County is saving approximately \$950,000 per year by locating previously-leased operations at 1600 Los Gamos.** DPW and Health and Human Services ("HHS") staff relocated to permanent space at the new building from 899 Northgate in June 2015, with an annual General Fund savings of \$710,000 from the lease and operating expenses. In addition, General Fund leases were closed at 70 San Pablo, San Rafael, 3140 Kerner Boulevard, San Rafael, and Building #816 at Hamilton in Novato.

- **Using the building for “swing” space has saved approximately \$700,000** (Swing space is space used on a temporary basis while projects requiring staff to vacate where they are located during construction or for temporary uses such as training or fixed-term projects such as the County’s enterprise resource system software replacement called “ATOM”). Currently, County departments occupy about 24,000 rentable s.f. of office swing space and 5,000 s.f. of storage swing space, and it is estimated that about \$700,000 would have been expended to rent space in other locations short term to cover those projects’ needs. Projects at County buildings include 20 North San Pedro, 120 Redwood Dr., 4 Jeannette Prandi Way, the Hall of Justice renovations at the Civic Center and other departments such as Human Resources, have all located staff or other departmental needs into swing space at 1600 Los Gamos since acquisition.
- **Future programming of the building will include other governmental activities and additional private leases.** The planned government uses include the Information Services and Technology (“IST”) Department relocation of out leased space, and the Marin Emergency Radio Authority (“MERA”) prime site. Given the history of use by County departments and the need for County-wide swing space during projects, and uses like the ATOM project, the County will retain swing space for office uses and storage, such that the total government use of the building would be about 60% of the total office s.f. available.

There will remain 20% of the office s.f. space available, approximately 60,000 s.f. of vacant office space for lease in the upper floors of the building. Future lease revenues can be used to offset operating costs of the building.

The current Building Management Plan includes the following:

- Close County leased space to backfill the north portion of the building and construction of IST and other County or government uses in the north portion of the building
- Plan for MERA on the third floor adjacent to IST
- Expansion of existing private tenant(s)
- Provide swing space for County projects
- Based on market demand, target about 30,000 s.f. of office space over the next two years to lease for private tenants at market based rents

Board and Planning Chambers seating: After completion of an upgrade to the technology in the Board and Planning Chambers, the public seating was reviewed as it is the original seating from when the Civic Center opened 50 years ago. The seating arrangement and type is a strong part of the architectural fabric of the Frank Lloyd Wright design so it will be addressed in a thoughtful approach, while working with the Frank Lloyd Wright Civic Center Conservancy. Staff began assessment of rehabilitation options and received approval of the seating plans by the Frank Lloyd Wright Civic Center Conservancy in FY 2015-16. A contract was awarded by the BOS in late FY 2015-16 and DPW staff is working with the Clerk of the Board staff on the schedule for the Board Chambers seating to be upgraded separately from the Planning Commission side so that Board meetings and Planning Commission meetings would not have to be move to an off-site location.

250 Bon Air Drive, Greenbrae – Community Mental Health Building: This facility is co-owned 51% by the County and 49% by the Marin Healthcare District in an undivided 49% interest in the fee title which includes property of approximately 4.98 acres. The Community Mental Health Building (“CMHB”) contains about 40,000 square feet in a two stories. In September 2013, the County commissioned an Access Compliance Survey Report which indicated the most notable issue was the lack of elevator access between first and second floors. There is an empty elevator shaft provided in the building and staff from the County (departments include the County Administrator, Public Works, Health and Human Services, and County Counsel) have met with Marin General Hospital (MGH) staff, which operates the building through an

operating agreement with County. MGH staff developed a plan, with County input, to construct an elevator and improve the path of travel from the new parking garage adjacent to the CMHB to the elevator landings. The new garage is under construction by MGH and will be opening about July 2016. The County's share of the cost of the elevator has been agreed to not exceed \$400,000, with MGH absorbing any cost overruns. The Department of Health and Human Services has funding set aside in a capital account to fund for this project. The elevator project is undertaken by MGH and is expected to be completed in FY 2016-17.

Emerging Issues:

920 Grand Avenue, San Rafael: Staff from the Department of Health and Human Services (H&HS), the Department of Public Works (DPW), and the County Administrators' office (CAO) have begun discussions about the future use by H&HS at this location. Although the FY 2016-17 CIP recommends \$420,000 towards the replacement of the roof and HVAC system at 920 Grand Ave., this recommendation is a stopgap measure proposed by DPW that prevents major repair or replacement, one of the CIP major criteria, since a roof leakage failure, which was eminent, would have required hundreds of thousands of dollars more of costs. The long-term plan for 920 Grand Ave. will still need to be discussed by all parties.

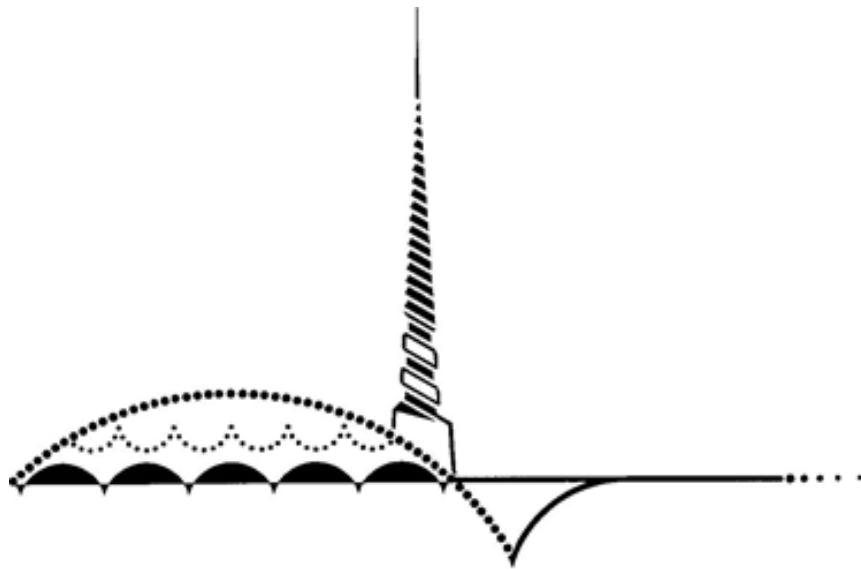
Civic Center and Marin Center parking areas: The Hall of Justice parking lot was repaired and partially resurfaced in 2011 to extend its useful life. The 'Pit' parking area was resurfaced in 2003. However, the remaining parking areas around the Civic Center and the Marin Center need significant repair or complete resurfacing. The Veterans' Memorial Auditorium parking area is being designed and integrated with the north gateway improvements project but is not yet fully funded. In FY 2012-13's CIP, \$250,000 was set aside toward the needed \$1.5 to \$1.8 million estimated to completely resurface it and meet current codes. Another \$228,000 was set aside in the FY 2013-14 CIP budget and \$100,000 in FY 2014-15 CIP. In FY 2015-16, \$200,000 was set aside, and in FY 2016-17 another \$200,000 is recommended to be set aside toward the needed funding. All of the other parking areas around the Civic Center and Marin Center have no funding set aside for resurfacing, and the highest priorities will be identified and recommended for funding in future CIP cycles.

Marin Center facilities renovation strategies: Marin Center facilities used to be maintained by the Department of Cultural Services. With the adoption of a facility fee on ticket sales in FY 2015-16, the Board approved the transfer of maintenance responsibility and staff to DPW. DPW's Capital Projects Division manages major repair work and capital improvement projects at these facilities. In recent years the mechanical systems in both the Exhibit Hall and the Auditorium have been replaced or upgraded; the fire curtain at the stage in the Auditorium was replaced; and the fire panel replacement at the Exhibit Hall design has been completed, with construction later this year. In FY 2015-16, funding was recommended for a thorough Marin Center facility assessment. The final assessment report was not yet complete as of this report. The highest priorities will be identified and recommended for funding in future CIP cycles.

Parks and Libraries facilities: Significant funding for the Libraries and for Parks has been provided by voter approved measures for each department. Each department, the Library and Parks, have their own process for prioritizing funding of projects. Funds are specified for use and cannot be used for other County uses. These are not General Funds used for these projects. Specific discussions about the projects for each department are detailed in the *Facility Improvement Projects* section of this CIP.

