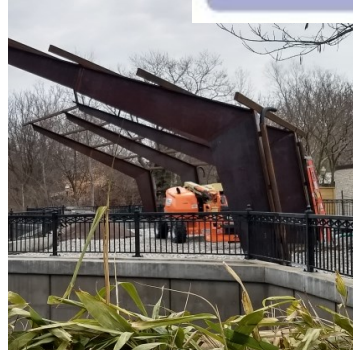


Site Civil Engineering Design
Roadway Design
Water Distribution
Sanitary Sewer Collection



Stormwater Management
Hydrology/Hydraulics
Asset Management
Construction Administration



HART ENGINEERING, LLC

15 Years of Excellence

Hart Engineering, LLC was established in 2007 by Paula M. Hart, P.E., LEED AP. Hart Engineering provides civil engineering services to developers, architects, and public agencies in the area of **site development, utility coordination, sewer design, roadway design, and asset management**. Hart Engineering brings sound project management and quality design oversight to each step of a project. We always strive to maintain our esteemed record of successfully meeting project deadlines while delivering the highest quality project.

Unique Business Model

Hart Engineering is a certified woman-owned business through the State of Missouri and a disadvantage business enterprise through the MRCC and the City of St. Louis Airport Authority. Over 80% of our employees are women including several professional engineers and technical experts. Hart's unique and flexible business model includes a combination of both full and part time employees. This distinctive business platform encourages a more diverse mix of employees and high employee satisfaction rate.

Encourages Diversity

As a woman-owned business, Hart Engineering is committed to providing a workplace that is equally open to all members of society regardless of race, gender, disability, religion, or national origin. Hart recognizes that a qualified team should include a variety of experiences, viewpoints, and talents to address engineering challenges. The owner of Hart Engineering, Paula Hart, is the current chair of the American Public Works Association's (APWA) Diversity, Equity, and Inclusion committee. She has also served on the National DEI Committee for APWA in order to promote more diversity and equity within the engineering community.

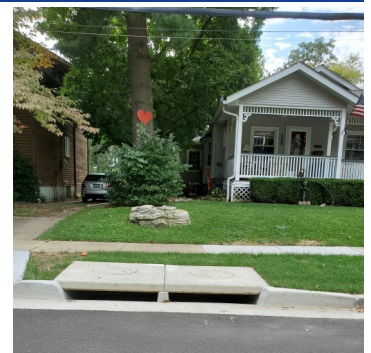
3207 Fairview Drive
St. Louis, MO

314-803-0528
paulahart@hartengr.com



HART COMPANY MISSION

To strive for achievement by utilizing a visionary business model to create a strong and positive team that will not only create innovative and concise designs for our clients but also have the drive to exceed customer service expectations with ease and satisfaction for both our team and yours.





Project Management

Hart Engineering brings sound project management and quality design oversight to each step of a project. Our end goal is to successfully meet all design deadlines while delivering the highest quality project. Our company is founded on the following core values to ensure a successful completed project.



Effective Communication

We strongly believe communication is the backbone to any successful project. We will check in with you each step of the way to confirm our design plans are meeting all your needs and to incorporate any feedback. Our firm's flexible schedules allow us to be on site for any meetings or field visits when needed. Hart Engineering also maintains ongoing communication with other consultants, utilities, and agencies as needed throughout the duration of a project.

On Time and On Budget

Our clients time and project needs are top priorities. Project milestone completion dates are scheduled well in advance of actual project submittal dates to ensure that each project stays on schedule. Hart has a stringent quality control and quality check management system that is utilized on every project we are a participant. By conducting QA/QC reviews at several points in the project, problems are reduced or eliminated in later design or construction stages when modifications can be extremely costly.

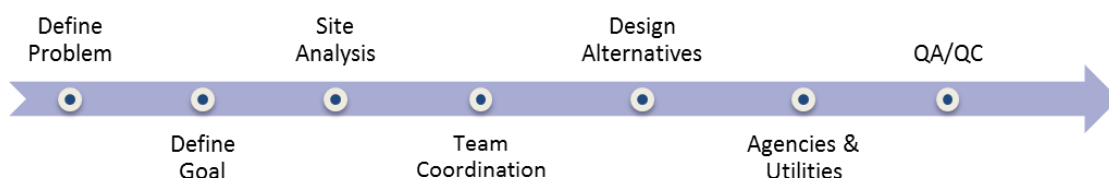
Quality Coordination

Our team possesses a wealth of knowledge and experience in coordination with multiple local, state, and federal agencies. We have built strong relationships with individuals and departments facilitating concise and timely communications resulting in shortened project schedules. We are well versed in the permits that may be required when work involves public streets or right of way.

