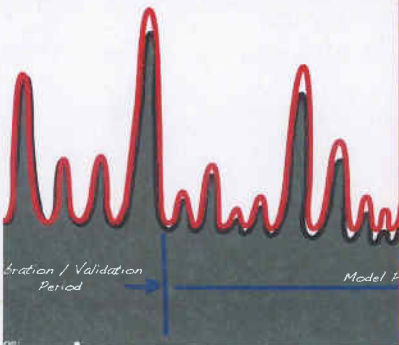


3/20/2015

## Sump Pump Installations Modification Project

City of Ann Arbor  
Procurement Unit  
City Hall, 301 East Huron Street  
Ann Arbor, Michigan 48107





ARCHITECTS. ENGINEERS. PLANNERS.

March 20, 2015

Nick Hutchinson, City Engineer  
City of Ann Arbor  
Procurement Unit, 5<sup>th</sup> Floor  
301 East Huron Street  
Ann Arbor, MI 48107

Re: RFP 922 Sump Pump Installation Modification Project

Dear Mr. Hutchinson:

The City of Ann Arbor's Footing Drain Disconnection (FDD) program was successful at removing wet weather flows from the sanitary system, and most residents were satisfied with the program. However, a significant number of residents reported a higher level of anxiety after the FDD program, and there were a substantial number who reported problems with water in the basement and installation problems after the FDD program. The objectives of this project are to:

- ▶ Conduct a public outreach program to provide residents with the opportunity to report problems.
- ▶ Locate, inspect and correct FDDs that require modification under this project.
- ▶ Create a public education program so that residents understand sump pump O&M.

Our project approach will initiate the public outreach quickly, and perform the investigations and develop contract documents in parallel, so that corrections can begin as soon as possible. We will conduct the initial 10 corrections concurrently with the investigations, so that residents who need a sump pump modification see action quickly after their inspection is complete. We believe that the 50 houses that were estimated for modifications in the 2014 investigation can be corrected within a one-year construction period. This aggressive responsiveness is the best way for the City to address the issues raised by some residents.

Some FDD participants are concerned with the issues caused by FDD, and tensions can flare over issues within their homes. We know we can deliver a successful project to the City of Ann Arbor, even under challenging circumstances, because we have done it before. The following points demonstrate that we know what it takes to deliver a successful project to the satisfaction of the City and the Ann Arbor residents:

- ▶ We prepared an informational video to tell our story of how we accomplished success on the City's SSWWE project. The video can be found at: <https://youtu.be/ZZ25bHTwn30>
- ▶ The residents who worked the closest with us on the SSWWE project gave us very positive reviews – please see the attached feedback from the members of the Citizens Advisory Committee (CAC).
- ▶ A small group of residents approached the SSWWE project with a predetermined agenda - to stop the FDD program, and they attempted to disrupt the project. We handled the situation professionally, and worked with the City to keep the project on track, while still considering all perspectives.

We are ready to complete the process that we started with you and the residents of the City of Ann Arbor on your sanitary sewer system, and help you with modification to sump pump installations.

Respectfully,  
OHM Advisors

A handwritten signature in black ink that reads "Robert Czachorski". The signature is written in a cursive style and is positioned above a horizontal line.

Robert S. Czachorski, PE  
Principal

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1. Participating on the SSWWE CAC was a valuable experience for me.	4	6	0	1	0
2. My input was valued throughout the project.	5	4	2	0	0
3. The project team treated me with respect.	5	6	0	0	0
4. The project team strived to create a safe meeting & digital environment for me to express my opinions.	5	6	0	0	0
5. The project team was timely in preparing project materials, agenda, meeting notes & meeting notices.	4	5	1	1	0
6. The follow-up notes, meetings, videos, & Basecamp responses to my questions were high quality, easy to read, & well prepared.	4	3	3	1	0
7. The meeting venues were clean, comfortable, & conducive to conducting the CAC's meetings.	4	6	1	0	0
8. The technical analyses prepared were professional, accurate, & high quality.	5	6	0	0	0
9. The presentation of technical materials was done in a way that was understandable & without technical gobbledeygook.	6	4	1	0	0
10. The City staff was responsive to questions, open to the CAC's ideas, & worked diligently to find win-win solutions.	2	6	1	2	0
11. THE OHM Advisors technical team was responsive to questions, open to the CAC's ideas and worked diligently to find win-win solutions.	5	6	0	0	0
12. The Project Innovations public engagement team did a good job moderating the meetings, & making sure all opinions were heard & documented.	5	4	1	1	0
13. My fellow CAC members conducted themselves in a professional manner & worked towards finding win-win solutions.	4	6	0	1	0
14. I would recommend that the City retain the OHM Advisors team for future work.	5	5	1	0	0
<b>TOTAL (Out of 154)</b>	<b>63</b>	<b>73</b>	<b>11</b>	<b>7</b>	<b>0</b>



## Contents

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- Key Personnel

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- Projects

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- Work Plan

### D. Fee Proposal (Separately Sealed)

### E. Authorized Negotiator

### F. Appendices

- Resumes
- Living Wage Ordinance
- Legal Status of Proposer
- Conflict of Interest Disclosure Form



## A. Professional Qualifications

### About OHM Advisors

Orchard, Hiltz & McCliment, Inc. (OHM Advisors) is a firm of architects, engineers and planners committed to Advancing Communities. Leaders rely on our proven public and private sector expertise, insightful counsel and forward thinking to create lasting, viable places and communities. We opened our doors in 1962 and have been growing ever since. We have offices in Michigan, Ohio and Tennessee.

### What We Do Best

One of our long-time clients called OHM Advisors a “one-stop solution.” That’s our goal. We’re great project managers, but we think like advisors. Our clients appreciate our long-term collaboration and holistic approach. This could involve capital improvement planning, strategic workforce restructuring, funding sourcing and administration, and community redevelopment. And our goal is always sustainability.

### Firm Ownership

OHM Advisors is a privately held corporation, licensed to work in Michigan, Ohio, and Tennessee, governed by a seven member Board of Directors and has 26 employee shareholders.

### Our Clients

- Cities, Villages, Towns, Counties and Townships
- State and Federal Agencies
- County Road Agencies / MDOT
- K-12, Colleges and Universities
- Utility Authorities
- Parks Authorities
- Drain and Water Resource Commissioners

### Locations

OHM Advisors & its partners are all licensed to work in Michigan.

#### OHM Advisors

(Corporation)  
34000 Plymouth Road  
Livonia, MI 48150  
ph. 734.522.6711  
fax. 734.522.6427

#### Project Innovations, Inc.

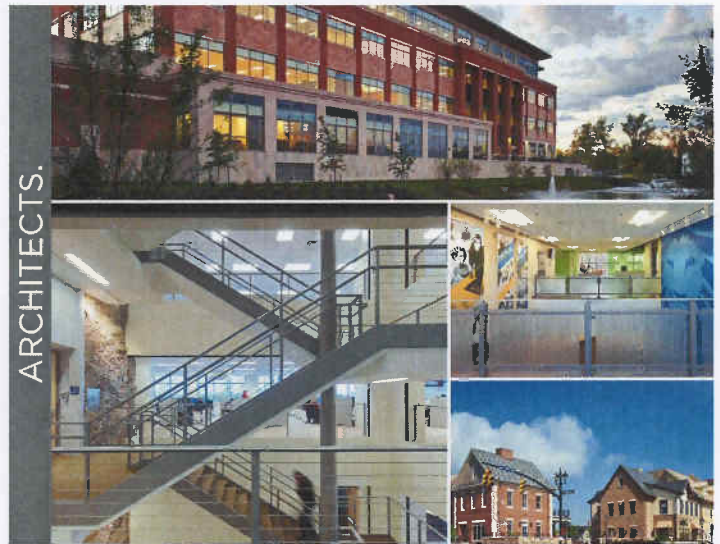
(Corporation)  
22000 Springbrook Avenue,  
Suite 106  
Farmington Hills, MI 48336  
ph. 248.476.7577

#### Famous in Your Field

(Individual, Sole Member LLC)  
3796 Plaza Drive, Suite 2C  
Ann Arbor, MI 48108  
ph. 734.678.7831

#### OK Raptor Productions

(Individual)  
22000 Springbrook Avenue,  
Suite 106  
Farmington Hills, MI 48336  
ph. 586.295.2180



We perform the following services in-house and have relationships with partners to provide any additional needed services:

### Architecture

- Full Service Facility Design
- Facility Surveys & Assessments
- Site & Facility Master Planning
- Space Planning
- Programming
- Design for LEED Certification
- Construction Administration

### Planning & Landscape Architecture

- Planning & Visioning
- Urban Design
- Zoning & Entitlements
- Land Planning
- Parks and Recreation Master Planning
- Trail/Bike Path, Trail Head Design
- Playground & Athletic Field Design
- Site Planting Design
- Site Grading Plans