General Services Building and associated parking lot renovations: The General Services Administration (GSA) Building located at 6 Peter Behr Dr., San Rafael, is a one-story, 17,000 square foot structure which includes administrative, clerical, communication technicians, communication installers, vehicle mechanics, and roads maintenance personnel. Three separate DPW divisions Garage, Communication Services, and Road Maintenance, with 47 people are located at this building. The building consists of a combination of office space, equipment storage, garage bays for vehicles maintenance / equipment installation, and other designated work areas. Besides repair and resurfacing of the existing parking areas associated with the GSA building, there is a need to reconfigure the vehicle and storage lot located on the north side of the complex to accommodate plans for an adjacent relocated future Farmers

Market. There currently is a facility assessment being done on the GSA Building and associated parking area that includes review of work space efficiencies, space planning, furniture reconfiguration to accommodate existing and new office personnel, storage of new radio equipment, an mechanical, electrical, plumbing (MEP) needs assessment, wall and front entry reconfiguration, including bathroom and kitchenette, locker room improvements. Based on the assessment, the highest priorities will be identified and recommended for funding in future CIP cycles.



Airport Improvements

AIRPORT

The expenditures below include all costs related to the development or significant maintenance of Gross Field, the County airport near Novato, a 121-acre facility housing nearly 250 tenants. Fixed base operators operating under contract or leases with the County provide the services at the airport. Funding in future years is indicated for planning purposes only and subject to available funding and approval by the Board of Supervisors. Inclusion of unfunded projects does not guarantee funding in future years, as unfunded projects will be subject to available funding, including from grants, and reviewed along with new emerging needs. Several grants are shown as "In Progress" and are being carried forward until project completion.

Summary of Proposed Airport Projects and Expenditures

Project Description	In Progress (Prior Year Carry Forward)	Recommended for FY 2016/17	Planned for FY			
			2017/18	2018/19	2019/20	2020/21
	\$	\$	\$	\$	\$	\$
Miscellaneous Maintenance		100,000	100,000	100,000	100,000	100,000
Runway Ext. Supplemental EIS	358,360					
Upgrade Automatic Weather Observation System (AWOS)	92,400					
AGIS, ALP with Narrative	250,000					
Pavement Maintenance Management Plan (PMMP)	75,000					
Wildlife Hazard Assessment	100,000					
Design of existing runway resurfacing		244,500				
Ex. runway resurfacing & reconstruction.			1,850,000			
Wildlife Hazard Management Plan			25,000			
Final Supplemental EIS Review		115,000				
Ramp Apron Rehabilitation Design				150,000		
Environmental Mitigation/ Permitting Runway 13/31 Extension					6,500,000	
Runway 13/31 and Parallel Taxiway Ext Design					300,000	
Phase 1 Runway 13/31 and Parallel Taxiway Ext Construction						4,000,000
Runway 13/31 and Parallel Taxiway Ext Construction Phase 2 Design						650,000
TOTALS	\$875,760	\$459,500	\$1,975,000	\$250,000	\$6,900,000	\$4,750,000

Miscellaneous Maintenance

1. Project Description and Background

Miscellaneous maintenance projects at the airport. Projects are primarily pavement, levee, drainage and building related maintenance needs.

2. Project Objective

To maintain the airport facility and property in a safe and functional condition.

3. Cost Estimate

\$100,000 annually.

4. Basis of Estimate

Staff Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds						
Special Funds						
Other Funds		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Runway Extension Supplemental EIS

1. Project Description and Background

The Final Environmental Impact Report (EIR) for the project was certified by the Board of Supervisors in February 2014. The FAA issued its Final Environmental Impact Statement in June 2014. However, after public comment and internal FAA review, the FAA requested that additional study be completed prior to a final federal decision. A scope of work has been prepared for a Supplemental EIS.

2. Project Objective

Complete the Supplemental Environmental Impact Statement (EIS) necessary to extend the existing runway 1,100 feet to improve airport safety and implement the Airport Master Plan.

3. Cost Estimate

\$358,360

4. Basis of Estimate

FAA Grant.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds	\$322,524					
Special Funds						
Other Funds	\$35,836					

Automated Weather Observation System (AWOS)

1. Project Description and Background

Accurate and up-to-date weather information is essential to the safe and economic operation of any airport. The Automated Weather Observation System (AWOS) provides the weather information needed by pilots prior to landing at Gness Field. Parts are unavailable for repair of the current AWOS instrument facility at Gness Field and the AWOS at Gness Field will need to be replaced.

2. Project Objective

Replace the current airport AWOS facility needed to make IFR flights at Gness field.

3. Cost Estimate

\$94,400

4. Basis of Estimate

FAA Grant and manufacture's cost estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds	\$83,160					
Special Funds						
Other Funds	\$9,240					

AGIS, ALP with Narrative

1. Project Description and Background

Create an Federal Aviation Administration (FAA) required Airport Geographic Information System (AGIS) database, and update the Airport Layout Plan (ALP) and narrative to meet the FAA aeronautical requirements for the proposed runway extension. An FAA grant has been received. Completion of the work is tied to the FAA Runway Extension EIS Record of Decision.

2. Project Objective

To complete documents necessary to extend the existing runway 1,100 feet to improve airport safety and implement the Airport Master Plan.

3. Cost Estimate

\$250,000

4. Basis of Estimate

Staff and FAA estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds	\$225,000					
Special Funds						
Other Funds	\$25,000					

Pavement Maintenance Management Plan

1. Project Description and Background

This project will gather and document subsurface and pavement conditions in order to make cost effective decisions about pavement maintenance and rehabilitation.

2. Project Objective

To provide data for a pavement management program for future pavement maintenance decisions.

3. Cost Estimate

\$75,000

4. Basis of Estimate

Estimate from consultant.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds	\$67,500					
Special Funds						
Other Funds	\$7,500					

Wildlife Hazard Assessment (WHA)

1. Project Description and Background

The WHA is an ecological study that includes 12 months of site monitoring in accordance with federally approved protocols to determine the presence of wildlife or wildlife habitat that could pose hazards to aviation.

2. Project Objective

The study will be used to identify and reduce potential wildlife hazards and prevent wildlife strikes at DVO.

3. Cost Estimate

\$100,000

4. Basis of Estimate

Consultant and FAA cost estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds	\$90,000					
Special Funds						
Other Funds	\$10,000					

Design Existing Runway Resurfacing

1. Project Description and Background

This project will be a design phase for leveling and paving the existing 3,300 feet long runway surface, safety areas and taxiway alignment.

2. Project Objective

Create plans and specifications for the leveling and rehabilitation of the existing runway and taxiway alignment.

3. Cost Estimate

\$244,500

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds		\$220,050				
Special Funds						
Other Funds		\$24,450				

Existing Runway/Taxiway Resurfacing

1. Project Description and Background

Reconstruction of existing runway and taxiway surfaces by grinding, leveling, repaving, repainting runway markings and re-aligning taxiways.

2. Project Objective

To improve runway and taxiway pavement surfaces for landing and takeoff operations.

3. Cost Estimate

\$1,850,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			\$1,665,000			
Special Funds						
Other Funds			\$185,000			

Wildlife Hazard Management Plan

1. Project Description and Background

Develop measures from the completed Wildlife Hazard Assessment to determine steps needed to address wildlife hazards at Gross Field.

2. Project Objective

To eliminate wildlife hazards to aircraft operations by providing airport staff training, authority and responsibility for implementing the management plan.

3. Cost Estimate

\$25,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			\$22,500			
Special Funds						
Other Funds			\$2,500			

Final Supplemental EIS Review

1. Project Description and Background

The FAA issued its Final Environmental Impact Statement in June 2014. However, after public comment and internal FAA review, the FAA requested that an additional study be completed prior to a final federal decision.

2. Project Objective

Complete the FAA Environmental Impact Statement and Record of Decision for the Gross Field Runway Extension.

3. Cost Estimate

\$115,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			\$103,500			
Special Funds						
Other Funds			\$11,500			

Ramp Apron Rehabilitation Design

1. Project Description and Background

The Gness Field aircraft apron requires a design to rehabilitate the taxi and parking surfaces.