Solid Approach

The Hart team prides themselves on producing a high quality product to exceed our clients' expectations. Our skilled associates evaluate all the factors of a proposed design including cost, land disturbance, and best construction practices to select a solution that is both efficient and effective. While each project has its own tasks and design steps, we have an overall strong approach to each project to ensure a superior finished project. The philosophy of our design approach to each project is based on the following components that allow us to excel each step of the way.

- **Define the Problem**—We begin with full understanding of the existing issues and all documentation available.
- **Define the Goal**—We set a solid solution as our end goal with smaller goals along the way to keep the schedule on track.
- **Site Analysis**—Our team strives to have full knowledge of the existing project site and conditions by visiting the site personally.
- **Team Coordination**—Hart maintains seamless and timely communication between all parties involved in a project.
- **Design Alternatives**—Our team meticulously studies each design problem to determine the best possible solutions.
- **Agency and Utility Check**—We start this process early in the project to avoid surprise conflicts or delays.
- **QA/QC Check**—Quality control checks are performed at multiple stages of the project and identify best practices and controls.





Our Services

Hart Engineering has provided a range of experience on a variety of design services over the past twelve years. Our team of professionals has provided superior design services for an array of clients including private owners, municipalities, public utilities, MoDOT, BPS, and St. Louis MSD. We have received numerous honorable ratings from local agencies and have many repeat clients. Our firm prides ourselves in being a well-known part of the Missouri engineering design community and are often asked back to participate in large design teams. Our flexible schedule and ability to adapt to additional demands and changes has led Hart to excel in meeting our clients needs. Hart Engineering has the skillset to lead each step of the design process from the preliminary conceptual plans through final construction management.

Utility Coordination Services

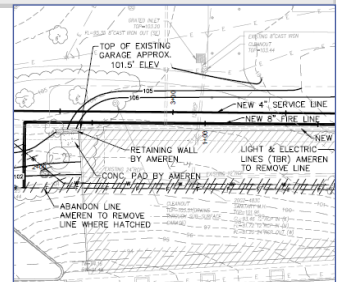
Hart Engineering team understands the ongoing construction projects necessary to maintain a safe and reliable transportation network often cross paths with existing utility infrastructure. Our firm's vast experience in leading utility coordination for a range of developments can ensure this step of the design process is handled in an accurate and efficient manner.

- Communication with Utilities Throughout Project Stages
- Map Requests of Existing Utility Networks
- Utility Conflict Review Submittals
- Determination of Possible Conflicts
- Site Visits with Utility Representatives
- Presentation of Possible Alternatives to Avoid Conflicts

Our history of past coordination services has allowed us widespread knowledge of each stage of utility accommodation. We set this process in motion early in each project in order to prevent delays by determining the exact location and potential impact of all existing facilities. Hart knows the proper procedures and contacts to request maps of existing utility facilities as well as the process to request conflict review. Through our broad past experience, we have established key contacts and connections at all St. Louis area utilities including AT&T, Ameren, Missouri American Water, Charter, St. Louis Water Department, St. Louis MSD, and Spire (Laclede) Energy. These established connections also provide a vital link when a conflict or other utility issue arises throughout any step of the design or construction process.

BJC QUEENY TOWER DEMOLITION AND SUB STATION: ST. LOUIS, MO

Hart Engineering is working as a subconsultant with BJC Health Care and Ameren on the Washington University Medical Center Campus Renewal project. Phase 2 of this project involves the isolation and demolition of Queeny Tower as well as a Barnes-Jewish Hospital sub station upgrade. Hart Engineering is responsible for the relocation of water lines and site improvements for the new sub station. The project involves coordination between BJC, Ameren, and utility agencies. The congestion of structures and utilities at the project site as well as the age of many of the buildings and infrastructure have required detailed investigation work.



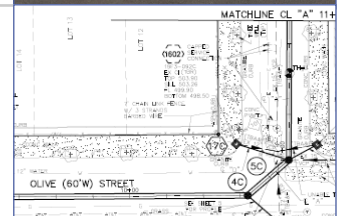
MCKNIGHT ROAD IMPROVEMENTS: RICHMOND HEIGHTS, MO

This project in Richmond Heights involved numerous improvements along McKnight Road between Godwin lane and Clayton Road. The improvements include a new mill and overlay, signal replacement, sidewalk addition, ADA, improvements, and storm sewer installation. Hart acted as a subconsultant in charge of utility coordination, drainage design, and other tasks.



