COUNTY OF EL DORADO

Senate Bill 1 – Road Maintenance and Rehabilitation Account (RMRA)

Fiscal Year 2017-2018 Project List

Department of Transportation

9/19/2017

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General Information

- **County:** El Dorado
- **Project Lead and Department Contact Information**
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      Department of Transportation
      Community Development Services
- **Legislative District:** 4th District
- **Jurisdiction Average PCI and date/year of measurement**: PCI = 65, measurements taken 01/2014 – 08/2017.
- **Supplemental Information**
    - **How were projects identified as a priority:** Projects for the Fiscal Year 2017-2018 were identified using two methods. First, projects slated for completion in 2017 were of critical need. These projects were a result of road failures that unless they were repaired before winter 2017, the roads would have to be closed. This would cause public safety issues to the residents living on these roadways. Second, projects with future year completion dates were selected from the County's Pavement Management System. The Pavement Management System depicted these as the next roads to be most cost effective and needed for repair.
    - **How they demonstrate efficient investment of public funds:** These projects are spread out throughout the five (5) supervisorial districts in El Dorado County. All these projects will improve the PCI and make improvements to the roadway structures to prevent major repair in the future.

Proposed Project: Fallen Leaf Road – Repairs

Project Number: 78726

Description: Fallen Leaf Road repairs project consist of replacing approximately 290 lineal feet of corrugated metal pipe (CMP) over 8 locations with 18" and 24" High Density Polyethylene (HDPE) pipes. The existing CMPs on Fallen Leaf Road are undersized per current County standards and failing as a result of the 2017 severe winter storms. If these culverts are not replaced the County will continue to have damage to Fallen Leaf Road with each future event. In addition to the culvert work, 1000 linear feet of the Fallen Leaf Road will be reconstructed and repaved.

Location: Fallen Leaf Road is in the Lake Tahoe Basin and is approximately 2 miles west of the City of South Lake Tahoe. Fallen Leaf Road is the primary access point to Fallen Leaf Lake and the Desolation Wilderness. The repairs will be completed at multiple locations on Fallen Leaf Road between State Route 89 and Glen Alpine Way (https://goo.gl/maps/qWNHFwTED342).

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: HDPE has a greater useful life as compared to CMP. The life expectancy of the HDPE culverts will be 50 – 75 years. Life expectancy of the repaved sections will be 10 years, before a micro-seal is needed. Upsized culverts will be better equipped to convey flows and limit future damage to the roadway from future storm events.

Technology, Climate Change, and Complete Street Considerations: The project includes increasing the sizes of existing culvert and improved flow conditions for the inlet and outlet. The increased size will be better suited to handle changes to precipitation as a result of climate change. The roadway sections will be pulverized in place which will limit greenhouse gas emissions from the need for additional trucking to haul off/on material for roadway work.

Proposed Project: Tahoe Mountain Road – Repairs

Project Number: 48920

Description: Tahoe Mountain Road repairs project consist of replacing approximately one 18" and one 24" corrugated metal pipe (CMP) which are 30 feet long with two 24" High Density Polyethylene (HDPE) pipes of similar length. The existing CMPs on Tahoe Mountain Road are undersized per current County standards and are failing as a result of the 2017 winter storms. One of the culverts has begun to fail on top impacting the existing roadway. In addition to replacing the culverts, flared end sections will be added to the inlet and outlets to increase flow efficiencies through the culverts. During the 2017 winter storms flows overwhelmed the existing inlets sending high flows down Tahoe Mountain Road causing further damage to the roadway and shoulders.

Location: Tahoe Mountain Road is in the Lake Tahoe Basin approximately 2.5 miles west of the City of South Lake Tahoe. Tahoe Mountain Road is a secondary access point to Fallen Leaf Road as well as to Angora Lakes. The location of the repair is at the intersection of Tahoe Mountain Road with Angora Ridge Road (https://goo.gl/maps/WrS5NYLoBh72)

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: HDPE has a greater useful life as compared to CMP. The life expectancy of the HDPE culverts will be 50 – 75 years. Life expectancy of the repaved sections will be 10 years, before a micro-seal is needed. Upsized culverts will be better equipped to convey flow and limit future damage to the roadway from future storm events.

Technology, Climate Change, and Complete Street Considerations: The project includes increasing the sizes of existing culvert and improved flow conditions for the inlet and outlet. The increased size will be better suited to handle changes to precipitation as a result of climate change.