2. Project Objective

Create plans and specifications for the leveling and rehabilitating the existing aircraft apron area of Gness Field.

3. Cost Estimate

\$150,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds				\$135,000		
Special Funds						
Other Funds				\$15,000		

Runway 13/31 Extension Environmental Mitigation and Permitting

1. Project Description and Background

Identify the availability of mitigation options and permitting requirements for the runway extension addressing drainage, levee construction and relocation of existing ditches, and continued implementation of mitigation measures.

2. Project Objective

Purchase credits of wetland and biological habitat for the runway extension including levee and ditch relocation, and to comply with biological and wetland mitigation requirements.

3. Cost Estimate

\$6,500,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds					\$5,850,000	
Special Funds						
Other Funds					\$650,000	

Runway 13/31 and Parallel Taxiway Extension Phase 1 - Design

1. Project Description and Background

The project consists of design work for Runway 13/31 and parallel taxiway extension addressing drainage, levee construction and relocation of existing ditches, and continued coordination of environmental mitigation measures.

2. Project Objective

Design the runway extension including levee and ditch relocation, and to comply with biological and wetland mitigation requirements.

3. Cost Estimate

\$300,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds					\$270,000	
Special Funds						
Other Funds					\$30,000	

Phase 1 Runway 13/31 Extension Construction, including Levee Work and Ongoing Mitigation Work
--

1. **Project Description and Background**

Construct Phase 1 of the runway extension addressing drainage, levee construction and relocation of existing ditches, and continued implementation of mitigation measures.

2. **Project Objective**

Begin construction on the runway extension including levee and ditch relocation, and to comply with biological and wetland mitigation requirements.

3. **Cost Estimate**

\$4,000,000

4. **Basis of Estimate**

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds						\$3,600,000
Special Funds						
Other Funds						\$400,000

Phase 2 Runway 13/31 Extension Design, including Parallel Taxiway

1. Project Description and Background

Design Phase 2 of the runway extension pavement design, airfield geometry, and realignment of taxiway connectors and adjustments of navigational aids.

2. Project Objective

Complete the runway extension and parallel taxiway design for the phase 2 runway construction project.

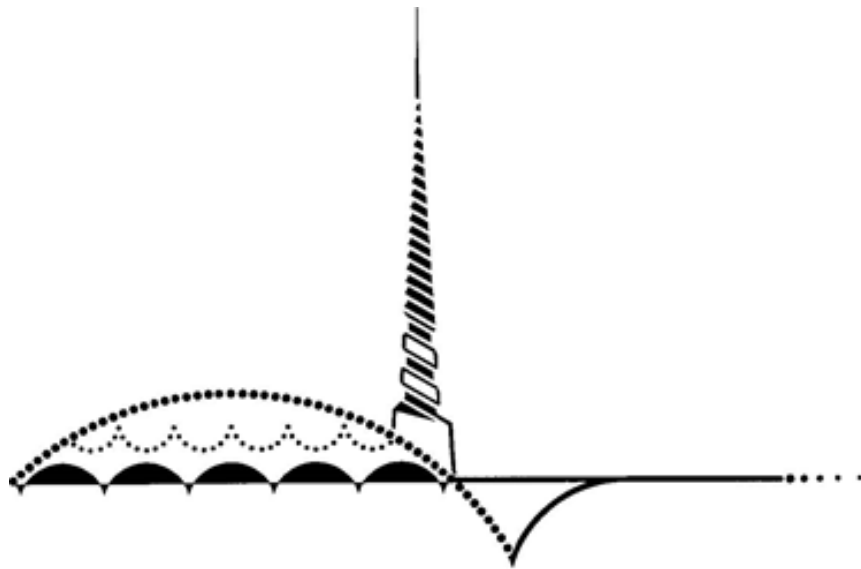
3. Cost Estimate

\$650,000

4. Basis of Estimate

Consultant Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds						\$585,000
Special Funds						
Other Funds						\$65,000



Facility Improvements

FACILITY IMPROVEMENTS

The Department of Public Works Building Maintenance Division is responsible for all building and plant maintenance for 44 County buildings (totaling over 1 million square feet, excluding Marin Center facilities), 16 flood control pump stations, and underground fuel tank systems. The Capital Projects Division administers contracts for construction projects at County buildings and various other County facilities. Fiscal Year 2016-17 represents the amount for the specific capital projects recommended for funding in the Proposed Budget. Recommendations were developed with a focus on health and safety, legal/policy mandates, and high priority program enhancements. Funding indicated for future fiscal years is for planning purposes only and subject to available/anticipated funding and approvals by the Board of Supervisors.

Summary of Proposed Facility Improvements

Project Description	In Progress (Prior Year Carry Forward)	Recommended for Fiscal Year 2016/17	Planned for future fiscal years			
			2017/18	2018/19	2019/20	2020/21
	\$	\$	\$	\$	\$	\$
Small Projects Countywide		150,000	150,000	150,000	150,000	150,000
Various Accessibility/Transition Plan Implementation Projects		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
VMA Parking Lot Improvements funding	477,000	200,000	500,000	500,000	500,000	
North Civic Center Campus Improvements		400,000	400,000			
Civic Center Cooling Tower No. 1 Repair & Media Replacement		110,000				
Fire Alarm Replacement at Juvenile Services Center		175,000				
Roof and HVAC Replacement, 920 Grand Avenue		420,000				
Re-Roof Roof Over Stage & Smoke Hatch Repairs at Veteran's Auditorium		280,000				
Fire Gate Retrofit at Reception, Area 3250 Kerner Blvd.		50,000				
Marin City Fire Station Traffic Beacon		50,000				
Replacement of Main Underground Fire Sprinkler Supply Line, 1600 Los Gamos		400,000				
HVAC System Balancing, 120 N. Redwood		50,000				
Elevator Door Repair, 120 N. Redwood		50,000				
2nd Phase of Jail Roof Replacement (Funding)		465,000	300,000			
Parapet Wall Repair, 10 N. San Pedro		100,000				
Bayside Park Pathway Repairs		100,000				
Projects not yet specified			1,650,000	2,350,000	2,350,000	2,850,000
General Fund Subtotal	477,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Libraries Measure A Capital Funding		400,000	600,000	500,000	500,000	500,000
Library Fund Subtotal		400,000	600,000	500,000	500,000	500,000
Parks Measure A Capital Projects		1,200,000	1,000,000	1,000,000	1,000,000	1,000,000
Parks CSA and other Capital Projects	350,000	1,320,000				
Parks Fund Subtotal	350,000	2,520,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL ALL FUNDS	\$ 827,000	\$ 6,920,000*	\$5,600,000	\$5,500,000	\$5,500,000	\$ 5,500,000

*This total does not include Certificates of Participation (\$25,500,000) and Fire Facilities Reserves (\$6,000,000). See Overview section, for more details.

Small Projects Countywide

1. Project Description and Background

This allocation funds various small projects during the fiscal year, coordinated through the Department of Public Works Capital Projects Division.

2. Project Objective

Implement various small projects or preventive repair projects.

3. Cost Estimate

\$150,000 for 16/17; \$150,000 annually thereafter.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Grant Funds						
Special Funds						
Other Funds						

Various Accessibility/Transition Plan Implementation Projects

1. Project Description and Background

The self-evaluation and transition plan completed in FY 07/08 identified high priority accessibility projects for County facilities. The projects listed below address path of travel (POT) issues, and other miscellaneous accessibility and barrier removal improvements to various County facilities for FY 16/17.

Projects:

- 920 Grand: Accessible parking, entrance ramps & doors, and signage
- County Jail: Elevator controls and visitor restrooms
- Stinson Beach Library: Van accessible parking, path of travel to entrance, and install power-assisted doors
- County Airport: Renovate accessible parking and exterior path of travel
- Traffic Signal, Sidewalk and Curb Ramp Retrofits
- Various Other Small Projects

2. Project Objective

Complete the projects listed above in compliance with current codes.