### Mechanical & Electrical Engineering

- Energy Evaluation & Assessments
- Existing Facility Evaluations
- HVAC System Design
- Plumbing System Design
- Energy Management Systems Design
- Lighting Design

### Structural Engineering

- Existing Structure Evaluations
- Dams/Retaining Walls
- Foundation Design
- Bridge Design, Scoping & Safety Inspection

### Civil Engineering & Surveying

- Site Evaluations, Surveying & Geotechnical
- Sanitary Sewer & Water Systems
- Stormwater Management Design & NPDES permitting
- Roadway & Freeway Design
- Site & Parking Design
- Soil Erosion Control Design & Inspection
- Construction Engineering, Site Observation & Contract Administration
- Wetland Identification & Mitigation Planning
- Water Treatment & Wastewater Treatment Plant Design
- Topographic, Right-of-way, Boundary & Geodetic Control Surveys
- Bicycle Path & Sidewalk Design
- Recreational Facilities & Park Development

### Other Services

- Technology Assessments & Infrastructure Design
- GIS Database Development & Design Mapping
- Technology Services
- Graphics & Multimedia

## AT A GLANCE

EXPERIENCE

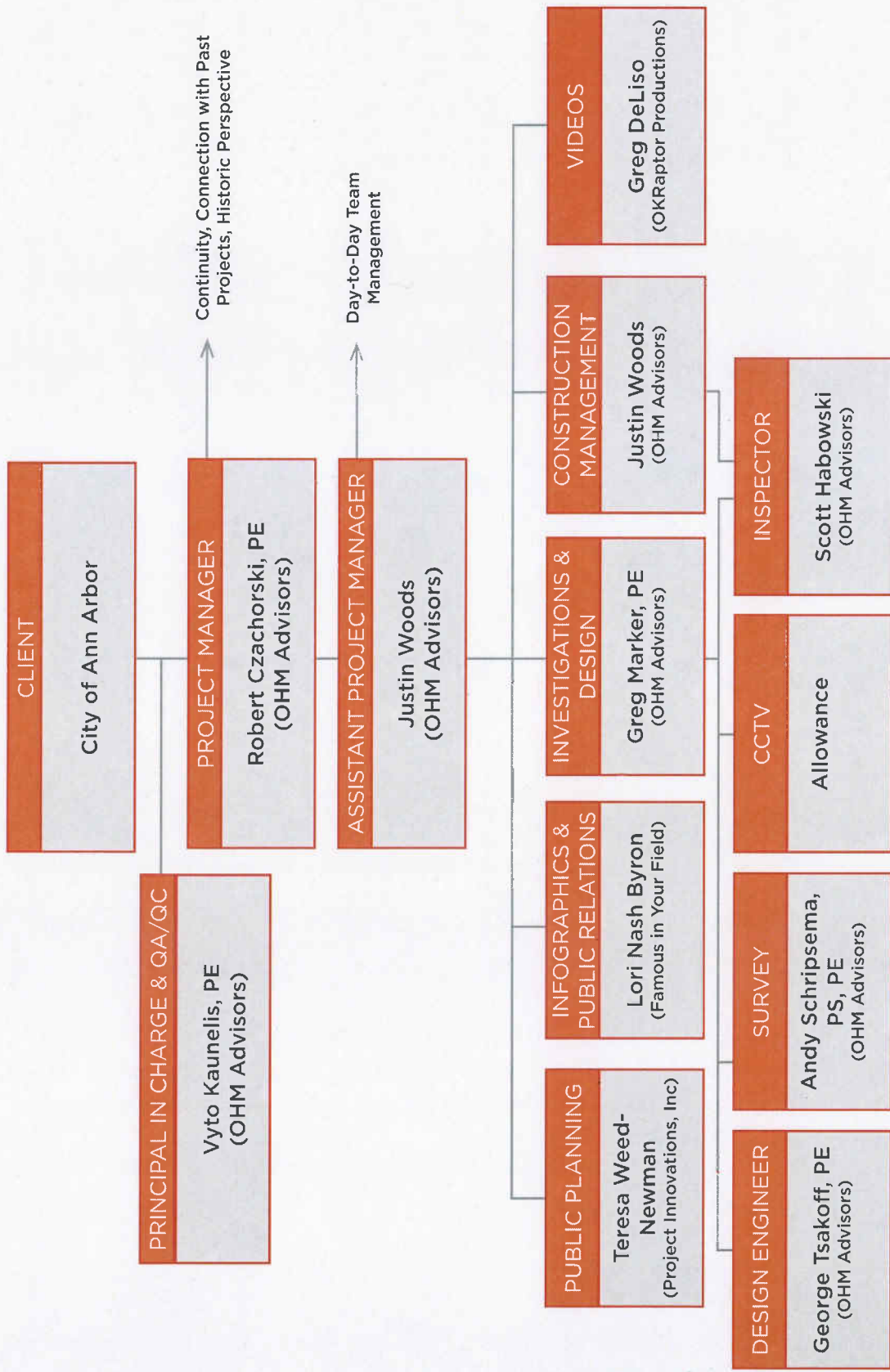
- 10,000+** civil engineering projects
- 500,000+** SF of LEED intended space
- 3 million+** SF of educational space
- 125+** miles of sewer installation and **80** miles of rehabilitation
- 140+** zoning projects and **65+** mixed-use planning projects
- 250+** miles of water main installation and **130** miles of replacement/rehabilitation
- Major road projects, totaling more than **500** miles
- 2,500+** plan reviews and subsequent construction observation services

IN-HOUSE CAPACITY

- 18 Architectural Staff Members
- 22 CADD Technicians
- 39 Civil Engineers
- 38 Construction Inspectors/Managers
- 4 Mechanical / Electrical Engineers
- 1 GIS Specialist
- 15 Surveyors
- 12 Landscape Architects
- 7 Planners
- 11 Project Managers
- 6 Technicians/Analysts
- 24 Transportation Engineers
- 5 Structural Engineers
- 16 Water Resources Engineers/Sanitary Engineers

# PROFESSIONAL QUALIFICATIONS

## Organizational Chart







OHM Advisors - Livonia, MI

Vyto Kaunelis, PE | Principal in Charge & QA/QC

**Primary Responsibilities:**

- Client Satisfaction
- Quality Assurance & Quality Control
- Validation of results & recommendations based on experience

**Relevant Experience & Expertise:**

- More than 30 years experience with storm & sanitary water systems
- Served Michigan Combined Sewer Overflow & Sanitary Sewer Overflow Policy Development Committees



OHM Advisors - Livonia, MI

Robert Czachorski, PE | Project Manager

**Primary Responsibilities:**

- Responsible to Ann Arbor PM for client satisfaction
- Ensure successful completion of project scope

**Relevant Experience & Expertise:**

- Developed Antecedent Moisture Model
- National expert in sanitary collection systems & wet weather flow modeling



OHM Advisors - Livonia, MI

Justin Woods | Assistant Project Manager/Construction Management

**Primary Responsibilities:**

- Oversee day-to-day tasks, including survey development, resident interviews, design & construction
- Manage construction staff & contractors

**Relevant Experience & Expertise:**

- Served as Asst Construction Manager for the FDD project
- Familiar with homes throughout the Ann Arbor area
- Performed QA of previously installed FDDs



Project Innovations - Farmington Hills, MI

Teresa Weed-Newman | Public Planning

**Primary Responsibilities:**

- Lead public engagement strategist
- Lead facilitator

**Relevant Experience & Expertise:**

- More than 25 years of experience in developing & implementing successful public engagement strategies
- Successful facilitator on many large projects



Famous in Your Field - Ann Arbor, MI

Lori Nash Byron | Infographics & Public Relations

**Primary Responsibilities:**

- Public engagement & education
- Communications strategy
- Create engagement materials & communications

**Relevant Experience & Expertise:**

- Public education for government projects
- Communicating technical information to non-technical audiences



OHM Advisors - Livonia, MI

Greg Marker, PE | Investigations & Design

**Primary Responsibilities:**

- Coordinate, schedule, & document in home inspections
- Troubleshoot reported FDD problems
- Perform field design of solutions

**Relevant Experience & Expertise:**

- Familiar with reviewing construction methods & previous installations in the field for acceptance and is qualified to ensure compliance with plans and specifications



OKRaptor Productions - Farmington Hills MI

Greg Deliso | Videos

**Primary Responsibilities:**

- Develop video media for public engagement tasks

**Relevant Experience & Expertise:**

- Visually transform complex & technical issues to understandable concepts
- Prepared videos for the Ann Arbor SSWWE project



OHM Advisors - Livonia, MI

George Tsakoff, PE | Design Engineer

**Primary Responsibilities:**

- Develop accurate base plans
- Prepare location specific construction plans & documents for sump pump repair
- Prepare contract documents and pre-qualification documents