Proposed Project: Mewuk Drive – Repairs

Project Number: 48932

Description: Mewuk drive was damaged during the 2017 severe winter storms when high surface and subsurface flows saturated the base section and subgrade of the road causing large scale sinkholes and roadway failures to occur. The Mewuk Drive repair consists of grinding out approximately 1,300 square feet of asphalt concrete (AC) to a depth of 3 inches, repairing the subgrade in the area of the failure, and paving back 3 inches with ½ inch AC mix. Crews will clean the existing ditch along the north side of Mewuk Drive to keep flows from negatively impacting the roadway during times of high runoff.

Location: Mewuk Drive is in the Lake Tahoe Basin, located off of South Upper Truckee, approximately 4.5 miles south of the City of South Lake Tahoe. (https://goo.gl/maps/Dkp1JaFSgCm)

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: The life expectancy of the repaved sections will be 10 years, before a micro-seal is needed.

Technology, Climate Change, and Complete Street Considerations: Grindings of the existing AC will be re-purposed by either delivering to the local asphalt plant for use in recycled asphalt base products or utilized by El Dorado County for future micro seal projects. Recycling of existing material will help to limit greenhouse gases.

Proposed Project: Strawberry Lane – Repairs

Project Number: 48938

Description: Strawberry Lane was damaged during the 2017 severe winter storms when high surface and subsurface flows saturated the base section and subgrade of the road causing large scale sinkholes and roadway failures to occur. The Strawberry Lane repair consists of grinding out approximately 3,500 square feet of asphalt concrete (AC) to a depth of 3 inches, repairing the subgrade in the area of the failure, and paving back 3 inches with ½ inch AC mix. Crews will clean the existing ditch along the east side of Strawberry Lane to keep flows from negatively impacting the roadway during times of high runoff.

Location: Strawberry Lane is located off of Highway 50 (old Lincoln Highway) at the town of Strawberry (https://goo.gl/maps/XwzxDBAtJLN2)

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: The life expectancy of the repaved sections will be 10 years, before a micro-seal is needed.

Technology, Climate Change, and Complete Street Considerations: The roadway sections will be pulverized in place which will limit greenhouse gas emissions from the need for additional trucking to haul off/on material for roadway work. This is especially critical due to the remote location of Strawberry (40 miles west of Placerville and 20 miles east of South Lake Tahoe, via Echo Summit)

Proposed Project: Tionontati Street – Repairs

Project Number: 48936

Description: Tionontati Street was damaged during the 2017 severe winter storms when high surface and subsurface flows saturated the base section and subgrade of the road causing large scale sinkholes and roadway failures to occur. The Tionontati Street repair consists of grinding out approximately 4,000 square feet of asphalt concrete (AC) to a depth of 3 inches, repairing the subgrade in the area of the failure, and paving back 3 inches with ½ inch AC mix.

Location: Tionontati Street is in the Lake Tahoe Basin, located off of Pioneer Trail, approximately 2.5 miles south of the City of South Lake Tahoe. (https://goo.gl/maps/nhex3StcQNM2)

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: The life expectancy of the repaved sections will be 10 years, before a micro-seal is needed.

Technology, Climate Change, and Complete Street Considerations: Grindings of the existing AC will be re-purposed by either delivering to the local asphalt plant for use in recycled asphalt base products or utilized by El Dorado County for future micro seal projects. Recycling of existing material will help to limit greenhouse gases.

Proposed Project: Waverly Drive – Repairs

Project Number: 48937

Description: Waverly was damaged during the 2017 severe winter storms when high surface and subsurface flows saturated the base section and subgrade of the road causing large scale sinkholes and roadway failures to occur. The Waverly Drive repair consists of grinding out approximately 4,500 square feet of asphalt concrete (AC) to a depth of 3 inches, repairing the subgrade in the area of the failure, and paving back 3 inches with ½ inch AC mix. Crews will clean the existing ditch along the east side of Waverly Drive to keep flows from negatively impacting the roadway during times of high runoff.

Location: Waverly Drive is in the Lake Tahoe Basin, located off of Elks Club Drive, approximately 2.0 miles south of the City of South Lake Tahoe. (https://goo.gl/maps/uo4m9ATjrR62)

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: The life expectancy of the repaved sections will be 10 years, before a micro-seal is needed.

