



## NCE Current Projects



### **El Dorado County Storm Water Management Plan**

**Agency:** El Dorado County

NCE developed a comprehensive Storm Water Management Plan (SWMP) for the Lake Tahoe Basin portion of El Dorado County.



### **Effluent Fill Station**

**Agency:** City of Sparks, Nevada

NCE is preparing a site feasibility study and report for relocation of an existing effluent truck-fill station.



### **Superpave Mix Design Study**

**Agency:** RTC of Washoe County

Analysis of current mix designs, local materials, Superpave methodology, laboratory performance testing, and field test sections to improve asphalt concrete performance and life.



### **Moraga Way Pavement Rehabilitation**

**Agency:** City of Orinda

NCE is providing full design for rehabilitation of approximately 3 miles of a two-lane minor arterial roadway with intermittent turn lanes. NCE's scope includes a pavement survey, FWD testing, coring, and preparation of PS&E. Alternatives include rubberized asphalt concrete (RAC) overlay.



### **Sparks Alley Rehabilitation**

**Agency:** City of Sparks, Nevada

NCE provided full design and preparation of PS&E for grading, drainage and paving for an existing unpaved alley.



### **2007 Water System Improvements**

**Agency:** Stagecoach General Improvement District

NCE provided full planning, design, permitting, and construction management services for 5.5 miles of 12-inch water transmission main, two pump stations, pressure reducing station, and a 500,000 gallon storage tank.



### **Taylor Boulevard Rehabilitation**

**Agency:** City of Pleasant Hill

NCE provided full design and PS&E for pavement rehabilitation of approximately 1-1/2 miles of four-lane arterial roadway, including pavement survey, FWD testing, coring and retrofit for ADA design requirements. NCE also provided services during construction.



### **Deflection Testing, Specialty Pavement Testing & Evaluation Services**

**Agency:** Caltrans

NCE has a 4-year contract to provide deflection testing and pavement evaluation for the central region, which includes Caltrans Districts 5, 6, 9 & 10. NCE will perform professional and technical engineering services that include consultation, investigation, and technical analysis to produce a deflection testing report of existing pavement for rehabilitation and reconstruction projects; provide structural section designs based on the deflection testing.



### **Washoe County Golf Course Parking Lot**

**Agency:** Washoe County Public Works

Grading, drainage and rehabilitation of pavement for an existing 1-1/2 acre parking lot. NCE provided full design and permitting services.



### **Pavement Rehabilitation of Major Streets**

**Agency:** City of Sunnyvale

Pavement design, preparation of PS&E



### **Chalk Bluff Basin Liner Repair**

**Agency:** Truckee Meadows Water Authority

NCE provided full design and construction management services for rehabilitation of the asphalt liners for 2 raw water pre-sedimentation and 3 water recovery basins at the Chalk Bluff Water Treatment Plant.



### **Tanager and Mays Rehabilitation**

**Agency:** RTC of Washoe County

NCE provided full design, geotechnical, survey, permitting, and construction management services for rehabilitation of 4000 feet of existing roadway.



### **Kiefer Landfill Entrance Design *Winner of the 2008 APWA Award for Environmental Solid Waste (\$2-10 million)***

**Agency:** Sacramento County Waste Management



NCE provided full design and PS&E for reconstruction of the landfill entrance and scale facilities to accommodate heavy truck traffic and queuing of mixed traffic.

### **Whitelake Parkway Rehabilitation**

**Agency:** RTC of Washoe County



Project consisted of rehabilitating approximately 4,200 feet of a two lane roadway. The section of roadway contained 5 intersections, 3 business accesses and multiple residential driveways. NCE was responsible for design, geotechnical investigation, survey, life-cycle cost analysis of pavement alternatives, and construction management.



### Contra Costa Boulevard Pavement Rehabilitation

Agency: City of Pleasant Hill

NCE is providing full design for rehabilitation of approximately ½ mile of a 4-lane arterial roadway. NCE's scope includes a pavement survey, FWD testing, coring, and preparation of PS&E. ADA retrofit and replacement of traffic loop detectors is also included. Overlay alternatives include rubberized asphalt concrete (RAC).



### Fairway Phase III Country Club ECP

Agency: Washoe County Public Works



Erosion control improvements in existing subdivisions. NCE provided full design and permitting services. This project was awarded **2007 APWA Project of the Year!**



### Tire and Pavement Noise Evaluation

Agency: Arizona Department of Transportation

Services included data collection, analysis and reporting to support the Quiet Pavement Pilot Program (QPPP) which is the first of its kind in the US.



### Jay Way Pavement and Site Improvements

Agency: University of California, Berkeley

NCE provided geotechnical and civil design services for new pavement, drainage improvements (including curb and gutter) for an existing roadway at UC Berkeley's Richmond Field Station.



### South Lake Tahoe PMS

Agency: City of South Lake Tahoe

NCE's services included PMS implementation & review of best practices for maintenance strategies.



### Evaluation of Pavement Cuts

Agency: RTC of Southern Nevada (HDR Engineering)

NCE provided FWD testing services to evaluate and quantify the impact of pavement cuts on structural integrity of arterial asphalt concrete streets to provide recommendations for adjustment in street cut fees.



