



CIVIL DESIGN

Harris & Associates' multidisciplinary engineers devote their careers to designing infrastructure projects that endure. Our innovative, cost-effective solutions reduce disruptions while optimizing results for your growing community.

"What's the best way to solve the problem?" That question underpins every infrastructure improvement project, and we help agencies design solutions that every resident can depend on. Our resume of award-winning civil design projects span the municipal, transportation, and water sectors, delivering multiple benefits to our communities.

Value by Design

The right design team brings value beyond meeting deadlines, providing accurate estimates, and comprehensive plans and specifications.

Arterial and roadway design, water and wastewater infrastructure, utility undergrounding, sustainable design, and emergency repair services—we apply our experience to find holistic solutions that fit within stringent budgets and timelines.

Novel Approaches to Enduring Problems

While the Harris design team has a proven track record of delivering quality projects that are timely, comprehensive, and accurate, our ability to identify innovative and cost-saving solutions offers the most value to our clients. Our experts bring an extensive history of delivering a broad range of complex and award-winning projects to public agencies.

Envision® Sustainable Infrastructure Rating System

Harris is a proud charter member of the Envision®
Sustainable Infrastructure
Rating System—a holistic framework for evaluating and rating the community, environmental, and economic benefits of all types and sizes of infrastructure projects.



ARTERIALS + ROADWAYS

Harris & Associates' civil design teams understand the complexities of utility conflicts, traffic control, and confined right-of-way—and we apply the innovation needed to design seamless paths forward. Our focus areas include:

- · Urban arterial design
- · Roundabouts and traffic calming
- Streetscapes
- Complete streets
- Bike and pedestrian facilities
- ADA compliance
- Traffic signal and street lighting
- Roadway stabilization

UTILITY UNDERGROUNDING

Harris provides joint trench design, utility coordination, streetlight design, inspection, and construction management for utility undergrounding projects to help improve the safety and aesthetics of local communities.

SUSTAINABLE DESIGN

Harris has long designed projects to meet or exceed sustainability requirements through innovative use of techniques, materials, and processes, adding tremendous long-term value to community projects. Our teams are credentialed in the latest sustainable engineering and construction techniques, including trenchless technologies that save communities from unnecessary costs and headaches. Since 2013, Harris & Associates has been named one of the Top 50 Trenchless Engineering Firms in North America by *Trenchless Technology Magazine*.





San Ramon Canyon Stormwater Flood Reduction Project City of Rancho Palos Verdes Rancho Palos Verdes, CA

For this 2014 APWA Southern California Chapter Project of the Year Award-winning project Harris completed the design and preparation of PS&E construction documents for this \$6.4 million project. Harris' services included preparing a detailed hydrology and hydraulics study report; undertaking geotechnical studies, survey, environmental clearances; coordinating with governing authorities; and full PS&E design of the proposed storm drain system.

■ WATER+WASTEWATER INFRASTRUCTURE

Aging pipes, overburdened treatment plants, and dangerous flooding hazards often threaten community safety and access to an abundant water supply. Harris' potable water, wastewater, and stormwater solutions include:

- Pipeline design and rehabilitation
- Pump stations (water and wastewater)
- · Collection system design
- Water treatment/chemical feed systems
- Trenchless technology
- Reclaimed water systems
- Stormwater compliance (QSD/QSP)
- SWPPP preparation
- NPDES permitting
- · Flood control planning and design

EMERGENCY REPAIR SERVICES

When failed infrastructure puts communities in danger, Harris emergency response experts leap into action. We work toward fast fixes and long-term solutions with project management, engineering, design, community outreach, and more. Experience in environmental permitting and mitigation helps expedite progress.





Marin County Civic Center Drive Circulation Improvements Project County of Marin

San Rafael, CA

For this APWA NorCal award-winning project, Harris & Associates prepared a design package and coordinated a variety of sub-consultants, including landscape, traffic, geotechnical, utility locating, environmental and survey professionals. Also won 2017 ASCE San Francisco Section Award in the "Outstanding Transportation Project" category.

925.827.4900

www.WeAreHarris.com

Harris partners with public agencies to enhance their communities.