Technology, Climate Change, and Complete Street Considerations: Grindings of the existing AC will be re-purposed by either delivering to the local asphalt plant for use in recycled asphalt base products or utilized by El Dorado County for future micro seal projects. Recycling of existing material will help to limit greenhouse gases.

Proposed Project: Carson Road – Repairs

Project Number: 49322

Description: Carson Road repair consists of installing 150 feet of 24” HDPE (High-Density Polyethylene) plastic culvert pipe. HDPE has a greater life span than conventional metal pipe. The original 24” metal culvert failed in the beginning of 2017 and caused a sinkhole on the exhaust end of the culvert; if this culvert is not repaired, the sinkhole could potentially become larger and move into the roadway. After installing the culvert, 200 feet of roadway will be repaved and restriped above the new culvert to match existing roadway.

Location: Carson Road culvert replacement is located .80 miles East of Schnell School Road and .50 miles West of Jacquier Road in Camino, California

https://www.google.com/maps/@38.7429941,-120.7682552,3a,75y,65.7h,70.02t/data=!3m6!1e1!3m4!1s9oByDpMuAI_FQnbG77d-Vw!2e0!7i13312!8i6656

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: By using HDPE, the life expectancy of the culvert will be 50-75 years. Replacing the pipe will convey water more efficiently and will be less likely to clog with debris.

Proposed Project: Sawmill Road Preparation Work for Overlay

Project Number: 49323A

Description: This project consists of several phases over multiple years. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. Phase One (1)consists of brushing 1.80 miles of Sawmill Road, on both sides of the roadway from Highway 50 to Lake Tahoe Boulevard**.** Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Phase Two (2) consists of ditching 1.8 miles of Sawmill Road, on both sides of the roadway from Highway 50 to Lake Tahoe Boulevard. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and be replaced if needed. Also in Phase 2, all signage will be upgraded to retro-reflectivity standards. After Phase and are completed, the roadway is ready for asphalt repairs and surface treatment.

Location: Sawmill Road is located in South Lake Tahoe, 1.4 miles east of Meyers. Sawmill Road is 1.8 miles long starting at Highway 50 and ending at Lake Tahoe Boulevard. https://www.google.com/maps/@38.8774736,-120.0210056,14.93z

Proposed Schedule of Completion: June 2021

Estimated Useful Life: The useful life of the brushing phase is 8 to 12 years before crews would have to return to the area to brush again as part of the maintenance program. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching can vary from location to location.

Proposed Project: Grizzly Flats Section 1 Subdivision Rehabilitation and Surface Treatment

Project Number: 49324

Description: Grizzly Flats Section 1 Subdivision Rehabilitation and Surface Treatment is a multi-year project. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. Phases One (1) and Two (2) will consist of roadside ditching and brushing of 11 miles of roadway within the subdivision. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and be replaced if needed. Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Also in the first two phases, all signage will be upgraded to meet retro-reflectivity standards. Phase 3 will consist of repairing damaged asphalt. Phase 4 is the surface treatment throughout the subdivision

Location: Grizzly Flats Section 1 Subdivision is located in the Southern part of El Dorado County off of main arterial Grizzly Flat Road and consists of the roadways below totaling 11 miles.

https://www.google.com/maps/@38.6412498,-120.517183,15.93z

Road Name	Start	End
Capps Crossing Rd	Sciaroni Rd	End of County Maintained Portion
Cypress Point Dr	South View Dr	Capps Crossing Rd
Deertract Ct	Deerwood Dr	End
Deerwood Ct	Deerwood Dr	End
Deerwood Dr	Capps Crossing Rd	Winding Way
Edgewood Cir	Capps Crossing Rd	Deerwood Dr
Forest Glen Dr	Meadow Glen Dr	End
Grizzly Creek Dr	North End of Parkside Dr	South End of Parkside Dr
Meadow Glen Dr	North End of Winding Way	South End of Winding Way
Merrywood Ct	Parkside Dr	End
County Road 1965	Winding Way	End
County Road 1926	Tyler Dr	End
Parkside Ct	Parkside Dr	End
Parkside Dr	North End of Winding Way	South End of Winding Way
Pinehaven Dr	Tyler Dr	End
Quietwood Dr	Sciaroni Rd	Tyler Dr
Sciaroni Rd	Grizzly Flats Rd	Cosumnes Mine Rd
South View Drive	Capps Crossing Rd	End

Tyler Dr	Sciaroni Rd	End
Winding Way	Sciaroni Rd	Capps Crossing Rd
Winding Way Ct	Winding Way	End

Proposed Schedule of Completion: June 2020

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching will vary from location to location.

