



Search Tags: Pipeline

Project Count: 29



Minera Escondida, Organic Growth Project 1, Tunnel 4

Atacama Desert, Chile

Project Contacts: [Jesse Beaver](#)

Expansion of the Minera Escondida copper mine included constructing a corrugated steel structural plate arch tunnel. The tunnel acts as a buried bridge to carry a haul road over the mine's...

Services: [Structural Investigation](#), [Structural Rehabilitation](#)

Markets: [Highway & Tunnel](#)

Keywords: [Buried](#), [Condition Assessment](#), [Culverts and Storm Drains](#), [Damage](#), [Finite Element Analysis](#), [International](#), [Metal](#), [Metal-Steel](#), [Pipe](#), [Pipe](#), [Steel](#), [Pipeline](#), [Settlement](#), [Structural Adequacy Assessment](#), [Tunnel](#)



Sonoma County Water Agency, Transmission System Pipeline

Sonoma County, CA

Project Contacts: [Jesse Beaver](#)

The Sonoma County Water Agency manages a regional water supply to ensure its customers have access to clean water. Wanting to preserve their assets, the agency needed to understand the condition...

Services: [Materials Investigation](#)

Markets: [Water/Wastewater](#)

Keywords: [Metal-Steel](#), [Metallurgy](#), [Petrography](#), [Pipe](#), [Pipe](#), [Steel](#), [Pipeline](#)



Massachusetts Water Resource Authority, Beacon Street Line

Boston, MA

Project Contacts: [Murat Engindeniz](#), [Rasko Ojdrovic](#)

Constructed in the 1870s, the Beacon Street Line carries water under the MBTA Green Line tracks in the busy Brookline neighborhood. Massachusetts Water Resources Authority (MWRA) identified a leak...

Services: [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Pipe](#), [Pipeline](#), [Water Leakage](#)



Retaining Wall Failure Investigation

Prescott, AZ

Project Contacts: [Scott DiFiore](#), [Bryan Strohman](#)

Shortly after the site was developed, a terraced, mechanically stabilized earth (MSE) wall failed. The MSE wall, with heights up to 63 ft tall, consisted of precast concrete facing panels and soil...

Services: [Materials Investigation](#), [Structural Investigation](#)

Markets: [Retail](#)

Keywords: [Failure Investigation](#), [Field Testing](#), [Geotechnical](#), [Laboratory Testing and Analysis](#), [Mechanically Stabilized Earth \(MSE\) Wall](#), [Pipeline](#), [Retaining Wall](#), [Slopes and Embankments](#)



Paramus Park Mall

Paramus, NJ

Project Contacts: [Phillip Sharff](#)

Corrugated metal storm drain pipes running beneath the Paramus Mall parking lot were severely corroded and deflected. SGH investigated the pipes' condition and developed rehabilitation options...

Services: [Structural Investigation](#), [Structural Rehabilitation](#)

Markets: [Retail](#)

Keywords: Metal, Pipe, Pipeline, Settlement



City of Columbus Pipeline

Columbus, OH

Project Contacts: [Murat Engindeniz](#), [Rasko Ojdrovic](#)

While attempting to install telecommunications lines below a creek, a driller punctured a buried, 48 in. dia. prestressed concrete cylinder pipe (PCCP). The pipe is part of Columbus's water system...

Services: [Structural Rehabilitation](#)

Markets: [Government](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Failure Investigation](#), [Laboratory Testing and Analysis](#), [PCCP](#), [Pipe](#), [Pipeline](#)



Palo Verde Nuclear Generating Station Pipelines

Tonopah, AZ

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

Constructed in the early 1980s by the Arizona Public Service Company, the water reclamation supply system at Palo Verde Nuclear Generating Plant consists of thirty-six miles of prestressed...

Services: [Structural Investigation](#)

Markets: [Nuclear](#)

Keywords: [Condition Assessment](#), [Corrosion](#), [Cracking](#), [Failure Risk Assessment](#), [PCCP](#), [Pipe](#), [Pipeline](#), [Risk Assessment](#)



Nuclear Station Low-Pressure Service Water System

United States

Project Contacts: [Murat Engindeniz](#), [Rasko Ojdrovic](#)

The low-pressure service water system comprises 36 in., 42 in., and 54 in. dia. steel pipe. Approximately 1800 ft of pipe

was corroded and required repair. SGH designed internally bonded, carbon...