**Relevant Experience & Expertise:**

- More than 15 years of project design experience
- Design engineer for various municipal projects in and around Ann Arbor area



OHM Advisors - Livonia, MI

Andrew Schripsema, PE, PS | Survey

**Primary Responsibilities:**

- Lead surveyor
- Oversee topographic survey & construction layout

**Relevant Experience & Expertise:**

- More than 14 years of engineering and surveying experience
- Vast experience with water improvement projects

Scott Habowski | Inspector

OHM Advisors - Livonia, MI

**Primary Responsibilities:**

- Provide daily, on-site inspection of sump pump, discharge piping & curb drain modifications
- Documents details of work
- Communicate directly with residents & contractors

**Relevant Experience & Expertise:**

- 5 years experience in contract oversight
- Lead construction observer for a FDD project in the City of Livonia in 2013



## **B. Past Involvement with Similar Projects**

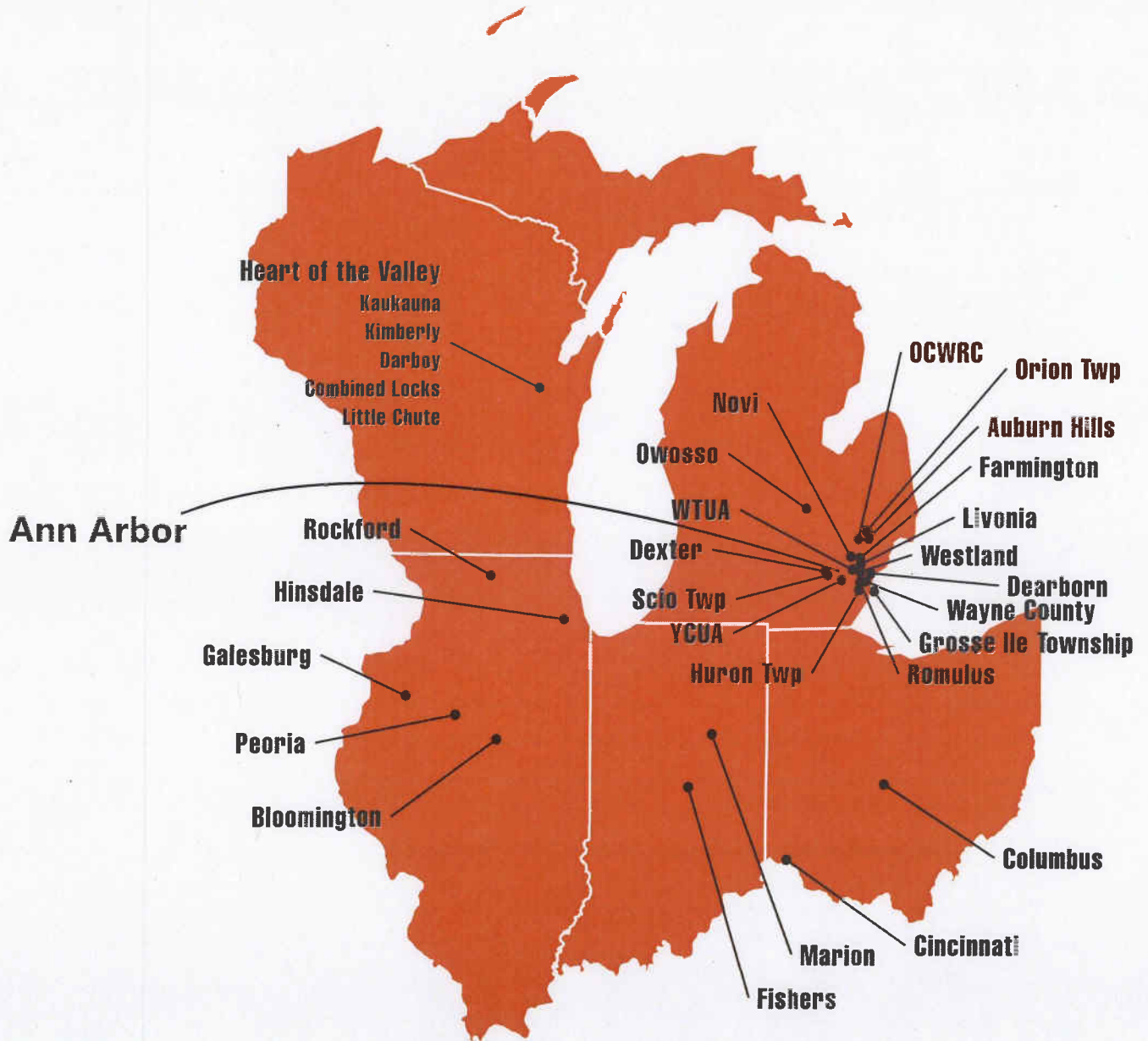
### Introduction

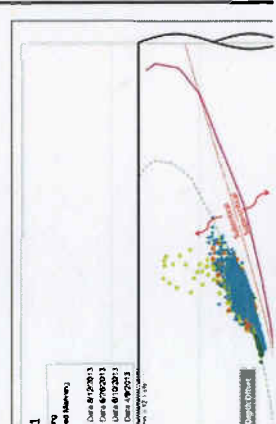


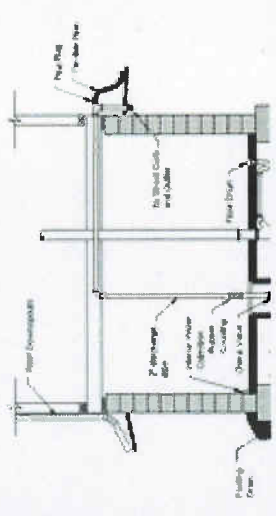
Members of the OHM Advisors team have performed a large number of projects that have similarities to the requested scope of work. The attached map shows the locations of the projects, which are spread throughout the Midwest.

In addition, we have provided a more detailed write-up for 5 of our footing drain projects, including all the requested detailed information. These sample projects demonstrate that we are fully qualified to complete the proposed work plan, on time, and within the budgeted costs.

Of further note, the engineers that have completed most of these studies are the ones that we propose to use for this project.

### Map of Project Experience Locations



<p><b>y Sewer Wet Weather ion Project - Ann Arbor, MI</b></p>	<p><b>Bloomfield Orchards Footing Drain Disconnection and Evaluation - Auburn Hills, MI</b></p>	<p><b>Pilot Footing Drain Disconnection - Westland, MI</b></p>	<p><b>Footing Drain Disconnection - Farmington, MI</b></p>
<p>Ann Arbor tchinson, PE ineer .6411 nson@a2gov.org uron Street or, MI 48104</p>	<p>City of Auburn Hills Ron Melchert Director of Public Services 248.364.6902 1500 Brown Road Auburn Hills, MI 48326</p>	<p>City of Westland William Wild Mayor 734.467.3200 36300 Warren Road Westland, MI 48185</p>	<p>City of Farmington Vincent Pasture City Manager 248.474.5500 23600 Liberty Street Farmington, MI 48335</p>
<p>retained OHM Advisors to an evaluation of the effectiveness urrent FDD program and develop ves for improving the sanitary Our approach included flow g, FDD effectiveness evaluation, gic modeling, hydraulic modeling, assessment, alternative on, and an extensive public nent program. Because of the ities of evaluating wet weather a sanitary sewer system caused ng wetness conditions, our h included a robust evaluation D effectiveness comprised of hentic methods of evaluating the hen three independent methods i agreement, it provides a strong nce in the results and a good basis ssing the effectiveness of the FDD</p>	<p>The Bloomfield Orchards subdivision is located in the City of Auburn Hills. The Footing Drain program was a multi-phased, City-funded project in an effort to eliminate the primary sources of inflow from the sanitary sewer system. Since completion, sanitary sewer related basement flooding has been eliminated, improving the health and welfare of all residents involved. The City, along with OHM Advisors engaged in an aggressive public education campaign. The pilot program success led the City to offer FDD to a large number of residents. A total of 270 FDD were performed. The project has become a model for public/ private cooperation and is being studied by many other municipalities that have similar problems. The project was named "Public Works Project of the Year" in 2002.</p>	<p>This project consisted of two components: Documentation of existing system conditions, and a pilot footing drain disconnection program. The footing drain disconnect program was a pilot program within the City, including approximately 20 homes in an area of town showing significant inflow and infiltration during a previous metering period.</p>	<p>The City of Farmington conducted footing drain disconnection construction activities to help control sanitary sewer overflows (SSOs) to the Rouge River Watershed. The City of Farmington removed 71 footing drain connections to the sanitary sewer in the Chatham Hills Subdivision. The footing drain disconnection activities were prefaced by several meetings with the homeowners that had footing drains connected to the sanitary sewer. The public meetings were held to inform the homeowners of the construction activities that would take place within their basement and yards if they volunteered to take part in the disconnection program. In addition to public meetings, the homeowners were sent informational pamphlets illustrating the footing drain disconnection process.</p>
<p>1. 0 0</p>	<p>\$2,800,000 \$2,800,000</p>	<p>\$275,000 \$275,000</p>	<p>\$800,000 \$800,000</p>
<p>- 11/2014</p>	<p>2002 - 2006 2006</p>	<p>2006 - 2007 2007</p>	<p>2005 - 2006 08/2006</p>
			



## C. Proposed Work Plan

**A. Conduct Public Outreach**

- Develop informational mailer to residents in City’s FDD program.
- Prepare informational video on sump pump basics and common language.
- Disseminate informational mailer and link to video to residents with a call to action for residents to report problems.
- 90 day response period.
- Approximately 1,800 residents in City’s FDD program.
- Anticipate 600 responses returned from residents.
- Estimated breakdown of resident responses for scope development:
  1. Residents requesting operational assistance – 300 responses estimated.
  2. Claims of installation issues not related to water issues – 100 responses estimated.
  3. Claims of water issues caused by FDD – 100 responses estimated.
- Respondents in category 1 above will be addressed with the public education and outreach materials, information and videos.
- Respondents in categories 2 and 3 above will require further investigation.