The average PCI for Grizzly Flats Section 1 Subdivision is 43. With this project, the PCI will increase to the mid 80's. The surface treatment will have a life expectancy of 10-15 years.

Proposed Project: Onnontioga Street Repair/Rehabilitation

Project Number: 49326

Description: Onnontioga Street Repair consists of grinding out 7,309 square feet (sf) of asphalt, 3 inches deep and repairing subgrade failures as needed, then paving back 3 inches with 1/2 inch asphalt. Crews will clean the ditch that runs along Onnontioga Street to keep water flowing in the ditch during the project.

Location: Onnontioga St is located in South Lake Tahoe off of Washoan Blvd.

https://www.google.com/maps/place/Onnontioga+St,+South+Lake+Tahoe,+CA+96150/@38.8873372,-119.9885601,17.5z/data=!4m5!3m4!1s0x80998e164e2b52e9:0x438f4891b272040d!8m2!3d38.8878013!4d-119.9879907

Proposed Schedule of Completion: Fall 2017

Estimated Useful Life: Useful Life of the grind out/repave and subgrade repairs is 10 to 15 years.

Proposed Project: El Dorado Hills Blvd Preparation Work for Overlay

Project Number: 49327A

Description: El Dorado Hills Blvd preparation work for an overlay is a multi-year project that will consist of several phases to prepare the roadway for a surface treatment. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. Phase One (1) consists of brushing 3.16 miles of El Dorado Hills Blvd, on both sides of the roadway from Saratoga Way to Brittany Way**.** Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Phase Two (2) consists of ditching 3.16 miles of El Dorado Hills Blvd, on both sides of the roadway from Saratoga Way to Brittany Way. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and be replaced if needed. Also, in Phase 2 all signage will be upgraded to meet retro-reflectivity standards. After Phase 1 and 2 are completed, the roadway is ready for asphalt repairs and surface treatment.

Location: El Dorado Hills Blvd is located in the Western part of El Dorado County, North of Highway 50. This is a main arterial.

https://www.google.com/maps/place/El+Dorado+Hills+Blvd,+El+Dorado+Hills,+CA+95762/@38.6825925,-121.0751263,14z/data=!4m5!3m4!1s0x809afb32f07eb975:0xa9ad141ba68bb2d9!8m2!3d38.6808236!4d-121.076176

Proposed Schedule of Completion: June 2021

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching can vary from location to location.

The PCI for this section of roadway on El Dorado Hills Blvd is 56.

Proposed Project: South Shingle Road Preparation Work for Overlay

Project Number: 49328

Description: South Shingle Road preparation work for a pulverization/overlay is a multi-year project that will consist of several phases to prepare the roadway for a surface treatment. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. Phase One (1) consists of brushing 11.6 miles of South Shingle Road, on both sides of the roadway from Latrobe Rd to Highway 50**.** Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Phase Two (2) consists of ditching 11.6 miles of South Shingle Road, on both sides of the roadway from Latrobe Rd to Highway 50. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and be replaced if needed. Also in Phase 2, all signage will be upgraded to meet retro-reflectivity standards. After Phase 1 and 2 are completed, the roadway is ready for asphalt repairs and surface treatment.

Location: South Shingle Road is located in the Southwest part of El Dorado County. https://www.google.com/maps/@38.5888542,-120.9522139,13.68z

Proposed Schedule of Completion: June 2021

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching will vary from location to location.

The PCI for South Shingle Road is 42.

Proposed Project: Greenwood Rd Preparation Work for Overlay

Project Number: 49329

Description: Greenwood Road preparation work for a pulverization/overlay is a multi-year project that will consist of several phases to prepare the roadway for a surface treatment. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. Phase One (1) consists of brushing 5 miles of Greenwood Road, on both sides of the roadway from Marshall Road to Highway 193**.** Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Phase two consists of ditching 5 miles of Greenwood Road, on both sides of the roadway from Marshall Road to Highway 193. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and if needed, be replaced. Also in Phase 2 all signage will be upgraded to retro-reflectivity standards. After Phase 1 and 2 are completed, the roadway is ready for asphalt repairs and overlay.