3. Cost Estimate

\$ 1,000,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Grant Funds						
Special Funds						
Other Funds						

Veterans' Memorial Auditorium Parking Lot Circulation Improvements

1. Project Description and Background

In FY2012/13, a concept study was undertaken to identify various improvements to the existing Veterans' Memorial Auditorium parking lot, including Civic Center Drive frontage improvements. FY2012/13 & FY2013/14 CIP budgets earmarked \$477,000 funding. The preliminary design concept is in progress.

2. Project Objective

To repave the original parking lot surface, redo the electrical wiring for lighting, improve storm water management and improve circulation for vehicles, pedestrians and bicyclists within the parking lot and ingress/egress from Civic Center Drive.

3. Cost Estimate

\$2.2 million is the estimated total project cost; \$228,000 was programmed in FY2013/14; \$100,000 was programmed in FY2014/15; \$200,000 was programmed in FY2015/16; and, \$200,000 is programmed for FY2016/17. Staff continues to seek additional funding sources such as State & Federal grant programs, etc.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund	\$477,000	\$200,000	\$500,000	\$500,000	\$500,000	
Grant Funds						
Special Funds						
Other Funds						

North Civic Center Campus Improvements

1. Project Description and Background

There are multiple projects located within the north portion of the Civic Center Campus that are either in the planning stages or are close to going to construction. It is anticipated that the Civic Center Drive Improvement project will be under construction throughout 2016, and there are several projects planned at the Marin Center. The planning for the Farmers' Market is moving forward and the GSA Facility Assessment and the Marin Center facility assessment, (both FY 2015-016 CIP projects), are also underway. Additional funding is required to augment these efforts.

2. Project Objective

To improve and/or augment projects located within the northern portion of the Civic Center Campus.

3. Cost Estimate

\$400,000 is programmed for FY2016/17 and FY2017/18 with the possibility of additional funds being required in the out years.

4. Basis of Estimate

Programmed funding.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$400,000	\$400,000			
Grant Funds						
Special Funds						
Other Funds						

Civic Center Cooling Tower #1 Repair and Media Replacement

1. Project Description and Background

Cooling Tower #1 is a necessary component of the Civic Center Cooling system. The media material is 16 years old and no longer functions within required operational parameters. Additional components of the Cooling Tower also require replacement.

2. Project Objective

To make necessary repairs and replace filter media to extend the working life of the system. These repairs will also increase system efficiency that will reduce energy consumption.

3. Cost Estimate

\$110,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$110,000				
Grant Funds						
Special Funds						
Other Funds						

Fire Alarm Replacement at the Juvenile Services Center

1. Project Description and Background

Remove and replace the current fire alarm system with addressable, non-proprietary system. The current system provides only minimum coverage and is over 20 years old. Replacement parts are difficult to find and the system does not communicate with the County's central fire alarm system located at the Civic Center.

2. Project Objective

Replacement of the fire alarm system will provide a much needed upgrade to an aging system. This system will eliminate the need for First Responders to search the entire building (the system will have zonal actuators) and will allow direct communications to the central system located at the Civic Center.

3. Cost Estimate

Fire Alarm system replacement cost is estimated to cost \$175,000.

4. Basis of Estimate

Engineer's estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$175,000				
Grant Funds						
Special Funds						
Other Funds						

Roof and HVAC Replacement at 920 Grand Avenue

1. Project Description and Background

Remove existing HVAC equipment, and replace the roof and install new, energy efficient HVAC system. The roof was patched over five years ago and has development multiple leaks and can no longer be effectively repaired. The existing HVAC equipment was designed for laboratory operations, which are no longer conducted at the facility. Replacement parts are no longer available.

2. Project Objective

The structure has been utilized for a variety of services in recent years. It was originally designed as a laboratory. The HVAC system is designed for laboratory services and uses 100% outside make-up air, which requires high energy consumption. The roof system is also long past its useful life and in need for replacement. The primary objective of the project is to construct these improvements to protect and preserve the structure, provide a comfortable working environment for staff, and install a new energy-efficient HVAC system that will allow for future flexibility in office/use configuration.

3. Cost Estimate

\$420,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$420,000				
Grant Funds						
Special Funds						
Other Funds						

Re-Roof Areas on Veteran’s Memorial Auditorium Over Stage and Repair Smoke Hatches

1. Project Description and Background

The VMA roof has developed leaks in and around the roof hatches, some of which are located over the stage area. There are also areas of deterioration associated with the roof flashing around the roof perimeter. The project will include encapsulating the roof hatch lids with a waterproofing membrane and the installation of roof repair/preservation materials.

2. Project Objective

This project is part of the on-going roof maintenance required for VMA facility. The project will address the immediate need to fix leaks and existing deterioration of the roofing system flashing. This work will extend the useful life of the roof and prevent further degradation of the roof hatch system.

3. Cost Estimate

\$280,000

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$280,000				
Grant Funds						
Special Funds						
Other Funds						

Fire Gate Retrofit at Reception Area at 3250 Kerner Blvd. (Health Campus)
--

1. Project Description and Background

The fire gates located at the 3250 Kerner Blvd. reception area are part of the fire alarm system. When an alarm is triggered or there is a loss in power the gates respond, closing from the ceiling to the floor. The fire gate deployment is rapid, which has created a safety concern for clients or staff that might be standing in the area of the gate closure.

2. Project Objective

The implementation of this project will address a threat to health and safety of staff and clients at the 3250 Kerner Blvd. facility, particularly those individuals that are required to be present in or around the reception area. The system will be retrofitted to continue providing a fire-rated enclosure for the reception area, but will remove the threat of the gate deploying rapidly through automatic actuation.

3. Cost Estimate

\$50,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$50,000				
Grant Funds						
Special Funds						
Other Funds						

Marin City Fire Station Traffic Beacon

1. Project Description and Background

The Marin City Fire Station does not have a system that activates yellow flashing beacons on the street when the fire apparatus leaves the facility on a call. This has created potential conflicts with vehicles or pedestrians on the street or sidewalks when the apparatus leaves the station. The project will include the installation of new light poles and yellow LED flashing beacons that will be tied into the pre-emption system of the response system located within the building.

2. Project Objective

The installation of this system will address the threat to the health and safety of the first responders from the Marin City station, and drivers and pedestrians that are present near the station during a call, and will enhance existing operations and functions of the facility.

3. Cost Estimate

\$50,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$50,000				
Grant Funds						
Special Funds						
Other Funds						

Replacement of the Underground Fire Sprinkler Supply Line at 1600 Los Gamos

1. Project Description and Background

Replacement of the main underground water feed to the fire sprinkler system supply for 1600 Los Gamos, including the replacement of approximately 1,700 linear feet (LF) of 10” fusible PVC pipe; and, 450 LF of 8” fusible PVC pipe to various hydrants and risers within the building. This installation will allow the system to hold 300 psi rating as per new fire code.

2. Project Objective

The installation of this line will bring the facility up to new fire code requirements of the City of San Rafael, and will improve the health and safety capabilities of the facility.

3. Cost Estimate

\$400,000

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$400,000				
Grant Funds						
Special Funds						
Other Funds						

<h2 style="margin: 0;">Heat Pump and Water System Balance at 120 N. Redwood</h2>
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1. Project Description and Background

The 120 N. Redwood facility is comprised of multiple levels and floor configurations that require specific balance of the HVAC system to maintain consistent comfort levels. Employee work spaces at the perimeter locations within the 120 N. Redwood facility are not receiving the correct volume of heating or cooling. This has created comfort variations for staff and clients within those locations. The root cause of these conditions is an imbalance to the existing HVAC system, primarily the approximately 60 heat pumps that comprise a significant portion of the system. The project will provide water balancing of the heat pump system across the facility.

2. Project Objective

The project will allow improved temperature control through the facility, which will improve the comfort for staff and clients.

3. Cost Estimate

\$50,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$50,000				
Grant Funds						
Special Funds						
Other Funds						

Elevator Door Repair at 120 N. Redwood

1. Project Description and Background

The elevator doors at 120 N. Redwood do not always close properly, including instances when door movements are jerky or intermittent. The condition is a cause of concern for staff and clients, and has been diagnosed as controllers that can no longer maintain required tolerances for calibration. The project will require the complete replacement of the controllers, including initial calibration and follow-up.