**B. Investigate Reported Problems & Recommend Corrections**

- Anticipate that of the 200 inspections required, that 50 (25%) can be addressed by phone call and 150 (75%) will require a household inspection (similar ratio to the 2014 pilot investigation).
- Estimate that 50 total homes will require correction under this program, based on the 2-3% incident rate found during the 2014 pilot investigation.

**C. Construction Management and Resident Support**

- Boiler plate contract development for FDD repairs, RFP for contractors and contractor selection will occur in parallel to the Public Outreach task, at the beginning of the project.
- This will allow for construction to commence on repairs immediately following the public outreach, giving the City and residents results early in the project.
- Our base scope includes one year of construction management services; we anticipate that 50 FDD repairs can be accomplished during the first year of construction.
- If more than 50 houses require repair, those can be performed in subsequent years of the program.

**D. Education**

- A program of outreach materials, information, videos and workshops will be developed in parallel to the Public Outreach in Task A.
- This will generate informational materials for residents who performed FDDs early-on in the project.

EARLY VIDEO DEVELOPMENT WILL CREATE A “COMMON LANGUAGE” FOR RESIDENTS, TO FACILITATE CLEAR RESPONSES FROM THE SURVEY.

WE’VE BASED OUR ANTICIPATED RESIDENT RESPONSE RATE & FDD REPAIR COUNT ON THE RESULTS FROM THE 2014 WORK DONE.

VIDEOS AND EDUCATIONAL MATERIALS WILL PROVIDE CLEAR, EASY TO DIGEST INFORMATION TO FDD PARTICIPANTS.

WE'VE BASED OUR ANTICIPATED RESIDENT RESPONSE RATE & FDD REPAIR COUNT ON THE RESULTS FROM THE 2014 WORK DONE.

	2014 SURVEY & PILOT INSPECTIONS	2015 SUMP PUMP INSTALLATION MODIFICATIONS PROJECT
<b>SCOPE</b>	INCLUDED ALL HOUSES IN DOM & CITY FDD PROGRAMS	INCLUDES ONLY 1,800 HOUSES IN CITY FDD PROGRAM
<b>SURVEY</b>	2,000 SURVEY SET 800 RESPONSES	1,800 RESIDENTS INCLUDED ESTIMATE 600 RESPONSES
<b>INSTALLATION ISSUES</b>	110 RESIDENTS	ASSUME 100 RESIDENTS REQUIRE FOLLOW-UP ON INSTALLATION ISSUES
<b>WATER ISSUES</b>	150 RESIDENTS WITH WATER ISSUES WERE IDENTIFIED FOR FOLLOW-UP	ASSUME 100 ADDITIONAL RESIDENTS REQUIRE FOLLOW-UP ON WATER ISSUES
<b>INVESTIGATIONS</b>	THE 100 HOUSES WITH THE WORST WATER ISSUES WERE INVESTIGATED: 23 WERE NOT REACHED 77 WERE INSPECTED (INSTALLATION ISSUES WERE NOT INVESTIGATED IN 2014)	200 MORE HOMES IN TOTAL WILL REQUIRE INVESTIGATIONS (INSTALLATION & WATER ISSUES)
<b>CORRECTIONS REQUIRED</b>	RESULTS OF 77 FOLLOW-UP CONTACTS: <ul style="list-style-type: none"> <li>• 24 RULED OUT AS FDD ISSUE VIA PHONE CALL</li> <li>• 16 RULED OUT AS FDD ISSUE VIA INSPECTION</li> <li>• 27 UNCLEAR AS TO CAUSE</li> <li>• 10 OUT OF SPECIFICATIONS REQUIRING CORRECTIONS</li> </ul>	50 TOTAL HOMES WILL BE IDENTIFIED FOR CORRECTION (2-3%) (IDENTIFIED IN SSWWEP EXECUTIVE SUMMARY)  10 ALREADY IDENTIFIED 40 ADDITIONAL CORRECTIONS



# PROPOSED WORK PLAN

## Schedule

- Initiate public outreach **immediately**.
- Develop contract documents early in project to begin repairs **as soon as possible**.
- Prepare education materials **in parallel** to the public outreach call to action.

Task	2015												2016							
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>A. Public Outreach</b>																				
Prepare informational mailers & call to action																				
Informational video on sump pump basics & common language																				
90 day resident response period																				
Tabulate results from residents																				
Pick houses for inspections																				
<b>B. Investigate Problems</b>																				
Conduct house inspections																				
Report out houses identified for repair																				
<b>C. Construction Management</b>																				
Develop contract & contractor selection																				
Design for 10 houses already identified for repair																				
Perform modifications required to first 10 houses																				
Perform modifications required for remaining 40 houses																				
<b>D. Education &amp; Outreach</b>																				
Workshop #1 - During resident response period																				
Workshop #2 - After houses selected for inspection																				
Workshop #3 - Before construction of remaining houses																				
Develop videos, infographics, & social media materials																				

## Statement of Understanding

The City of Ann Arbor’s Sanitary Sewer Wet Weather Evaluation (SSWWE) project showed that the City’s Footing Drain Disconnection (FDD) program was successful at removing wet weather flows from the sanitary system, and that most residents were satisfied with the program. A significant number of residents reported a higher level of anxiety after the FDD program, and there were a substantial number who reported problems with water in the basement and installation problems after the FDD program.

- A. **Conduct Public Outreach** – It is important to generate informational materials quickly at the beginning of the project, which can be sent with the initial outreach to residents, to create a common language for residents to communicate with the team.
- B. **Investigate Reported Problems & Recommend Corrections** – The 2014 investigation work provides a good template for this work, and was used as the basis for the estimates of the number of houses for inspection and correction.
- C. **Construction Management and Resident Support** – The preparation of contract materials should be initiated at the start of the project, in parallel to the resident outreach, so that the corrections can begin as soon as possible following the investigations.
- D. **Develop an Education and Outreach Program** – These materials can also be prepared in parallel to the resident outreach, so that they are ready early on in the project for residents who conducted FDDs.

**APPROXIMATELY 50 HOMES  
IN THE CITY MAY HAVE ISSUES  
DIRECTLY RELATED TO THE  
FDD PROGRAM**

In response to these reported problems, OHM Advisors performed a follow-up investigation of 77 homes that reported problems with water in the basement. Of these 77 homes, 10 were determined to have issues related directly to the FDD work. At this incident rate, it was determined that 2-3% of the 1,800 homes in the City’s FDD program, or about 50 homes, may have issues directly related to the FDD program. The City desires to locate, inspect and correct these issues, and provide public education to residents on the operation and maintenance of sump pumps.

The City has outlined a strong scope of work to accomplish this in the RFP, and our proposed Work Plan expands upon this outline with the details of our approach. Critical components for a successful project for each step include:

The Work Plan provides our proposed strategy for achieving these desired objectives.



### DETAILED SCOPE OF WORK

#### A. CONDUCT PUBLIC OUTREACH

OHM Advisors and its subconsultant team, Project Innovations, Famous in Your Field and OK Raptor Productions will plan, execute and manage a public outreach program to raise awareness of the City's Sump Pump Installations Modifications project and to communicate the program's aims and qualification criteria to FDD participants.

The team will prepare and send mailings; coordinate other communications with the City's Communications Department; gather, organize, and thoroughly document all responses; and respond to questions from residents.

We understand that residents will have 90 days to respond to report problems that could potentially be addressed through this project. We also affirm that the team will continue to engage the public during the duration of the project.