OLIVE/WASHINGTON (CONTRACT B): ST. LOUIS MSD

Hart served as a subconsultant on the project in charge of utility coordination and regulatory requirements research. We utilized our key contacts at the major utilities to receive prompt replies and maps of existing facilities. The project location also required contact with the City of St. Louis and the St. Louis Streets Departments to obtain information on needed permits or requirements. Obtaining this information is critical to the project as construction affects a city street.





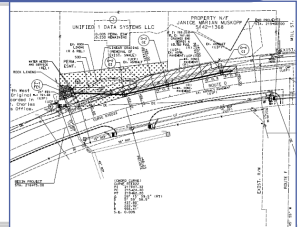
Roadway Design Services

The Hart Engineering team understands the design challenges necessary to build and maintain a safe and reliable transportation network. Our firm has provided quality work on various road projects including **mill and overlay**, **road widening**, **sidewalk additions**, **curb and gutter**, and **ADA improvements**. We are also well versed in additional specific elements for roadway projects including stormwater management, utility accommodation, regulatory coordination, and construction management.

Preliminary Layout
Utility Coordination
Sidewalks
Sheet and Channel Flow Analysis
Roadway and Intersection Design
ADA Ramp Design and Conformance

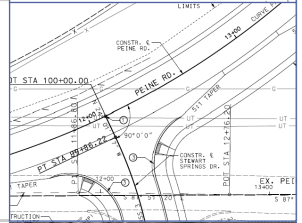
MODOT CULVERT REPLACEMENT: ST. CHARLES COUNTY & JEFFERSON COUNTY

Hart Engineering acted as the Prime for this MoDOT project to replace three culverts located along MoDOT right-of-way. Two of the culverts were located in St. Charles County and one was in Jefferson County. The project involved the stormwater design improvements, assistance with the design plans and specifications, and quantities and cost estimates. The culvert replacements included some removal and replacement of existing roadway and driveways.



PEINE ROAD: WENTZVILLE, MO

Hart Engineering is acting as a subconsultant on this project to provide road improvements along Peine Road in Wentzville. The improvements include roadway resurfacing, intersection improvements, new sidewalks, drainage improvements, and a box culvert extension. Hart Engineering is assisting with public engagement, drainage analysis, traffic control plan sheets, plan preparation, permits, and utility coordination. The road improvements design requires electrical and gas relocations.



VINELAND SCHOOL ROAD IMPROVEMENTS: DESOTO, MO

The City of DeSoto improved approximately two miles of Vineland School Road. The project included curb and gutter, sidewalks, drainage, and road renovation. Hart Engineering acted as a sub consultant responsible for the preliminary layout, storm water improvements, utility coordination, and construction observation. The project involved coordination with the city of DeSoto, Jefferson County and utilities.



Site Civil Design Services

Our firm has completed a variety of commercial and residential site civil projects in the St. Louis Metro area on sites ranging from a quarter acre up to 80 acres. We have developed multiple project types including **parking lots**, **subdivision developments**, **building layouts**, **rehabilitation projects**, and **additions** to existing structures. Hart has also developed detailed plans for erosion control, grading, and drainage for a variety of site terrain. Many of our past projects have also included storm water detention, water quality design, and LEED eligible designs.

Site Planning/Layout for new buildings, rehabilitations and additions
Site Grading
LEED, Permeable Pavers, Raingardens, Buffer Strips and Holding Cells
Earthwork Analysis
Parking, Sidewalks, and Trails
Erosion Control and Drainage Designs
Utility Coordination

ST. LOUIS ZOO LAKESIDE RETAIL REPLACEMENT: ST. LOUIS, MO

Our firm acted as the lead civil engineer for the architecture team in charge of replacing the Build-A-Bear retail shop with a new coffee shop and deck. Hart Engineering developed the civil engineering plans, including the layout, grading, and an LEED eligible storm water design and erosion control plan. This included coordinating with various utility companies, plan submittals, and construction administration.



BEE TREE COUNTY PARK: ST. LOUIS, MO

Hart Engineering was the civil engineer of a project in Bee Tree County Park in St. Louis County. The project involved adding new ADA parking spaces and ramps. The project design also includes adding ADA access to the restrooms and a pavilion to ensure the park is accessible and welcoming to all abilities.