2. Project Objective

The replacement of the exiting elevator controllers at 120 N. Redwood will allow the system to maintain required calibration and operate without jerky and intermittent movements.

3. Cost Estimate

\$50,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$50,000				
Grant Funds						
Special Funds						
Other Funds						

2nd Phase of Jail Roof Replacement (Year 1 Funding)

1. Project Description and Background

The roof on the County Jail is approximately 20 years old and requires replacement. The project was divided into two phases, with the first portion being replaced in 2015. The second portion of the roof, which comprises approximately 60% of the total roof volume, is scheduled for a FY 2017-18 replacement. This facility is the County’s only adult detention center and has an active inmate population. Funding in FY 2016-17 is the first of two funding allotments required to fully fund the replacement.

2. Project Objective

The roof replacement is part of the normal, on-going maintenance of County facilities. The primary project objective is asset preservation; however, due to the active day-to-day population within the facility, this improvement will maintain and enhance working and living conditions within the complex.

3. Cost Estimate

\$465,000

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$465,000	\$300,000			
Grant Funds						
Special Funds						
Other Funds						

Parapet Wall Repair at 10 N. San Pedro

1. Project Description and Background

The upper parapet wall behind the roof line of the facility has dry rot and requires replacement. The sheet metal flashing that ties the roof system to the wall is also deteriorated and some sections are missing. Deterioration, particularly at the corners of the roof, has allowed water infiltration at the building corners and entryways.

2. Project Objective

The replacement of the parapet wall is part of normal, on-going maintenance required to maintain County facilities. The primary objective is asset preservation, but the project will address a condition that has allowed water leaks at various areas of the building.

3. Cost Estimate

\$100,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$100,000				
Grant Funds						
Special Funds						
Other Funds						

Bayside Park (San Rafael) Pathway Repairs

1. Project Description and Background

Bayside Park contains several asphalt paths and bench areas that allow unobstructed views of the San Rafael Bay and the Marin Islands Natural Wildlife Refuge. The Park, and its associated asphalt path adjacent to the bay, allows the community various recreational opportunities. Bayside Park is essentially a ‘pocket park’ that supports landscaping and trees at the southwest corner of the Bay. Due to the age of the asphalt and the mature trees within the park, pavement cracks and uplifts has occurred in the pathway. As a first phase, this project will dig-out and replace several areas of asphalt, and provide accessible curb ramps from the on-street parking along point San Pedro Road.

2. Project Objective

The project addresses accessibility, and health and safety concerns by rebuilding areas of the park’s pathways.

3. Cost Estimate

\$100,000

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$100,000				
Grant Funds						
Special Funds						
Other Funds						

Various Marin County Free Library Projects

1. **Project Description and Background**

In June 2015 voters approved a nine-year \$49 library parcel tax to maintain existing library services. Among the many services that this measure supports, \$500,000 per year is being allocated towards addressing library facility needs such as critical maintenance, ADA improvements, and bringing libraries up to date.

The allocation of these funds was reviewed by an oversight committee. Although these funds allow the Library to address some critical facility needs, they are not sufficient to address the continuing long-term capital needs originally identified in the Library's Facilities and Services Vision Plan from 2007. The Library will continue to explore long-term funding mechanisms to implement the Facilities and Services Vision Plan recommendations for providing 21st century library services at all locations. The current capital project expenditure plan projects include:

- Electrical panel and wiring upgrades at Corte Madera, Fairfax, Novato and Civic Center libraries
- Novato Library gas line replacement
- Concrete sidewalks and path repairs
- Miscellaneous small repairs and maintenance items
- Investigation of Novato Library HVAC and roof conditions and repair needs
- Investigation of the soil conditions and structural conditions at the Corte Madera Library

2. **Project Objective**

Address critical life safety infrastructure needs at Marin County libraries.

3. **Cost Estimate**

\$400,000

4. **Basis of Estimate**

Estimates from 2015 Raker Architects Study.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds						
Special Funds		\$400,000	\$600,000	\$500,000	\$500,000	\$500,000
Other Funds						

Various Marin County Parks Measure A Projects

1. Project Description and Background

In FY 2016-17, the greatest share of Measure A funding will be devoted to either construction of capital projects or development of construction documents for upcoming capital projects. Marin County Parks will also initiate a capital planning program to inventory and track structures and infrastructure within park facilities, enabling the department to better predict and prioritize future capital projects. The current capital expenditure plan includes the following prioritized projects:

- Mill Valley/Sausalito Dept. of Transportation ATP Design
- McInnis Operations Facility
- Paradise Slide Repair
- McInnis Playground Design
- Stafford Bridge Design
- Paradise Pier Rail Replacement
- McInnis Tennis Court Replacement

2. Project Objective

To provide better park facilities.

3. Cost Estimate

\$1,200,000

4. Basis of Estimate

Various engineer, architect, and expert cost estimator estimates.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds						
Special Funds						
Other Funds		\$1,200,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

Various Marin County Parks' CSA and Other Projects

1. Project Description and Background

Marin County Parks provides capital project services to County Service Areas (“CSAs”) and also coordinates grants and volunteer groups efforts, as well as coordinating work with the Department of Public Works in the construction of capital projects or development of construction documents for upcoming capital projects.

Projects

- Culvert Replacement on Corté Madera Creek Pathway \$650,000*
- Stafford Lake Intake Pump: \$350,000
- CSA 17:
 - Hal Brown Park Bridge: \$250,000
 - Creekside Marsh restoration: \$200,000
- CSA 16: Various landscape projects: \$100,000
- CSA 18: Tennis court repaving: \$120,000

*(Funding sources: Grants: CSA 17; Partners: Friends of Corté Madera Creek, Marin County Flood Control District)

2. Project Objective

To provide better park facilities and manage capital projects in County Service Areas.

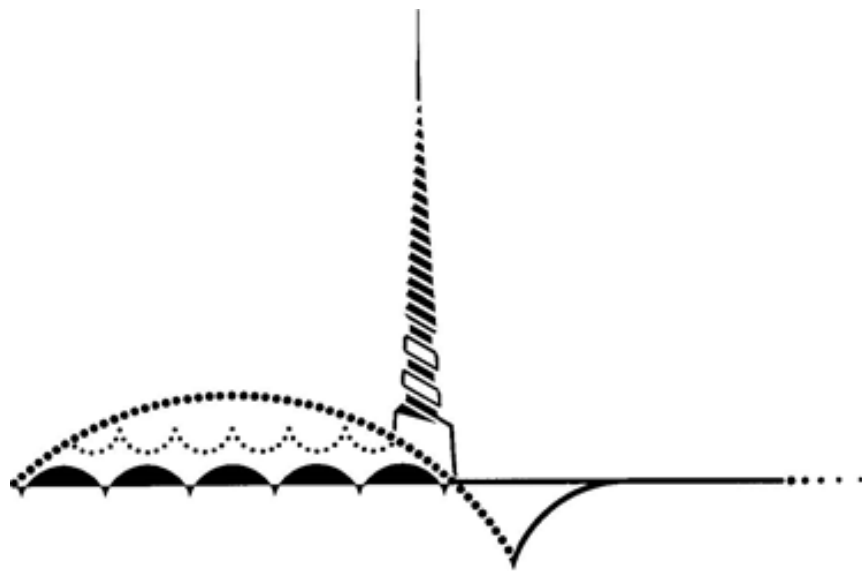
3. Cost Estimate

\$1,670,000

4. Basis of Estimate

Various engineer, architect, and expert cost estimator estimates.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds		\$650,000				
Special Funds	\$350,000					
Other Funds		\$670,000				



Water Resources

FLOOD CONTROL

The staff of the Water Resources Division of the Department of Public Works provides administration for the Marin County Flood Control and Water Conservation District. The District is a political subdivision of the State of California and is a separate and distinct agency from the County. It was established in 1953 by an act of the State legislature. The Board of Supervisors of the County sits as the Board of the District. Within the District, eight separate flood control zones have been formed. The purpose of the zones is to collect taxes and fees to fund specific flood control projects within that particular zone. The taxes and fees collected are restricted and must be spent within each respective zone. There is no impact on the County's General Fund.