Services: [Structural Rehabilitation](#)

Markets: [Nuclear](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Construction Administration](#), [Laboratory Testing and Analysis](#), [Metal-Steel](#), [Pipe](#), [Pipe](#), [Steel](#), [Pipeline](#), [Testing/Inspection](#)



[Miami-Dade Water and Sewer Authority](#)

Miami, FL

Project Contacts: [Murat Engindeniz](#), [Rasko Ojdrovic](#)

In 2010, Miami-Dade Water and Sewer Authority (MDWSA) instituted a continuous inspection and repair program for their 48 in. to 96 in. dia. prestressed concrete cylinder pipes (PCCP). With brief...

Services: [Structural Investigation](#), [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Construction Administration](#), [Failure Risk Assessment](#), [Inspection](#), [Laboratory Testing and Analysis](#), [PCCP](#), [Pipe](#), [Pipeline](#), [Testing/Inspection](#)



[Fermi 2 Nuclear Power Plant, Circulating Water Pipeline](#)

Monroe, MI

Project Contacts: [Murat Engindeniz](#), [Rasko Ojdrovic](#)

The 144 in. dia. circulating water pipeline at Fermi 2 consists of two intake lines between the reservoir and condenser and two discharge lines between the condenser and two cooling towers. All...

Services: [Structural Investigation](#), [Structural Rehabilitation](#)

Markets: [Nuclear](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Concrete Rehabilitation](#), [Failure Risk Assessment](#), [PCCP](#), [Pipe](#), [Pipeline](#)



Brian J. Gallagher Generating Station

Almonte, ON

Project Contacts: [Rasko Ojdrovic](#)

The Brian J. Gallagher Generating Station, located on the Mississippi River in Ontario, was completed in April 2010. In 2012, power output suddenly dropped by half. Mississippi River Power Corp. (...

Services: [Structural Investigation](#), [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Concrete Rehabilitation](#), [Construction Administration](#), [Metal-Steel](#), [Pipe](#), [Pipeline](#)



Huachipa Water Treatment Plant

Lima, Peru

Project Contacts: [Jesse Beaver](#), [Phillip Sharff](#)

Ramal Norte Pipeline is a 27 km long subsurface pressure pipeline that provides drinking water from Huachipa Water Treatment Plant to several districts in Lima, Peru. The pipeline was in temporary...

Services: [Materials Investigation](#), [Structural Investigation](#)

Markets: [Water/Wastewater](#)

Keywords: [Failure Investigation](#), [Failure Risk Assessment](#), [Finite Element Analysis](#), [International](#), [Metallurgy](#), [Pipe](#), [Pipeline](#), [Soil-Structure Interaction](#)



Cheyenne Water Distribution System

Cheyenne, WY

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

The water distribution system in Cheyenne includes four prestressed concrete cylinder pipelines (PCCP), approximately 13.5 mi long. The 16 to 30 in. dia., lined-cylinder pipes (LCP) were installed...

Services: [Structural Design](#)

Markets: [Water/Wastewater](#)

Keywords: Concrete-Prestressed, Condition Assessment, Corrosion, Failure Risk Assessment, Pipeline



Sudbury Aqueduct

Needham, MA

Project Contacts: Jesse Beaver, Phillip Sharff, Mehdi Zarghamee

Built in 1880, the aqueduct was a major pipeline for the City of Boston's water distribution network until 1940, when the Hultman Aqueduct replaced it. Connecting reservoirs in Framingham with the...

Services: Structural Investigation

Markets: Water/Wastewater

Keywords: Adjacent Construction, Engineering Mechanics, Finite Element Analysis, Inspection, Masonry, Masonry-Brick, Pipeline, Risk Assessment, Soil-Structure Interaction



Muskegon County Wastewater Management System

Muskegon, MI

Project Contacts: Rasko Ojdrovic, Mehdi Zarghamee

The Muskegon County Wastewater Management System's pipeline is an 11 mi, 66 in. dia. prestressed concrete cylinder pipe (PCCP) that carries raw domestic and industrial sewage. SGH investigated the...