### Vintage Hills Parkway Main Tie & Check Valve

Agency: Truckee Meadows Water Authority

NCE provided full design services for an emergency water connection between the Satellite Hills pump zone and the gravity zone to the east of Spanish Springs Road.



### Tahoe Pines ECP

Agency: Placer County

NCE provided full design, PS&E and construction management services for erosion control improvements in existing subdivisions at Lake Tahoe. Project included roadway rehabilitation in select areas. Phase 1 of 2 phases has been constructed.



### Roadway Design On Call Contract

Agency: Sacramento County Dept of Transportation

***NCE is ranked 2 on the Sac County Dept of Transportation's Tier II on-call list.*** The scope of work includes new construction or widening of County or local roadways, bikeways, curb, gutter and sidewalk design and replacement.



### Bicycle and Pedestrian Facility Design Course

Agency: National Highway Institute

NHI Course #14238 "Bicycle Facility Design" and Course #142045 "Pedestrian Facility Design" were developed by NCE to assist state and local agencies in complying with new federal regulations. NCE's staff of qualified instructors deliver training courses to agencies across the U.S.

### **Grant Road Pavement Rehabilitation**

**Agency:** City of Los Altos



NCE provided engineering support for the overlay design of Grant Road by performing a field investigation that included FWD testing and coring to assess the pavement's structural and section properties. Pavement rehabilitation alternatives were based on methods developed by Caltrans.

### **Sacramento Docks Area Promenade Civil Design**

**Agency:** City of Sacramento Downtown Development Group



NCE is providing civil engineering design on the Promenade Parkway along the Sacramento River, which includes hard and soft landscape designs such as concrete walkways, grading, drainage issues, as well as railroad track realignment. PS&E documents will be prepared and NCE will provide support during construction.



### **Kiefer Can Yard Design**

**Agency:** Sacramento County Waste Management

NCE provided full design and PS&E for a facility to store up to 80,000 "cans" (90-gallon cart) on a suitable surface which will allow storage, handling, and removal of the stored cans at the Kiefer Regional Landfill.

### **K Street, St. Rose of Lima Park, Civil Design**

**Agency:** City of Sacramento Economic Dev. Dept. (Walker Macy)



NCE is providing civil design and PS&E for all work within the downtown right-of-way where a combined ice rink and interactive water fountain is being designed to take advantage of the open space during both winter and summer months. The project also includes the relocation of the Regional Transit Light Rail Mini-high station.



### **2006 Downtown Streets – Pavement Design Recommendations**

**Agency:** City of Walnut Creek

Pavement design, preparation of PS&E for various streets.



### **Middle Watsonville Slough Drainage & Wetland Enhancement**

**Agency:** County of Santa Cruz

NCE provided services for wetland and water quality improvement to meet engineering, environmental permitting, grant funding requirements, as well as the needs of adjacent agricultural land owners and growers.

### **1 Barrett Avenue Environmental Review**

**Agency:** City of Richmond Redevelopment Agency

Environmental Document overview and sampling oversight at 1 Barrett Ave in Richmond.



### **Park Avenue Pavement Analysis & Design**

**Agency:** City of Emeryville

Pavement design & analysis for Park Ave in Emeryville.



### **Ride Quality of Marina Blvd. & Bancroft Avenue**

**Agency:** City of San Leandro

Provide smoothness testing for Marina Blvd. and Bancroft Avenue.



**Marin County Roads South Region Pavement Design**

Agency: Marin County (Gannett Fleming, Inc.)

Pavement condition surveys and design for various southern Marin County roads.



**Lake Village EIP #679, Phase II**

Agency: Douglas County

NCE is responsible for survey, geotechnical investigations, design, and preparation of PS&E for water quality BMP retro-fit along existing streets in this Lake Tahoe neighborhood.



**El Cerrito PMS Update**

Agency: City of El Cerrito

Pavement Management Systems update.



**Marina Bay – Rip Rap Replacement**

Agency: City of Richmond Redevelopment Agency (Ghirardelli Assoc.)

Provide civil engineering services for the rip rap replacement of several sections of the bay trail that border the bay.



**San Pablo Creek Repair**

Agency: City of San Pablo

Preparation of construction documents for slope repair along private residence bordering San Pablo Creek.



**Phase 1 - 22 Carlson Boulevard, Richmond**

Agency: City of Richmond Redevelopment Agency

Environmental Site Assessment (Phase 1) for due diligence & discovery prior to agency purchase of the private property.



### **Crystal Springs – Pavement Testing & Analysis**

**Agency:** City of San Bruno

Pavement testing (FWD) and analysis on Crystal Springs Rd.



### **Richmond Marina Bay – Bay Trails Repairs**

**Agency:** City of Richmond Redevelopment Agency (Ghirardelli Assoc.)

Pavement repairs along the bay trail at Richmond Marina Bay.

### **Yolo County Road Rehab Projects**

**Agency:** Yolo County (Coastland Civil Engineering, Inc.)



NCE provided pavement analysis and design for 6 roadway sections, constituting nearly 15 miles in Yolo County. The project included deflection testing at nearly 2000 locations, materials sampling and laboratory testing to assess the pavement structural and section properties as well as to evaluate the subgrade soil conditions. Our design ended up saving the County approximately \$700,000 in construction costs