

INTEGRATED PROJECT DELIVERY

proactive & collaborative approach



AT GARNEY, A PROACTIVE AND COLLABORATIVE APPROACH IS IN OUR DNA.

For more than 10 years, integrated project delivery methods have accounted for nearly:

60%

OF OUR WORK

100+

PROJECTS

\$1 totaling upwards of

BILLION

IN CONTRACTS

We know projects aren't always straightforward.

You want a partner that can think creatively and work efficiently. **YOU WANT GARNEY.**



EARLY INVOLVEMENT BRINGS LASTING SUCCESS

Early collaboration offers the strongest combined expertise when the project needs it most, during conceptual design. Integrated project delivery methods bring the entire team together early in the process. This helps cut costs, accelerate the schedule, ensure safety and improve productivity.

INTEGRATED PROJECT DELIVERY METHODS INCLUDE:

- Lump Sum Design-Build
- Progressive Design-Build (EPCM or Design Construction Manager At Risk)
- Design-Build-Operate
- Design-Build-Operate-Finance
- Design-Build-Operate-Maintain
- Construction Manager At Risk
- Construction Manager / General Contractor

ACHIEVING THE HIGHEST LEVEL

We're always working to better serve our clients. For us, integrated project delivery is problem solving at the highest level. It requires a strong foundation, big ideas and the flexibility to change course when necessary. Garney's expertise and vision lets our clients take advantage of the opportunities these alternative methods bring.

WE'RE BLAZING A TRAIL FOR INTEGRATED PROJECT DELIVERY.

Our portfolio speaks to our passion, and our growing list of awards adds emphasis. Projects delivered via alternate delivery have been a focus of ours for more than a decade. Every project gives us another chance to break new ground.

OUR EMPHASIS ON COLLABORATION MAKES THE MOST OUT OF EARLY INVOLVEMENT.

We love the exchange of ideas that comes with strong partnerships. Integrated delivery lets this happen earlier, so every strategic decision is driven toward a safer site, a faster timeline and a tighter budget, all while keeping the focus on teamwork.

OUR KNOWLEDGE AND EXPERIENCE IS A SPRINGBOARD FOR SOLUTIONS.

We have an answer for anything a project may throw at us. There's no single model for an integrated delivery process, so we are ready to think on our feet. Our extensive experience gives us the knowledge base that your project needs.





GARNEY.COM
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CASE ◀ STUDIES

see the collaboration

Lake Texoma Outfall to Wylie WTP Pipeline

WYLIE, TEXAS

Reliable access to the surface water stored in its reservoirs is vital to the North Texas Municipal Water District, especially with the area's population growth and periodic severe drought conditions. When invasive zebra mussels infested a key storage reservoir, the District's ability to access and treat the reservoir's water was limited by the Federal Government. This meant the District needed an entirely new transmission and storage method to access 28 percent (nearly 100 MGD) of its total capacity.

The District planned a new pipeline from the reservoir affected by the zebra mussels directly to its treatment facility, short circuiting the creeks and reservoirs previously used. This effectively eliminated the risk for further zebra mussel infestation due to conveyance for treatment purposes. The \$305 million project (the largest contract in both the District's and Garney's history) includes the construction of 39 miles of 96" pipe, nine miles of 84" pipe and a 240 MG balancing reservoir. The project also includes a multitude of ground storage tanks as well as metering, blending and chemical feed systems to enable the treatment plant to accept and blend water directly from the source.

\$305 MILLION PROJECT

48 MILES OF 96"-84" PIPE

240 MG BALANCING RESERVOIR

CM at Risk in partnership with Freese & Nichols Engineering

112 DAYS SAVED

690 DAYS OPERATIONAL

870 DAYS FINAL

Blue River Wastewater Treatment Plant

OVERLAND PARK, KANSAS

With improvements to its Blue River Wastewater Treatment Plant, Johnson County Wastewater sought Garney's help in improving plant efficiency and reducing unhealthy nutrient levels in wastewater discharge. The \$30 million project included the replacement of dry and wet weather pumps, two new biological nutrient removal (BNR) basins, and the addition of pre-anoxic, anaerobic and anoxic zones to allow BNR treatment.

A U.S. Geological Survey showed that nutrient levels decreased 30 to 50 percent after the improvements, helping to prevent further degradation of the upper Blue River.

CM at Risk in partnership with Black & Veatch

The delivery method shortened the schedule by six to eight months, allowing the client to meet the demands of the surrounding communities faster and more efficiently.

Garney's decision to split the Guaranteed Maximum Price (GMP) into two phases meant that phase one construction could move forward almost immediately, providing extra time for phase two design. This buffer allowed for team brainstorming efforts that resulted in more than 40 cost-saving ideas that brought the project in under the established budget.