Services: Materials Investigation, Structural Investigation

Markets: Water/Wastewater

Keywords: Condition Assessment, Corrosion, Engineering Mechanics, Failure Investigation, Field Testing, Laboratory Testing and Analysis, Metallurgy, PCCP, Petrography, Pipe, Pipeline



Hultman Aqueduct

Weston, MA

Project Contacts: Phillip Sharff, Mehdi Zarghamee

For many years, the Hultman Aqueduct delivered nearly all the drinking water to the Boston area. The aqueduct had never been shut down for inspection or maintenance during that time due to its...

Services: Structural Investigation

Markets: Water/Wastewater

Keywords: Condition Assessment, Cracking, Engineering Mechanics, Field Testing, Laboratory Testing and Analysis, Nondestructive Testing, Petrography, Pipe, Pipeline



Seismic Assessment of Pipelines

Canada

Project Contacts: Mehdi Zarghamee

Prestressed concrete cylinder pipes (PCCP) are extensively used in the cooling system of power plants. SGH evaluated the seismic performance of buried PCCP pipelines in low, moderate, and high...

Services: Structural Design

Markets: Water/Wastewater

Keywords: Engineering Mechanics, International, PCCP, Pipe, Pipeline, Seismic Analyses



Central Arizona Project

Tucson, AZ

Project Contacts: Mehdi Zarghamee

The 252 in. dia. concrete pipe is used in siphons to convey water in the Central Arizona Project and is the largest diameter pipe in the world. The pipes have a 19.625 in. thick concrete core and...

Services: Structural Rehabilitation

Markets: Water/Wastewater

Keywords: Cracking, Excavation, Failure Investigation, Finite Element Analysis, PCCP, Pipeline, Risk Assessment, Soil-Structure Interaction



Massachusetts Water Resource Authority, Walnut Hill Treatment Plant, Cosgrove Intake Pipeline

Marlborough, MA

Project Contacts: Paul Kelley, Phillip Sharff

The Cosgrove Intake pipeline, a 144 in. dia. prestressed concrete cylinder pipe (PCCP), at MWRA's Walnut Hill Water Treatment Plant Project was completed in early 2004 as a part of the water...

Services: Structural Rehabilitation

Markets: Water/Wastewater

Keywords: Failure Investigation, Pipeline



Greybull Water Transmission Pipeline

Greybull, WY

Project Contacts: Rasko Ojdrovic

The Greybull Water Transmission Pipeline is the only pipeline that carries treated water for the town of Greybull. The 16.5 mile pipeline was constructed in 1960s and 1970s with 12 in. and 14 in....

Services: Materials Investigation, Structural Investigation

Markets: Water/Wastewater

Keywords: Analytical Studies, Engineering Mechanics, Failure Risk Assessment, Field Testing, Laboratory Testing and Analysis, Petrography, Pipeline



Crystal River Nuclear Power Plant Unit 3, Drop Load Analysis

Crystal River, FL

Project Contacts: [Mehdi Zarghamee](#)

The Crystal River Nuclear Power Plant, Unit 3, is part of a 4,700 acre energy complex that contains a 914 MW pressurized water reactor. When the client planned rigging operations for replacement...

Services: [Structural Investigation](#)

Markets: [Nuclear](#)

Keywords: [Buried](#), [Cracking](#), [Finite Element Analysis](#), [Heavy Loads](#), [Mechanical/Electrical System](#), [Pipeline](#), [Power](#), [Soil-Structure Interaction](#)



Cholla Power Plant

Joseph City, AZ

Project Contacts: [Murat Engindeniz](#), [Mehdi Zarghamee](#)

Arizona Public Service Company (APS) chose SGH to perform a condition assessment and develop repairs for the circulating water pipelines at the Cholla Power Plant. The coal-fired power plant, co-...