Summary of Proposed Flood Control Projects and Expenditures

Project Description	In Progress (Prior Year Carry Forward)	2016/17	2017/18	2018/19	2019/20	2020/21
	\$	\$	\$	\$	\$	\$
Zone 1						
Novato Creek Sediment Removal	90,000	1,600,000		52,285	1,698,200	
Novato Levee Repair and Deer Island Basin Improvement	923,000	2,785,000			5,060,000	
Zone 3						
Coyote Creek Middle Reach Sediment Removal	200,000	1,000,000				
Zone 9						
Phoenix Lake IRWM Retrofit	1,545,300	2,121,300	663,200	7,930,100	6,064,650	
San Amselmo Flood Protection Project		2,823,300		7,308,800	7,308,850	
Lower Corte Madera Creek Improvement Project		1,000,000	1,250,000	4,500,000	6,600,000	
Corte Madera Creek - Unit IV Improvements		200,000	200,000	300,000	300,000	5,000,000
TOTALS	2,758,300	11,529,600	2,113,200	20,091,200	27,031,700	5,000,000

**Novato Creek Sediment Removal
Zone 1**

1. Project Description and Background

Remove sediment from Novato Creek between Railroad Avenue and Diablo Avenue as part of the recurring maintenance of the Novato Flood Control Project. It is anticipated that a sediment removal project is required once every 4-years at this location and two project cycles are included in the cost estimate. The last sediment removal project occurred in 2012.

The 2016 cycle will include beneficial reuse of dredged sediments by placing them along the alignment of future flood protection levees required for the protection of built areas for the City of Novato. These levees are required both to complete construction of the Deer Island Flood Detention Basin and to allow for the future restoration of the rest of the Deer Island for future restoration to full tidal conditions. These sediments would comprise a structural core levee along the northern border of Deer Island Basin and improvements on existing cross levee between the City of Novato Corp-Yard and the Novato Creek levee. Additionally, within the 2016 cycle a gentle sloping levee suitable for habitat transition zone (i.e. an ecotone levee) will be constructed on the eastern side of the existing basin cross levee.

Other work proposed to start up during the 2016 cycle includes a study on introducing a thin-layer lift at select locations within Deer Island Basin. If the study provides enough information to determine a benefit to the thin layer lifts, it is anticipated that they will be introduced during the 2020 cycle.

2. Project Objective

To remove sediment from creek to maintain flow capacity.

3. Cost Estimate

\$3,440,525 for 5 years: \$1,690,000 for the 2016 dredge cycle and \$1,750,525 for the 2020 cycle.

4. Basis of Estimate

Flood Control Staff.

<u>Funding Source</u>	<u>Available Prior Year Funds</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>	<u>19/20</u>	<u>20/21</u>
F. C. Zone 1 Funds	\$90,000	\$1,600,000		\$52,285	\$1,698,200	
Grant Funds						
Special Funds						
Other Funds						

**Levee Repair and Deer Island Flood Basin
Improvements
Zone 1**

1. Project Description and Background

In 1995, 2006 and again in 2014, water levels in Novato Creek rose so high as to threaten flooding of Nave Gardens, downtown Novato, and washing out of the levee near a railroad bridge that crosses the creek. In response, the District used an excavator in each to intentionally breach the nearly overtopped levee that runs along the creek in order to relieve the flooding and washout threat. By doing so, water flows into the mostly dry Deer Island Basin.

In 2012 the County received a \$270,000 grant for design of improvements as part of the Novato Creek hydraulics study including within Deer Island Basin in Novato which will be started following completion of the currently on-going Novato Creek hydraulics study in 2016. These improvements will include a permanent engineered overflow weir into the Deer Island Basin along the existing Novato Creek levee (at the location of historic intentional breaches) and a new flood protection levee in Deer Island Basin. The purpose is to allow for controlled overflow from Novato Creek into the basin to lower water levels in the City of Novato during high flood events to prevent flooding of populated areas. The District has received a construction grant of \$1.5M from DWR for the first phase of flood basin construction. The District is working to secure an additional estimated \$5 million in grant funds which would cover construction costs for the remainder of the project. The Flood Zone is expected to need to contribute about \$1.285 million towards this effort primarily for preparation of plans and specifications and permitting.

2. Project Objective

To repair levee breaches that occurred during the December 11, 2014 storm and to design and construct a permanent engineered overflow weir to lower water levels in the creek and protect significant areas of the City of Novato during floods. The project is intended to make expensive post-storm breach repairs obsolete.

3. Cost Estimate

\$8,715,000: \$350,000 for repair of the breached levee in 2016; Construction of the first phase of the weir and flood basin is slated for 2018 or 2019 in the amount of approximately \$2M of which \$1.5M is grant funded.

4. Basis of Estimate

Flood Control Staff.

<u>Funding Source</u>	<u>Available Prior Year Funds</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>	<u>19/20</u>	<u>20/21</u>
F. C. Zone 1 Funds	\$303,000	1,285,000			60,000	
Grant Funds	\$270,000	\$1,500,000			\$5,000,000***	
Special Funds*	\$350,000					
Other Funds**						

*Funds made available from the County General Fund for levee repair by the Marin County Board of Supervisors due to the declared emergency following the December 11, 2014 storm.

**Watershed Program funds

*** Potential grant funding request; not yet obtained

Coyote Creek Middle Reach Sediment Removal Zone 3
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1. Project Description and Background

Coyote Creek, from the concrete channel to the Highway 1 overcrossing, has required periodic sediment removal every 8-12 years in order to remove accumulated sediment and maintain its intended design capacity for flow. The last sediment removal project occurred in 2003. Plans to remove sediment within the concrete channel are tentatively scheduled for 2016. Plans to remove sediment within the earthen channel section are tentatively scheduled to occur as early as summer 2017, or in conjunction with the Bothin Marsh Restoration Project.

2. Project Objective

To restore Coyote Creek to its intended design capacity for flow.

3. Cost Estimate

\$200,000 for the concrete channel section and \$1,000,000 for the lower earthen channel section (construction costs only).

4. Basis of Estimate

Engineer’s Estimate.^{1, 2, 3}

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
F.C. Zone 3 Funds	\$200,000	\$1,000,000				
Federal Funds						
Special Funds						
Other Funds						

1) Noble Consultants, Inc. Memorandum 7 Sedimentation Analysis (6/5/13) which is Appendix F of the Coyote Creek Levee Evaluation (Final) Hydraulic Analyses and Results for Coyote Creek and Nyhan Creek in Marin County (March 21, 2016), they recommend using the “2013 to 2003” as the best scenario for evaluating sedimentation quantities because it is the difference between two specific surveys. This suggests approximately 4,000 – 4,500 yd³ of sediment to be removed from the earthen channel.

2) Concrete channel estimate is approximately 560 yd³ and 70 truck trips.

3) Based on District records, the 2003 dredge episode removed an estimated 10,000+/- yd³ of sediment for a total cost of \$600,000.

Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit Zone 9

1. Project Description and Background

Retrofit existing water supply reservoir to add flood control capability. This project is identified in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management

2. Project Objective

Reduce peak flood flow in Corte Madera Creek; in concert with other measures in the study this reduction will provide flood protection during a 100-Year-Flood event.

3. Cost Estimate

\$2,121,300 for FY 2016/17. Total is \$19,691,150 which includes previously expended funds (assumes feasibility costs \$1,046,595, design & CEQA costs \$2,784,455, and construction & inspection costs \$15,860,100).

4. Basis of Estimate

Phoenix Lake IRWM Retrofit Grant Funding Agreement.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
Phoenix Lake Project Fund*	\$1,545,300	\$1,294,000	\$404,600	\$4,837,300	\$3,699,400	
Grant Funds ¹		\$827,300	\$258,600	\$3,092,700	\$2,365,250	
Special Funds						
Other Funds						

*These amounts follow the DWR grant agreement that Zone 9 will contribute approximately 61% of full project costs, the balance to be funded by the grant.

Note: This project requires a final agreement with the property owner to complete the project.