Location: Greenwood Road is located in the Northeastern part of El Dorado County between Marshall Road and Highway 193.
https://www.google.com/maps/@38.8751703,-120.8803183,14.18z

Proposed Schedule of Completion: June 2021

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching will vary from location to location.

The PCI of this roadway is 30.

Proposed Project: Lake Hills Subdivision Rehabilitation and Surface Treatment

Project Number: 49330

Description: Lake Hills Subdivision Rehabilitation and Surface Treatment is a multi-year project. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. The first phases will consist of roadside ditching and brushing of 5.5 miles of roadway within the subdivision. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time, all culverts will be inspected for life expectancy and if needed, be replaced. Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Also in Phase 1, all signage will be upgraded to retro-reflectivity standards. Phase 2 will consist of repairing asphalt failures within the 5.5 miles of the subdivision to prepare for the surface treatment.

Location: Lake Hills Subdivision can be entered from Lake Hills Drive or Francisco Drive in El Dorado Hills.

https://www.google.com/maps/@38.7312473,-121.0857594,16.75z

See table of roadways on next page.

Road Name	Start	End
Alena Way	Zapata Dr	Francisco Dr
Bolivar Ct	Encina Dr	End
Bolsa Ct	Lake Hills Dr	End
Bonita Dr	Loma Verda Dr	End
Castec Way	Lake Hills Dr	End
Cortez Ct	Planeta Way	End
Cresta Ct	Lake Hills Dr	End
El Nido Ct	Lake Hills Dr	End
El Sur Ct	Quadalupe Dr	End
Encina Ct	Encina Dr	End
Encina Dr	Loma Verde Dr	Guadalupe Dr
Fitch Way	Lake Hills Dr	End
Gordo Ct	Francisco Dr	End
Guadalupe Dr	Lake Hills Dr	End
Lakehills Dr	Bonita Dr	End
Lazo Ct	Lake Hills Dr	End
Loma Verde Ct	Loma Verde Dr	End
Loma Verde Dr	Quadalupe Dr	End
Lomita Way	Bonita Dr	End
Planeta Way	Guadalupe Dr	End
Ramon Ct	Loma Verde Dr	End
Torero Way	Quadalupe Dr	Quadalupe Dr
Toro Ct	Guadalupe Dr	End
Vera Ct	Lake Hills Dr	End
Zapata Dr	Encina Dr	End

Proposed Schedule of Completion: June 2020

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching will vary from location to location. The average PCI of this subdivision is 44 and was last inspected in January of 2015. The surface treatment will have a life expectancy of 10-15 years.

Proposed Project: Cold Springs Subdivision Rehabilitation and Surface Treatment

Project Number: 49331

Description: Cold Springs Subdivision Rehabilitation and Surface Treatment is a multi-year project. The first phases will concentrate on the rehabilitation of the roadway and preparation for the surface treatment. The first phases will consist of roadside ditching and brushing of 1.6 miles of roadway within the subdivision. Ditching involves correcting drainage issues and making sure all cross culverts are free of debris and are functioning to their fullest capacity. At that time all culverts will be inspected for life expectancy and if needed replaced. Brushing consists of removing hazardous trees, all low hanging foliage and opening up site distances as needed. Also in phase 1 all signage will be upgraded as needed. Phase 2 will consist of repairing damaged asphalt in the1.6 miles of the subdivision. Phase 3 will consist of a surface treatment.

Location: Cold Springs Subdivision is located approximately 2.5 miles North of Placerville on Cold Springs Road. https://www.google.com/maps/@38.7457003,-120.8638818,15.5z

Road Name	Start	End
Glen Dr	Richard Ave	End
Marva Ln	Cold Springs Rd	Richard Ave
Richard Ave	Cold Springs Rd	End
Beals Rd	Cold Springs Rd	End

Proposed Schedule of Completion: June 2020

Estimated Useful Life: The useful life of brushing is 8 to 12 years before crews would have to return to the area to brush again. Ditching the roadway will have a useful life of 4-8 years before returning. The useful life of brushing and ditching will vary from location to location. The average PCI of this subdivision is 29. It was last inspected on August 2016. After the surface treatment is completed, the roadways will have a life expectancy of 10-15 years.