1. Kick-off meeting - one focus of the meeting will be to establish a criteria for what is included in the program.
2. In an effort to begin the education process and to help FDD property owners give high quality information on the survey, we propose creating an initial video to show a sump pump installation. FDD property owners would be able to view this video on the City's website and have a clearer understanding of their sump pump installation. This would allow them to respond to the survey with more information that would be useful to the project team, speeding the investigation.
3. Write associated website content to explain the purpose of the survey and video.
4. Design survey to FDD program property owners.
  1. Determine survey objectives (what does the project team need to know?).
  2. Cover letter/explanation of survey, purpose.
  3. Design survey (write questions and logic).
  4. Set-up electronic survey.
  5. Write press release/notices for media, community.
  6. Send notification to email addresses.
  7. Format paper survey.
  8. Request addresses from City.
  9. Print and mail paper surveys.
  10. Re-send reminder notifications via City's communication channels.
  11. Input responses from written surveys.
  12. Review electronic responses.

13. Integrate mail in and electronic response in summary report.

#### B. INVESTIGATE REPORTED PROBLEMS AND RECOMMENDED CORRECTIONS

OHM Advisors proposes to provide professional services that will include follow up on survey responses from the previous task. OHM Advisors' team will include experts with extensive experience with the City's FDD and SSWWE programs. The team will work diligently to determine respondents requiring further contact and coordinate directly with residents to investigate reported issues and determine potential causes.

---

**OUR TEAM WILL WORK DILIGENTLY TO DETERMINE RESPONDENTS REQUIRING FURTHER CONTACT & COORDINATE DIRECTLY WITH RESIDENTS TO INVESTIGATE REPORTED ISSUES**

---

OHM Advisors will document investigations and report back to the City on findings and recommendations for affected properties. OHM Advisors will work closely with the City to finalize the scope of sump pump and downstream system modifications and will perform designs of the improvements to ensure problem resolution after construction. Throughout this task, OHM Advisors will use digital tools to track and record various formats of inspection data for later reference during the project construction phase. These digital tools will include addresses and parcel numbers and will be able to link to the Ann Arbor GIS database. Specific tasks are detailed below:

1. Screen results and determine additional investigations.
  1. Screen survey list and determine list of sites requiring further investigation.
  2. Review list with City staff.
  3. Finalize list of residences for follow up.
2. Pre-investigation preparation.

1. Develop application for collecting field data and storing within a managed database. Data tables include:
  - a. Site data (address, etc).
  - b. Equipment.
  - c. Indoor piping.
  - d. Exterior piping.
  - e. Right of way (curb drain) piping.
  - f. Asset age.
  - g. Indoor conditions.
  - h. Exterior conditions.
  - i. Video obtained during investigation.
  - j. Photos from investigation.
2. Obtain installation data and history reports for each site, index based on address and store electronically for investigation reference. This includes Ann Arbor FDD information site data, available electrical and plumbing permits, CDM installation data, CDM paperwork, photos of home, communication log from CDM and city for those residences.
  - d. Log responses and develop report.
3. Site Visit with Additional Services.
  - a. If necessary, use CCTV equipment to investigate:
    - i. Foundation footing drains (up to 20').
    - ii. Internal discharge piping.
    - iii. External discharge piping.
    - iv. Curb drain piping.
4. Develop Reports.
  - a. Throughout the investigation phase, OHM Advisors will log information within an electronic database system. At the completion of investigations, standard reports will be generated from database, which will include:
    - i. Resident responses.
    - ii. Installation checklist.
    - iii. Photos.
    - iv. CCTV reports (videos).
    - v. Sketches.
    - vi. Recommendation of site valid, inconclusive, or invalid.

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## CONNECTING WITH RESIDENTS USING A TIERED APPROACH

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### 3. Investigations.

OHM Advisors proposes to connect with residents using a tiered approach. The approach will help sort the types of problems prior to entering resident homes and will also help to identify issues which can be addressed by providing additional operation materials. Those requiring site visits will include on site visual investigations as well as CCTV in areas where issues are not apparent from visual inspection. Specific tasks are listed below:

1. Phone Interview.
  - a. Collate existing installation data.
  - b. Perform half hour phone calls with each respondent.
  - c. Log responses.
  - d. Determine whether additional investigation is necessary and schedule visit if necessary.
2. Site Visit.
  - a. Schedule site visit using online form or phone.
  - b. Perform site visit.
  - c. Document site conditions including

### 4. Site Analysis.

1. OHM Advisors will develop a listing of preliminary findings based on the site investigations. Sites will be divided into categories based on conformance with City specifications. A meeting will be scheduled with the City every two months during the site inspection phase to discuss findings. Sites will be summarized as:
  - a. In compliance (number).
  - b. Out of compliance (number).
  - c. Unclear (number).
2. Based on the analysis, prepare preliminary list of suspected repairs to address issues.
3. Every two months meet with the City to discuss findings regarding site investigation.
4. Finalize list of projects based on City's decision.

### 5. Development of Projects.

1. Using findings from investigations, determine the scope of the work for each project. These projects will include three types of work.
  - a. Interior work.
  - b. Exterior work (resident property).
  - c. Right of way work (curb drains, catch basins, etc).

2. Develop schedule for work.

### 6. Review of FDD Standards.

Building codes and City engineering standards will be reviewed by OHM Advisors and updates to the existing FDD standards will be updated where applicable. OHM Advisors will also review the details against reported problems and will evaluate whether alterations will improve results.

1. Review standard details and specifications against existing city and national building codes. Review will include civil engineering staff as well as architecture and mechanical (plumbing and electrical).
2. Review the results reported under finding analysis and determine whether modifications will assist in alleviating problems.
3. Prepare a technical memorandum summarizing the findings of the review and recommendations for changes.
4. Meet with city to discuss changes and offer assistance for the City to formally adopt agreed upon items for its FDD program.

### 7. Design.

1. Develop the design of interior plumbing and sump pump system modifications to comply with City standards. This includes work at the footing drain, pump, piping, electrical and sump cover. As part of this, OHM Advisors will:
  - a. Reference existing installation records.
  - b. Use field report to develop schedule of required work.
  - c. Perform supplemental site visits to perform measurements, electrical and piping feasibility.
  - d. Develop sketch of the improvements.
  - e. Prepare opinion of cost.
  - f. Prepare a summary document for resident buy in (agreement).
2. Exterior projects will include work between the basement wall and right of way line. This type of project consists of pipe, earthwork and restoration. Specific tasks include:
  - a. Reference existing installation records.
  - b. Perform GPS based site survey (2D) locating landscaping, hardscapes and discharge lines within the yard area.
  - c. Prepare a sketch and summary of work for

project.

- d. Prepare opinion of cost.
  - e. Prepare a summary document for resident buy in (agreement).
3. Right of way projects will include work necessary to modify curb drains or catch basins connections within the City of Ann Arbor right of way.
    - a. Reference existing installation records and CCTV data collected during the investigation.
    - b. Perform full topographic survey of half right of way connecting between site footing drain discharge piping to proposed outfall location. A single survey crew day is assumed for each project.
    - c. Solicit utility information from city and franchise utilities.
    - d. Prepare base plan sheets.
    - e. Prepare plan and profile of the proposed curb drain right of way piping.
    - f. Provide draft construction plans to the City review and approval.
    - g. Create final plans and specifications for City to Bid the work. It is anticipated that all right of way projects can be bundled and bid under a single project.
    - h. Submit for applicable right of way permit and soil erosion permit if necessary.

### 8. Project Management.

1. Develop a list of projects.
2. Prepare schedule.
  - a. Determined by time of the year – (focus non-external projects in the winter).

## C. CONSTRUCTION MANAGEMENT AND RESIDENT SUPPORT

Under this task, OHM Advisors will develop contract documents for residents and will help create a prequalified contractor list to help ensure timely modifications of sump pump systems. OHM Advisors' experienced team will work throughout the Construction phase to help ensure that residents understand the scope of the proposed work and its impacts to their property. OHM Advisors will also provide observation to ensure compliance with the construction specifications, homeowner satisfaction with the work and payment to the Contractor at the end of the project. Specific tasks are discussed below:

1. OHM Advisors will develop a Resident - Contractor Boilerplate Contract for use during construction of work on private property. The contract will include the following sections:
    1. Insurance.
    2. Agreement.
    3. General Conditions.
    4. Specifications.
    5. Method of Payment.
  2. To ensure that quality work is performed during construction, a prequalification process will be used. The prequalification will be used to vet contractor ability, capacity and experience. The process will use the following tasks to achieve this:
    1. Develop proposal package.
      - a. Include sample boilerplate agreement.
      - b. Develop a one package for interior work prequalification (plumbing, electrical, finishes).
      - c. Develop one package for comprehensive prequalification (interior + underground & site).
    2. Coordinate an internal review from City Engineering and legal support.
    3. Solicit proposals.
    4. Evaluate proposals.
    5. Recommendations.
  3. Construction manager.
    1. Hold a pre-construction team meeting between the City, prequalified contractors, the construction manager and the OHM Advisors construction observer.
    2. Discuss critical success factors.
    3. Discuss preliminary schedule.
    4. Develop a standard site inspection form (pre, during and post) and review with City.
  4. Scheduling work.
    1. Prepare a resident notification letter of the program.
    2. List prequalified contractors for the work.
    3. Follow up with residents to ask if they received the letter and when work can be scheduled.
  5. Construction phase.
    1. Pre-construction site inspection and walkthrough will be held between OHM Advisors CM and the Contractor. (Complete pre-project checklist and have resident sign). The meeting will include a site walkthrough with the resident to describe and locate all aspects of the work and any impacted areas of the resident's home.
  2. Provide resident with a joint letter from City, Contractor and OHM Advisors CM regarding the proposed work. This will include a summary of the work as well as a schedule, contact information and anticipated cost. This will become part of the Contract.
  3. OHM Advisors will prepare the contract and ensure all parties are in agreement. OHM Advisors will verify that the contract is signed between the Contractor and Homeowner before work begins.
  4. Work will be performed by the Contractor at their convenience. OHM Advisors will arrange for interim inspections to be performed throughout construction to ensure compliance with the specifications.
  5. OHM Advisors will provide construction layout services for improvement within the right of way. This will include providing line and grade of structures and curb drains. It is assumed that one day of layout will be necessary for each project (\$1600/day).
  6. If work change becomes necessary due to unforeseen circumstances, OHM Advisors will consult with City and Contractor on changes and costs. OHM Advisors will serve as communication lead with homeowner to facilitate timely decisions and convey any impacts from the changes..
  7. OHM Advisors will monitor the Contractor progress against the proposed schedule. Report back on progress to the City.
  8. Upon substantial completion of work, the Contractor shall arrange for inspection through OHM Advisors CM and necessary City Building Dept.
  9. Obtain final measurements and document installations prior to finishes and restoration.
  10. After finishes and site restoration perform final walkthrough and issue punch lists as necessary.
  11. Confirm completion of work (complete post-project checklist and have resident sign).
  12. Issue letter of recommended payment based on Contractor schedule of values/unit prices and completed work.
6. Collect data collectors.
    1. Get list of data collectors currently deployed from the City.
    2. Send mailer to residents to arrange a time to pick up.

## D. DEVELOP EDUCATION AND OUTREACH PROGRAM

The City's objective is to create a program to address the concerns identified in the 2013 SSWWE FDD Survey. The proposed project team will develop a comprehensive education program, using multimedia such as video, written materials and infographics. The materials and workshop content will be engaging, easy-to-understand and informative. All materials developed will be property of the City of Ann Arbor.

### PROJECT TEAM WILL DEVELOP A COMPREHENSIVE EDUCATION PROGRAM, USING MULTIMEDIA SUCH AS VIDEOS, WRITTEN MATERIALS, & INFOGRAPHICS

1. Perform existing information review and research.
  1. Review content from 2013 Survey and 2015 surveys and SSWWE Public Meeting summaries to determine most important topics for educational content.
  2. Review information already available from City of Ann Arbor's FDD program, including appropriate information from the FDD CAC and FDD website.
  3. Review information from other sources (videos, brochures, instructional guides, manufacturers).
2. Produce educational videos (1 to 2 minutes in length) and related material.
  1. Determine topics for videos. The team's initial brainstorm list includes:
    - What are the components of a sump and its collection system, why they are there, and what are the key points of failure?
    - Annual maintenance of a primary pump.
    - How to choose a backup system for your home?
    - What is an air gap, why is it important, and what to do if it is leaking water?
    - Annual maintenance of a water back-up.
    - Annual maintenance of a battery back-up.
    - How to inspect the perimeter of a home for drainage or grading concerns, egress windows?
    - How to inspect a whole house check valve?

- What to do if your primary pump fails?
  - What to do if you have a high water bill?
  - What to do if you have a sanitary sewer back-up?
2. Storyboard/outline each video.
  3. Develop and maintain library on the City's web page.
  4. Shoot videos.
  5. Review and edit videos.
  6. Create infographics to visually explain complex ideas.
  7. Create or revamp other educational materials: instruction guides, brochures.
  8. Deliver videos to City in digital format and coordinate with City on file format.
3. Develop and conduct educational workshops (3).
    1. Design workshop format.
    2. Create/collect workshop materials: demonstration items, collateral material.
    3. Communicate workshop purpose/date/time:
      - City website public calendars.
      - Press releases.
      - City email list.
      - Direct mail to FDD homes.
    4. Hold workshops (3).
    5. Write workshop summary (3).
  4. Write final report, summarizing and documenting Public Outreach and Education.

The public outreach and education team will document all outreach and education activities in a written, summary document. This includes the documentation of all meetings, workshops, materials created, Q & As and any additional public outreach activities.

## E. Public Outreach and Education Deliverables

1. Public outreach and education strategy.
  1. Situation Analysis – input for data collection & key issues to be addressed.
  2. Communication Objectives – clarify key objectives for outreach communications and workshop.
  3. Message Model – key messages describing the project.
  4. Target Audience Lists – external stakeholders, media, City staff.
  5. Engagement Matrix – schedule timing of key meetings/content development/workshops.
  6. Outreach/Education Plan with Milestones – coordinate timing of outreach & meetings.

2. Plan, facilitate, document meetings/workshops.
  1. Project team meetings.
  2. Workshops (3).
  3. Summary report.



3. Prepare and distribute educational materials.
  1. Survey instrument created, distributed, and analyzed.
  2. Develop printed and electronic information kits for stakeholders and media announcing project.
  3. Create outreach and education materials: videos, presentations, infographics, informational handouts, and press releases.
  4. Project website, content creation and updates to site.





**E. Authorized Negotiator**

## AUTHORIZED NEGOTIATOR

The following individuals are authorized to negotiate the Professional Services Agreement with the City.



**Vyto Kaunelis, PE**

Environmental & Water Resources Director  
734.466.4435  
vyto.kaunelis@ohm-advisors.com  
34000 Plymouth Road  
Livonia, MI 48150



**Jon Kramer, PE**

Vice President of Operations  
734.466.4581  
jon.kramer@ohm-advisors.com  
34000 Plymouth Road  
Livonia, MI 48150



**Ron Cavallaro, PE**

Operational Manager  
734.466.4467  
ron.cavallaro@ohm-advisors.com  
34000 Plymouth Road  
Livonia, MI 48150



## F. Appendices

**Vyto Kaunelis, PE**  
Principal in Charge &  
QA/QC



**Education**

- Master of Science in Civil Engineering, University of Michigan, 1984
- Bachelor of Science in Civil Engineering, University of Michigan, 1976

Professional Registration  
Professional Engineer, MI,  
1979, #27579

**Experience**

37 years of experience, 10  
years with OHM Advisors

**Professional Affiliations**

- Water Environment Federation
- American Public Works Association

**Background**

Vyto Kaunelis is a principal at OHM Advisors and currently serves as the Chairman of the Board. He is responsible to his clients to provide innovative, cost-effective, and quality solutions to the variety of issues facing communities today. He focuses on the big picture to create unique solutions, which often involves local communities and regional agencies collaborating to achieve greater results than they could individually. Examples of this include his involvement on the DWSD Water System Technical Advisory Committee (TAC) activities, the formation of the North Oakland County Water Authority, the Wayne County NHV/RV sanitary system wet weather plan to meet MDEQ requirements, and the Oakland County Water Resources Commissioner's implementation of a unique monitoring and billing system for the Clinton-Oakland Sanitary Disposal System.

In several positions with Wayne County, including several years as the appointed Drain Commissioner, he dealt with numerous projects. Initiation and completion of all projects achieved the desired results and generally resulted in a high level of satisfaction for the customer. This was particularly important for Wayne County due to a low level of trust from factors pre-dating the administration for which he worked. This experience has provided a public sector perspective on implementation of successful projects.

Vyto also served on the State of Michigan Combined Sewer Overflow and Sanitary Sewer Overflow Policy Development Committees.

**Select Relevant Experience**

**Sanitary Sewer Wet Weather Evaluation Project, Ann Arbor, MI - 2014**

Vyto served at the Principal in Charge for this project. The City retained OHM Advisors to perform an evaluation of the effectiveness of the FDD program and develop alternatives for improving the sanitary system. Our approach included flow metering, FDD effectiveness evaluation, hydrologic modeling, hydraulic modeling, capacity assessment, alternative evaluation, and an extensive public engagement program.

**Wayne County As-Needed Services for Wastewater Facilities, Wayne County, MI – 2008-2011**

Principal in Charge for as-needed services for a number of combined sewer overflow and regional transportation systems. The scope of work included long-term planning for all the facilities and implementation for a variety of improvements.

**Wayne County CSO Basin Improvements, Wayne County, MI – 2011-Ongoing**

Principal in Charge for the first phase of improvements to CSO basins including sampling systems, roof repairs, power monitoring system, and piping support replacements.