¹Stormwater Flood Management Grant (Proposition 1E, Round 1)

San Anselmo Flood Protection Project Zone 9

1. Project Description and Background

Add the necessary infrastructure upstream or within the Town of San Anselmo to meet the goals of the DWR grant awarded to the Memorial Park Detention Basin Project. The Memorial Park Detention Basin Project was originally identified in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management, but was later withdrawn following a public vote

2. Project Objective

Reduce peak flood flow in San Anselmo Creek; in concert with other measures in the study, it will provide flood protection during the 100-Year-Flood event.

3. Cost Estimate

\$847,000 for FY 2016/17. Total is \$17,441,000 (assumes easements cost \$19,000, feasibility verification costs \$162,000, design & CEQA costs \$1,477,000, and construction & inspection costs \$15,783,000 similar to Memorial Park).

4. Basis of Estimate

This is a planning level estimate from the Memorial Park grant application to DWR.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
FZ9 Funds*		\$847,000		\$2,192,650	\$2,192,650	
Grant Funds		\$1,411,667		\$3,654,416	\$3,654,417	
Special Funds		\$564,667		\$1,461,767	\$1,461,767	
Other Funds						

*The amounts shown follow the approved principle that Zone 9 will contribute 30% of full project costs, the balance to be obtained through other funding sources. The DWR grant will reimburse Flood Zone 9 at a later time.

Note: This project requires a memorandum of understanding with the Town of San Anselmo to proceed.

Corte Madera Creek Flood Risk Management Project- Units 2, 3 and 4 Improvements Zone 9

1. Project Description and Background

Design of improvements along Units 2, 3 and 4 sections of Corte Madera Creek from Sir Francis Drake Boulevard Bridge in Ross to the downstream end of the concrete channel in Kentfield to increase flow capacity while maintaining the environmental integrity of the creek. Project may include removal of the wooden fish ladder, widening overly narrow sections, installing flood barriers adjacent to or offset from the banks and stabilizing creek slopes in Unit 4, and also installing flood barriers and widening sections of the floodplain downstream of the fish ladder in Units 2 and 3. This project is identified as one of the baseline measures in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management.

2. Project Objective

Goal is to increase flood capacity and in conjunction with the measures and projects of the Ross Valley Flood Protection and Watershed Program, to convey the 100 Year Flood without overbank flow.

3. Cost Estimate

\$500,000 for FY 2016/17. Total is \$14,100,000².

4. Basis of Estimate

Army Corps of Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17 ¹	17/18	18/19	19/20	20/21
F.C Zone 9 funds		\$500,000	\$500,000			
Federal Funds		\$500,000 ¹	\$750,000 ²			
Special Funds						
Other Funds ³				\$4,500,000	\$6,600,000	

¹ \$500,000 allocated in U.S. Army Corps of Engineers (USACE) FY 16/17 Work Plan

² No federal funding has been allocated in future years, but cost sharing agreement has identified 50/50 federal/county split for the feasibility phase.

³ USACE cost sharing to be determined for real estate and construction costs.

Lower Corte Madera Creek Improvement Project Zone 9

1. Project Description and Background

Remove accumulated sediment of Corte Madera Creek to increase flood capacity of earthen channel along tidal section and make other improvements, including levees, floodwalls and interior drainage. This project is identified as one of the baseline measures in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management. The last sediment removal project occurred in 1986.

2. Project Objective

Goal to increase flood capacity of lower reaches of Corte Madera Creek and in conjunction with the measures and projects of the Ross Valley Flood Protection and Watershed Program to convey the 1-per-cent-annual -chance flood without overbank flow.

3. Cost Estimate

\$200,000 for FY 2016/17. Total is \$6,000,000.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
F.C Zone 9 funds		\$200,000	\$200,000	\$300,000	\$300,000	\$5,000,000
Grant Funds						
Special Funds						
Other Funds						

CSA 29 Paradise Cay Maintenance Dredge

1. Project Description and Background

Dredge Paradise Cay for recreation/boating use to minus 7 (-7 NAVD88) feet within the waterways and to minus 8 (-8 NAVD88) feet in the entry channels. Dredging is typically performed every 4 years. Last dredging was in 2014 for the South Cay. The North Cay dredging was completed in 2015. The next dredging event is scheduled for 2019.

2. Project Objective

Removal of sediment to maintain navigable waterways for homeowners' boating use.

3. Cost Estimate

\$800,000 for next full dredging in 2019 (construction cost only).

4. Basis of Estimate

Engineer's Estimate based on bids from 2014*.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
CSA Funds				\$800,000		
Grant Funds						
Special Funds						
Other Funds						

* $\$30/\text{yd}^3 \times 26,510 \text{ yd}^3 \approx \$800,000$

FISH PASSAGE PROJECTS

In 2005, Marin County Board of Supervisors voted to establish a County Fisheries Restoration Program aimed at restoring fish passage through county culverts on salmon streams in West Marin. Since 2005, eight fish passage projects have been constructed by the County; one project has received grant funds to be constructed in 2016, two projects are in design phase and one project is designed and seeking funding for implementation.

Grant funding supports a large part of this program with \$2,510,034 received from multiple agencies to date. Inclusion of unfunded projects does not guarantee funding in future years, as unfunded projects are often subject to available grant funding and updating of priorities due to emerging needs.

Summary of Proposed Fish Passage Projects and Expenditures

Project Description	In Progress (Prior Year Carry Forward)	2016/17	2017/18	2018/19	2019/20	2020/21
	\$	\$	\$	\$	\$	\$
San Geronimo Creek at Railroad	180,000	235,000				
Montezuma Creek			250,000			
San Geronimo Valley Dr. bridge downstream of Roy's Pools	40,000		90,000			
Larsen Creek Fish Ladder					488,000	
Contingency Funds						
TOTALS	220,000	235,000	340,000		488,000	

San Geronimo Creek at Railroad Ave.

1. Project Description and Background

Retrofit existing concrete box culvert with concrete baffles and restore 200 LF of creek channel for fish passage and salmon habitat enhancement using rock and log weirs. Final plans and engineering for structural anchoring will be completed by May 31, 2016 and the project will go to bid in June 2016, with construction planned for August and September. Board approved project funding on May 19, 2015.

2. Project Objective

Improve fish passage for coho salmon and steelhead and restore a degraded section of San Geronimo creek to enhance habitat for salmon.

3. Cost Estimate

\$415,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund	180,000					
Grant Funds		235,000				
Special Funds						
Other Funds						

*Project received Drought Program grant funds from the Department of Fish and Wildlife Fisheries Restoration Grants Program.

Montezuma Creek at Guadalupe Ave.

1. Project Description and Background

Replacement of a County culvert on Montezuma Creek at Guadalupe Ave, and restoration of the stream channel upstream that runs through the Forest Knolls County Park. 100% project designs were completed by County engineering as a match to the San Geronimo Valley Landowners design grant from California Department of Fish and Wildlife.

2. Project Objective

Restore fish passage and restore habitat for coho salmon and steelhead trout.

3. Cost Estimate

\$250,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			250,000			
Special Funds						
Other Funds						

*Construction funding will be pursued through grants.

San Geronimo Valley Drive Bridge at Roy's Pools

1. Project Description and Background

Removal of a concrete sill on County bridge that is a barrier to salmon to provide fish passage. Restore the stream channel beneath the San Geronimo Valley (SGV) bridge to a natural bottom, matching channel elevation to existing downstream gradient. The project also include reinforcement of the bridge footings with cut-off walls on the upstream side in order to protect the bridge footings when the Roy's Pools fish ladder is eventually removed upstream on SGV Golf Course property by others. That project's schedule is contingent on this project being completed first.

2. Project Objective

Restore fish passage through the County bridge structure and protect bridge footings from scour when Roy's Pools fish ladder is removed.

3. Cost Estimate

\$40,000 for design in FY 2016/2017. Estimated cost to construct is \$90,000.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			90,000			
Special Funds						
Other Funds	40,000					

* A grant was submitted for construction funds to DFW FRGP in March 2016. Grant awards are expected in 2017. If not selected, DPW will pursue other grant opportunities.

Larsen Creek Fish Ladder

1. Project Description and Background

Retrofit existing box culvert under Sir Francis Drake Blvd with concrete baffles inside the culvert and construct a fishway downstream of the culvert. Design for this project was funded by a Department of Fish and Wildlife (DFW) grant and completed in 2014.