Services: [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Composites-FRP / CFRP / GFRP](#), [Failure Investigation](#), [Pipeline](#), [Plastic/Composite](#), [Power](#), [Risk Assessment](#)



Water Research Foundation, Prestressed Concrete Cylinder Pipe Condition Assessment

United States

Project Contacts: [Rasko Ojdrovic](#)

Prestressed concrete cylinder pipe (PCCP) have been used for water transmission systems for more than sixty-five years. Therefore, utilities need effective means to identify distressed or...

Services: [Structural Investigation](#)

Markets: Water/Wastewater

Keywords: Codes & Standards, Condition Assessment, Deterioration, PCCP, Pipe, Pipeline, Research/Development



Water Research Foundation, CFRP Renewal of Prestressed Concrete Cylinder Pipe, Project 4352

United States

Project Contacts: Murat Engindeniz, Mehdi Zarghamee

Prestressed-concrete cylinder pipe (PCCP) makes up a significant portion of pipelines for the world's water, wastewater, and cooling water systems. Distress to PCCP can include broken wires,...

Services: Structural Investigation, Structural Rehabilitation

Markets: Water/Wastewater

Keywords: Analytical Studies, Codes & Standards, Composites-FRP / CFRP / GFRP, Field Testing, Laboratory Testing and Analysis, PCCP, Pipeline, Plastic/Composite



White Rock North, Water Transmission Main Failure Investigation

Dallas, TX

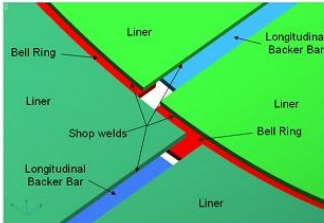
Project Contacts: Rasko Ojdrovic, Mehdi Zarghamee

The White Rock North Water Transmission Main is a 17 mi, 84 in. dia. prestressed concrete cylinder pipeline, embedded cylinder type, which delivers approximately 200 million gallons per day of...

Services: Structural Investigation

Markets: Water/Wastewater

Keywords: Analytical Studies, Failure Investigation, Metallurgy, Petrography, Pipeline



Calleguas Municipal Water District, Conduit North Branch

Thousand Oaks, CA

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

Calleguas Municipal Water District experienced a failure in 140 ft of steel liner within a 78 in. dia. prestressed concrete cylinder pipe (PCCP) water main. The failure resulted in local flooding...

Services: [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Finite Element Analysis](#), [Metal](#), [Metal-Steel](#), [PCCP](#), [Pipe](#), [Pipeline](#)



MWRA, Spot Pond

Stoneham, MA

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

SGH developed an emergency repair for a 48 in. dia. prestressed concrete cylinder pipeline penetrating the concrete core of the Spot Pond Dam. The pipe was cracked at the penetration point due to...

Services: [Structural Rehabilitation](#)

Markets: [Water/Wastewater](#)

Keywords: [Corrosion](#), [Cracking](#), [Emergency Response](#), [Failure Investigation](#), [PCCP](#), [Pipeline](#), [Soil-Structure Interaction](#)



MWRA, High Level Sewer

Roslindale, MA

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

The High Level Sewer (HLS) is a masonry conduit built around 1901. Following a large rainstorm, the HLS developed internal pressure that caused water to overflow through the manholes and flood...

Services: [Structural Investigation](#)

Markets: [Water/Wastewater](#)

Keywords: [Condition Assessment](#), [Construction Administration](#), [Cracking](#), [Failure Investigation](#), [Flood](#), [Masonry-Brick](#)

, Petrography, Pipeline, Risk Assessment, Soil-Structure Interaction



North Coast Superaqueduct

Arecibo to San Juan, PR

Project Contacts: [Rasko Ojdrovic](#), [Mehdi Zarghamee](#)

The 72 in. dia. North Coast Superaqueduct carries water 70 km from Arecibo to San Juan. Just after construction, the aqueduct experienced failure of two pipe segments during a transient pressure...

Services: [Materials Investigation](#), [Structural Investigation](#)

Markets: [Water/Wastewater](#)

Keywords: [Condition Assessment](#), [Engineering Mechanics](#), [Failure Investigation](#), [Metallurgy](#), [PCCP](#), [Petrography](#), [Pipeline](#), [Risk Assessment](#)