**City of Dearborn CSO Program, Dearborn, MI – 2009-Ongoing**

Assisted in developing a Revised Basis of Design report for the City's CSO control program. The City had been constructing deep shafts, but was running into significant problems. Alternatives were developed on how to modify the program in order to meet state CSO policy at the lowest cost. Since completion of the study, we have been working with the City to implement the recommendations.

**Vyto Kaunelis, PE**

Principal in Charge &amp; QA/QC

**Combined Sewer Overflow Long-Term Control Plan, City of Peoria, IL – Ongoing**

As a subconsultant to Symbiont, OHM Advisors performed hydrologic modeling using the i3D antecedent moisture model. The model used the long-term flow metering data (several years) from the main interceptor to develop “parent models” that accounted for long-term impacts of antecedent moisture variations. The parent models were then scaled to the local temporary flow metering data to develop accurate hydrologic models for the local sub-districts. This allowed accurate model development from a relatively short period of local flow metering, and provided a mechanism to best extract useful information from the temporary metering program.

**Evergreen-Farmington Sewage Disposal System, Long Term Corrective Action Plan, Oakland County Water Resources Commissioner – 2009-2010**

Principal in Charge for development of a long term plan to address sewer overflows from the County’s EFSDS system, which collects sewage from 15 communities comprising over 300,000 people. The project scope included detailed field investigations, modeling, analysis, development of alternatives, and development of the Long Term Corrective Action Plan. The project is being conducted in a phased approach and additional work is ongoing.

**Evergreen-Farmington Sanitary Disposal System – Billing System, Oakland County Drain Commissioner, MI – 2008-2009**

Principal in Charge for the development of a flow-meter based billing system for this regional collection system serving approximately 350,000 people in fifteen communities. Scope included flow meter data review, mass flow balance, billing system development, community coordination and processing of flows for the bills.

**Oakland Macomb Interceptor Drain Design (OMID), Oakland and Macomb Counties, MI – 2009**

Principal in Charge for OHM Advisors for the design of the upgrades to the OMID. Oakland County and Macomb County formed a Chapter 21 Drainage District to take over operation and maintenance of the OMID, which collected sewage from approximately 900,000 people in the two counties. The pipe was constructed in the early 1970’s with cast-in-place concrete using tunneling and is approximately 25 miles long and

consists of pipe sizes ranging in size from 48-inch to 144-inch in diameter ranging from 20 to 120 feet deep. The interceptor has deteriorated in many sections, and several sink-holes have occurred along its length, necessitating several expensive emergency repairs. Subsequent inspection of the interceptor revealed that major rehabilitation to the interceptor is necessary to maintain proper continued operation. OHM Advisors was a sub-consultant to NTH for the design and our scope included survey of approximately 35% of the interceptor, survey for easements documents, topographic mapping for two of the structures and design of the bypass pump station contained within one of the four flow control structures. The bypass pump station has a capacity of 90 cfs, is 85 feet deep and is built within a 65-foot diameter structure to house the station, gates and access shaft for equipment. The preliminary cost estimate for the station is approximately \$6 million.

**North Huron Valley/Rouge Valley (NHV/RV) Sanitary Sewer Evaluation Survey, Wayne County Department of Environment, MI – 2008**

Principal in Charge for a study that analyzed potential infiltration and inflow sources along the NHV/RV interceptor system. The project consisted of field inspection approximately 1100 manholes, televising of roughly 30 miles of sewer interceptors and analysis of the field work.

**Combined Sewer Overflow (CSO) and Stormwater Planning Study, Village of Hinsdale, IL – 2007**

OHM Advisors performed hydrologic modeling for the Village of Hinsdale, Illinois, Combined Sewer Overflow (CSO) and Stormwater Planning Study. The Village desired to examine alternatives to reduce CSOs and peak flows discharged to the two regional sewer districts to which they discharge. The Village sewer system is very complex, with a mixture of separate and combined systems, multiple bypasses, interconnections of the separate and combined systems and multiple connection points to the regional sewer districts. Understanding the sub-district characteristics and system flows was a very important component of the planning project. OHM developed a strategy to understand the system hydrology despite the very complex system hydraulics using the i3D antecedent moisture model and focusing on the small and medium storms for which the system hydraulics were well understood. This system understanding then provided the framework for design storm analysis and development of CSO control alternatives.

## Robert Czachorski, PE

Project Manager



### Education

- Master of Science in Hydraulics in Civil Engineering, University of Michigan, 1996
- Bachelor of Science in Civil Engineering, University of Michigan, 1994

### Professional Registrations

Professional Engineer:

- MI, 1998, #43827
- OH, 2009, #73798

### Experience

21 years, 11 with OHM Advisors

### Professional Affiliations

- American Institute of Hydrology - Registered Professional Hydrologist
- Michigan Water Environment Association - Collection System Committee Member
- Michigan Water Environment Association - Member, Past Vice President

### Background

Robert Czachorski has 20 years of experience in consulting with a primary focus on water resources and municipal engineering. He has been a project manager for dozens of water resources projects and has been the client representative for some of OHM Advisors' largest accounts, including the Oakland County Water Resources Commissioner, the Metropolitan Sewer District of Greater Cincinnati, and Ypsilanti Community Utilities Authority. He is our team's lead technical expert on sanitary collection systems and leads all of our team's national sewer work. He is responsible for managing and overseeing a variety of projects for water, sewer and storm water systems, as well as mentoring, managing and developing a project staff of 8 to 12 people.

Robert is a nationally recognized expert in wet weather issues and sanitary collection systems. He has published several papers that highlight many unique insights and techniques for system analysis, including a new hydrologic model for antecedent moisture impacts on sewer systems, which resulted in a 2001 Award from the Water Environment Federation (WEF) and a 2007 award from the Consulting Engineers Council, the leading industry professional association. Robert has presented this work and received regulatory approvals for projects in Michigan, Illinois, Indiana, Wisconsin and EPA Region 5. He has conducted sanitary sewer studies for which he performed flow metering analysis, I/I studies and hydrologic and hydraulic models for some of the largest collection systems in the country. Robert has performed water and sewer studies for nearly 100 municipal utility systems throughout the country. He has helped these agencies gain a better understanding of the system, improve system performance, and optimize capital upgrades.

### Select Relevant Experience

#### Sanitary Sewer Wet Weather Evaluation Project, Ann Arbor, MI - 2014

Robert served as the Project Manager for this project. The City retained OHM Advisors to perform an evaluation of the effectiveness of the FDD program and develop alternatives for improving the sanitary system. Our approach included flow metering, FDD effectiveness evaluation, hydrologic modeling, hydraulic modeling, capacity assessment, alternative evaluation, and an extensive public engagement program.

#### I/I Removal Evaluation for West Bloomfield, Waterford and Auburn Hills, Oakland County WRC, MI - 2012

Program Manager and technical lead for the evaluation of I/I source removal for several communities tributary to the Clinton-Oakland Sewage Disposal System (COSDS). Over 10 years of flow meter data, spanning a period before and after system rehabilitation, were used to quantify the impacts of sewer rehabilitation and footing drain removal programs. The Antecedent Moisture Model was also used to quantify the hydrologic impact for each footing drain removal and identified the reductions in the individual flow components.

#### Sanitary Sewer Flow Monitoring Standard Operating Procedures, Metropolitan Sewer District of Greater Cincinnati, OH - 2012

Prepared standard operating procedures for operations (SOPs), maintenance and analysis of over 300 sewer flow meters and rain gauges for MSDGC. As the District began working with multiple vendors for flow and rainfall monitoring, they desired to have a consistent set of standards to be followed for field procedures and data processing. OHM prepared a series of SOPs memos

**Robert Czachorski, PE**

## Project Manager

documenting all aspects of existing practices and made recommendations for enhancements.

**East Side Interceptor Sewer Study, City of Bloomington, IL – 2012**

Technical lead for the evaluation of the City's East Side Interceptor, including analysis of meter data and wet weather modeling. The antecedent moisture model was used to evaluate the design peak flows and storage requirements for the development of a comprehensive sanitary Master Plan.

**Rock River Water Reclamation District Hydrologic/Hydraulic Analysis, Rockford, IL - 2011**

Project Manager responsible for evaluation of flows within the Rock River Water Reclamation District sewer system to evaluate the sizing for a wet weather storage lagoon and influent pumps. The antecedent moisture model was used to perform a continuous simulation and frequency based approach for sizing storage.

**Evergreen-Farmington Sewage Disposal System, Long Term Corrective Action Plan, Oakland County WRC, MI – 2009-2012**

Program Manager for development of a long term plan to address sewer overflows from the County's EFSDS system, which collects sewage from 15 communities comprising over 300,000 people. As program manager, responsibilities included leading the project team and subconsultants, developing the project scope and schedule, developing the program strategies, managing the technical tasks and coordinating with the 15 communities and the MDEQ. The project scope included detailed field investigations, modeling, analysis, development of alternatives, and development of the Long Term Corrective Action Plan.