2. Project Objective

Improve fish passage for coho salmon and steelhead.

3. Cost Estimate

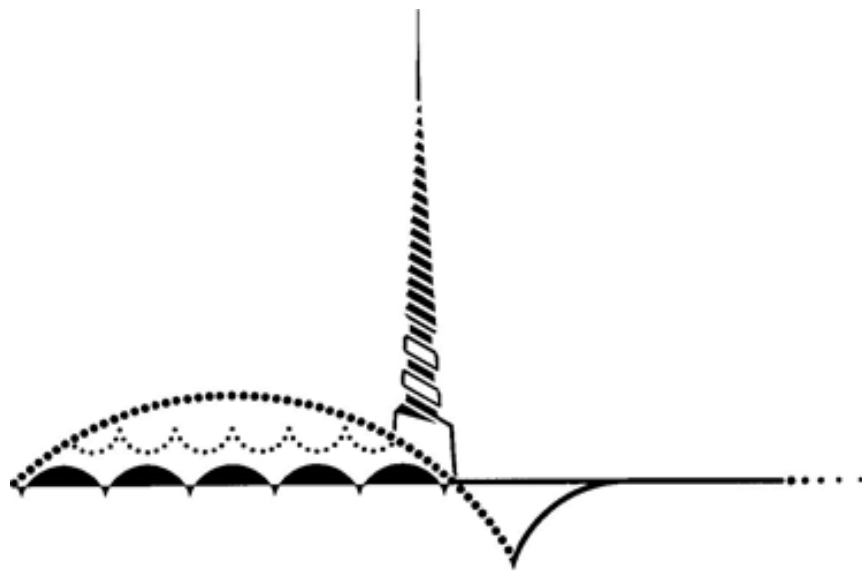
\$488,000 for construction.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds					488,000	
Special Funds						
Other Funds						

*Grant funding for construction has been pursued, but the project has not been selected. Since DFW no longer funds fish ladders, this project will be difficult to fund with grants. Public Works will continue to pursue grants.



Road Maintenance Improvements

ROAD MAINTENANCE

The objective of the Road Maintenance Division is to provide and maintain a safe and adequate road system for the unincorporated areas of Marin County. In addition to general maintenance, this budget includes the cost of engineering, right-of-way acquisition and construction of the 420 miles of County road. The Division's activities include: traffic safety, street overlays, replacement of culverts, road surface maintenance, chip seals, patching, shoulder repairs, tree removal and maintenance, removal of roadside debris, storm patrol, storm cleanup, striping, and providing requested service to other County departments.

The one-year deferred maintenance backlog is currently \$77 million and the County overall road network condition is rated at 60 out of 100. The \$77 million backlog represents the funding needed to bring our entire road network to a rating of 80 out of 100 in one years' time. State funding reductions have drastically impacted the road maintenance work program. In response to this growing problem, the Board of Supervisors initiated two five-year Road and Bridge Programs representing a \$50 million investment in our road infrastructure. All work was completed on both five-year programs in 2014 and the County's overall road network condition rating went from 48 to 60 out of 100 in that time. In order to maintain the current road condition and keep the deferred maintenance backlog from growing, the Board initiated a \$48M six-year 2014-2020 Road and Bridge Rehabilitation program. Funding under this latest program has provided matching funds such that significant grant revenue could be captured under the Federal Lands Access Program (\$23M) and the Highway Bridge Program (\$12M) to further preserve our transportation system.

Despite recent Federal grant successes for major roads and bridges, federal and state grants for local road resurfacing projects are becoming scarcer, so aggressive pursuit of other grant sources or larger general fund contributions are needed to address the road infrastructure shortfall and reverse the deterioration of our roads infrastructure. Fiscal year 2016/17 represents the amount of road maintenance capital projects recommended for funding this fiscal year.

Summary of Proposed Road Maintenance Projects and Expenditures

Project Description	Fund Source	In progress (Prior Year Carryforward)	Recommended for FY 2016/17	Planned for FY			
				2017/18	2018/19	2019/20	2020/21
		\$	\$	\$	\$	\$	\$
General Maintenance	R		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
	G						
	GF		750,000	750,000	750,000	750,000	750,000
	Other						
Special Projects	R						
	G			12,200,000			
	GF						
	Other						
Culvert Replacement	R		500,000	500,000	500,000	500,000	500,000
	G						
	GF						
	Other						
Traffic Improvements	R		200,000	200,000	200,000	200,000	200,000
	G						
	GF						
	Other		100,000	100,000	100,000	100,000	100,000
Roads & Bridges Program	R						
	G				35,000,000		
	GF		7,000,000	7,600,000	5,000,000	7,000,000	7,000,000
	Other		1,000,000	1,800,000	2,600,000	1,800,000	1,800,000
Road Fund Subtotal =		-	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000
Grant Fund Subtotal =		-	-	12,200,000	35,000,000	-	-
General Fund Requested Subtotal =		-	7,750,000	8,350,000	5,750,000	7,750,000	7,750,000
Other Fund Subtotal =		-	1,100,000	1,900,000	2,700,000	1,900,000	1,900,000
GRAND TOTAL		\$ -	\$ 10,550,000	\$ 24,150,000	\$ 45,150,000	\$ 11,350,000	\$ 11,350,000

R= Road Fund G= Funded by Grant GF= General Fund

General Maintenance

1. Project Description and Background

General maintenance for the road system includes, but is not limited to, pot hole repair, minor patch paving, ditch maintenance and clearing, tree removal, slurry sealing, chip seal, cape seal, and culvert maintenance.

2. Project Objective

General road maintenance.

3. Cost Estimate

\$1,750,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
Road Funds		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
General Fund		\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
Grant Funds						
Special Funds						
Other Funds						

Special Projects

1. Project Description and Background

This includes the resurfacing of Sir Francis Drake Blvd from Highway 101 in Greenbrae to the Ross town limit utilizing \$13,000,000 in TAM funds through their Major Roads and Related Infrastructure Expenditure Plan. Funding in the amount of \$800,000 to develop alternatives, prepare environmental documents, and develop plans and specifications has been secured. Funding for construction will be secured through TAM in 17/18 with construction anticipated in that year or the following year.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$12,200,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund						
Grant Funds			12,200,000			
Special Funds						
Other Funds						

Culvert Replacements (Roads)

1. Project Description and Background

Our drainage infrastructure is comprised of a significant amount of 50 to 60 year old corrugated metal pipe culverts (approximately 35,000 linear feet) that are at the end of their life cycle. The funding below reflects the maintenance need moving forward.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$500,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
Road Funds		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
General Fund						
Grant Funds						
Special Funds						
Other Funds						

Traffic Improvements

1. Project Description and Background

Improving and maintaining current traffic control systems throughout the County.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$300,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
Road Funds		\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
General Fund						
Grant Funds						
Special Funds						
Other Funds		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Roads & Bridges Program

1. Project Description and Background

This includes resurfacing of various County roads and pavement rehabilitation projects and bridge projects utilizing an average of \$7 million in general fund contributions. A portion (\$2M) of the FY16 General Funds will be held in reserve for FY17 and FY 18 to match approximately \$35M in Federal grant funds for various projects including five bridge replacements and two Federal Lands Access Program resurfacing projects – one on Sir Francis Drake Blvd from Pierce Point Road to the Point Reyes Lighthouse and one on Muir Woods Road from the monument to Highway One. These projects are slated for construction in the summers of 2017 and 2018. Special Funds include sales tax revenue from Measure A and Measure B annual allocations and Other Funds includes allocations from the Road Impact Fee account.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$8,000,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	16/17	17/18	18/19	19/20	20/21
General Fund		\$7,000,000	\$7,600,000	\$5,000,000	\$7,000,000	\$7,000,000
Grant Funds				\$35,000,000		
Special Funds			\$800,000	\$1,600,000	\$800,000	\$800,000
Other Funds		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

CAPITAL
IMPROVEMENT
PROGRAM

2016 - 2017

FY 2016 - 2017 to FY 2020-2021

County of Marin
County Administrator's Office
3501 Civic Center Drive
Suite 325
San Rafael, CA 94903
www.marincounty.org



COUNTY OF MARIN