"This is an excellent example of the power of teamwork and the efficiency that can be achieved when all parties work together."

-Derek Cambridge, Black & Veatch



Cross County Transmission Line

AUSTIN, TEXAS

The communities in and around Travis County needed a reliable, drought-resistant water supply. The Cross County Water Supply Corporation asked Garney to build a \$42 million system meeting this need. The supply and delivery project included installing 283,000 linear feet of 30" pipe, a well field with a 1.5 MG pre-stressed ground water storage tank, chemical treatment facilities, a cooling tower and high service pumping facilities. An aggressive schedule presented the biggest challenge: just twelve months to construct the pipeline and six months to construct the pump station and associated facilities.

\$42 MILLION SYSTEM

283,000 LINEAR FEET OF 30" PIPE

18 MONTH TOTAL TIMELINE

Design-Build delivery method in partnership with Chiang, Patel & Yerby, Inc.

The team divided the project into design and construction segments, allowing construction to begin before completion of the final designs. This approach shortened the overall schedule and allowed the owner to take advantage of historically-low material costs.

Garney served as the single point of contact for risk accountability after the GMP was developed, streamlining communication with property owners and preventing delays from poor communication or bureaucracy.

"Garney always kept us informed on the progress of the project, worked closely with the engineering team and made recommendations that benefited us financially and operationally."

-Patrick Reilly, Cross County Water Supply Corporation



Tampa Utility Capital Improvement Projects

TAMPA, FLORIDA

CH2M Hill called on Garney while assembling a Design-Build team for a \$250 million water and wastewater infrastructure program for the City of Tampa. Because of the project's size and complexity, Garney was tasked with the installation of all open cut pipework throughout the program.

\$250 MILLION PROGRAM

73,000 LINEAR FEET OF 42" & 48" PIPE

Though budget cuts greatly reduced the project's scope, Garney completed six projects totaling \$30 million in contract value, including more than 73,000 linear feet of 42" and 48" pipe. The primarily urban installation areas provided special challenges, including utility relocation, significant roadway restoration and traffic management during construction.

Design-Build delivery method in partnership with Greeley & Hansen and CH2M Hill

The design-build delivery method allowed for a high level of cooperation among the entire project team, a level of cooperation more difficult in the hard bid public market.

Garney's participation in the design phase meant that safety challenges were addressed early on. The team was able to alleviate issues relating to overhead power lines, buried utilities and traffic control without impacting the project flow.

Early collaboration and consistent communication kept change orders to a nearly nonexistent level.



Wes Brown Water Treatment Plant Improvements

THORNTON, COLORADO

The Wes Brown Water Treatment Plant is currently the world's largest retrofit of a conventional filter treatment plant to a state-of-the-art ultra filtration membrane water treatment plant. Special features built into the plant allow for an even greater scope in the future - a 15 MGD RO blended water process.

Garney managed the \$57 million project's multiple phases, transitioning from a 30 MGD conventional water treatment plant to a 45 MGD submerged membrane treatment plant. The team modified the existing plant by replacing the existing upflow solids contact clarifiers, reconfiguring the conventional filters with GE ultra filtration submerged membranes and rebuilding the existing pipe gallery in a six-month period. New additions included chemical feed facilities, 3 MG clear well, 45 MGD high service pump station, maintenance facilities and administration facilities. The construction was completed with no interruptions to the safe delivery of water to the citizens of Thornton.

Cutting-Edge Ultra Filtration Membrane Process

\$57 MILLION SYSTEM

45 MGD SUBMERGED MEMBRANE TREATMENT PLANT

Construction Manager / General Contractor in partnership with CH2M Hill Constructors, and Burns & McDonnell as the design engineer

223,755.50 TOTAL MAN-HOURS



Hialeah Reverse Osmosis WTP

HIALEAH, FLORIDA

The City of Hialeah needed a \$56 million brackish groundwater reverse osmosis WTP constructed in record time - just 10 months. A Design-Build-Operate project method was a good fit for such an aggressive schedule, allowing for a seamless transition from design to construction and then to operation of the facility with a single team responsibility. In fact, the plant was completed even before the City raw water mains that led to it.

\$56 MILLION PROGRAM

STATE-OF-THE-ART **17.5** MGD BRACKISH RO WTP

Design-Build-Operate in partnership with AECOM and INIMA

10 MONTH TIMELINE

The project team delivered on the challenge to complete 16,000 feet of underground piping and a complete processing plant that included five RO trains, five 500 HP feed pumps, three 125 HP high service pumps, three degasifier towers, biofilter, clear well, chemical systems and testing. The project also met the requirements for Leadership in Energy and Environmental Design (LEED) Silver Certification, achieving an optimal balance between energy cost savings and the pore size of the membranes.