**Oakland Macomb Interceptor Drain Design (OMID), Oakland and Macomb Counties, MI – 2009-2012**

Project Manager for OHM for the design of the upgrades to the OMID. Oakland County and Macomb County formed a Chapter 21 Drainage District to take over operation and maintenance of the OMID, which collected sewage from approximately 900,000 people in the two counties. The pipe was constructed in the early 1970s with cast-in-place concrete using tunneling and is approximately 25 miles long and consists of pipe sizes ranging in size from 48-inch to 144-inch in diameter ranging from 20 to 120 feet deep. The

interceptor has deteriorated in many sections, and several sink-holes that have occurred along its length, necessitating several expensive emergency repairs. OHM scope included survey of approximately 35% of the interceptor, survey for easements documents, topographic mapping for two of the structures and design of the bypass pump station contained within one of the four flow control structures. The bypass pump station has a capacity of 90 cfs, is 85 feet deep and is built within a 65-foot diameter structure to house the station, gates and access shaft for equipment. The preliminary cost estimate for the station is approximately \$6 million.

**Sanitary Sewer Modeling Study, Galesburg, IL – 2010**

Performed a modeling study of the City's sewer system to evaluate the cost effectiveness of storage and pump capacity upgrades. The study included hydrologic modeling using the i3D antecedent moisture model, hydraulic modeling, alternative overvaluation and cost estimates. The report recommended a strategy for cost effectively improving the system and addressing regulatory requirements to reduce overflows.

**Heart of the Valley Metropolitan Sanitary District Modeling, WI – 2009**

Project Manager for The Heart of the Valley (HOV) Metropolitan Sanitary District hydrologic evaluation of the system flows and rehabilitation. The intent of this evaluation is to provide a sound, defensible and scientific approach to evaluating the levels of inflow and infiltration (I/I) in the system and the effectiveness of the rehabilitation program to date and going forward.

**Combined Sewer Overflow Long-Term Control Plan, City of Peoria, IL – 2008**

As a subconsultant to Symbiont, OHM performed hydrologic modeling using the i3D antecedent moisture model. The model used the long-term flow metering data (several years) from the main interceptor to develop "parent models" that accounted for long-term impacts of antecedent moisture variations. The parent models were then scaled to the local temporary flow metering data to develop accurate hydrologic models for the local sub-districts. This allowed accurate model development from a relatively short period of local flow metering, and provided a mechanism to best extract useful information from the temporary metering program.

**Justin Woods**  
Assistant Project  
Manager/Construction  
Management



**Education**

Bachelor of Science  
in Water Resource  
Management/  
Environmental Studies,  
Central State University,  
1998

**Certifications**

- 40 hour OSHA Training
- 8 -hour Refresher  
OSHA Training
- Health and Safety  
Supervisors
- Troxler Nuclear Gauge  
Operations

**Honors/Awards**

- Honors/Awards
- "International Center  
for Water  
Resources  
Management Award,"
- Keynote Speaker, 4th  
Annual
- Senior Awards  
Banquet, Central  
State University, 2001

**Background**

Justin Woods is an environmental scientist experienced in construction quality assurance (CQA) including monitoring of landfill closures, observation and documentation, geo-membrane installation, soil boring, sampling and stability evaluation, topographic grade, quality surveying and collecting water samples from wells containing leachate. Justin has also written environmental assessment reports for clients.

Prior to joining OHM Advisors, Justin was an environmental technician. His duties included preparing environmental assessment reports, developing wells, soil testing, developing soil boring logs, surveying landfills, and installing water meters and geo-membrane.

Justin participated in a NASA summer internship where he conducted research for the NASA High Performance Summer Computing Institute. Working with the KINEROS erosion model for watershed modeling. Mr. Woods' research showed various parameters that affect watersheds.

**Select Relevant Experience**

**Field Engineer, Kalamazoo River Sampling Survey, Kalamazoo, MI**

Mr. Woods is involved in the Kalamazoo River Superfund project. He assists with electro-shocking fish for sampling surveys. Mr. Woods also performs soil and water sampling and provides oversight for sampling projects and works with drillers installing groundwater wells. Mr. Woods performed a wetland delineation, using a hand held GPS unit, marking wetland boundaries throughout the Kalamazoo River impoundment areas. He also inputs data into a master database regarding samples collected out in the field. Additionally, he coordinates the Health and Safety Plan for the Kalamazoo River Superfund Project.

**Environmental Scientist, Environmental Assessment, Detroit, MI**

For the Detroit Water and Sewerage Department (DWSD), Mr. Woods assisted on an environmental assessment regarding plant inspections concerning possible hazardous materials in buildings.

**Environmental Scientist, Detroit River Water Quality Workgroup, Detroit, MI**

For the City of Detroit, Mr. Woods performed field testing of water quality, boat driving, including working with a diving crew and running the GPS unit to locate samples.

**Environmental Scientist, Greater Detroit Regional Sewer System, Detroit, MI**

Mr. Woods was responsible for data collection, initial data review and communication of metering problems for wastewater transported to the DWSD plants.

**Environmental Scientist, Dye Dilution Tests, Detroit, MI**

Mr. Woods performed dye dilution tests throughout the Detroit region for DWSD using a flourometer and spectrophotometer to establish flow estimates made with meters that have been tested in the present areas. He also analyzed the dye testing data and performed lab work. Results of the tests are presented to the Flow Metering Task Force under the GDRSS project.



**Justin Woods****Assistant Project Manager/Construction Management****Environmental Scientist, Sanitary Sewer Model and Geographic Information System Data Collection, Ann Arbor, MI**

For the city of Ann Arbor Mr. Woods used a Global Positioning System (GPS) to locate coordinates for Sanitary and Storm drain sewers. He provided data for a network coordinate system.

**Environmental Scientist, Footing Drain Disconnect Construction Management, Ann Arbor, MI**

Mr. Woods is an assistant Construction Manager for the (FDD) Footing Drain Disconnect project in which he provides oversight over various contractors who disconnect the footing drains from the house sanitary lead and install sump pumps. He also inspects all homes throughout the Ann Arbor area looking for the footing tile connections and deals with home owners who will have these disconnects done. Mr. Woods deals with all payment issues, home owner issues and sets up and conducts presentations when bringing in new neighborhoods to have disconnections done. For the city of Ann Arbor he uploads flow data from the homes with sump pump installations and televised the sump discharge lines with a TV camera to make sure there was no backup flow throughout the lines.

**Environmental Scientist, Pavement Management System Visual Inspection, Detroit, MI**

For the Detroit Metro Airport Mr. Woods assisted Kimley Horn & Associates with the pavement management survey inspecting various runways throughout the airport for cracks and abrasions, he also helped coordinate daily task shutting down the various runways for inspection.

**Environmental Scientist, Malletts and Allen Creeks Open Channel Inspection, Washtenaw County, MI**

For the Washtenaw County Drains Commission Mr. Woods walked various creeks and streams sampling out falls and also manholes testing the pH and other parameters to be sent to a lab analyzing.

**Environmental Scientist, SHUVA GPS Fieldwork, Rockwood, MI**

Mr. Woods was responsible for leading a field team to locate manhole locations for the city of Rockwood, Michigan. Mr. Woods used a GPS Trimble Unit to identify and locate these locations.

## Teresa Weed-Newman

### Public Planning



#### Education

Bachelor of Arts in Business with an emphasis in Human Resources Management, Walsh College of Business & Accounting

#### Professional Affiliations

- Registered Myers Briggs Type Indicator
- Consultant Member of the Association for Psychological Type (APT)
- Member of the American Water Works Association (AWWA)
- Founding Member of the Southeast Michigan Women President's Organization

### Background

Teresa is a Senior Consultant and Business Professional with strong technical knowledge, leadership skills, and an ability to create and maintain relationships at all organization levels. She graduated from Walsh College of Business and Accountancy majoring in business with an emphasis in Human Resources Management.

She assists clients in developing customer outreach programs, creating team oriented work environments, individual and organizational development, and resolving conflict in public and private organizations.

### Select Relevant Experience

#### **Detroit Water and Sewerage Department (DWSD)**

Project manager of the wholesale water and sewer customer outreach project. The project focuses on creating workgroups comprised of water and wastewater utility staff, wholesale customers, and consultants to collaboratively solve issues facing their stakeholders.

Coordinator for the DWSD Water Contract Negotiation Team that is responsible for negotiating 30-year water contracts between DWSD and their 86 wholesale water customers.

#### **Southeast Oakland County Resource Recovery Authority (SOCRRA) and Southeast Oakland County Water Authority (SOCWA)**

Organizational Development and Human Resources Consulting Services.

#### **City of Ann Arbor - Facilitation of the public engagement process for the Water Treatment Plant Facilities**

Master Plan and Water Resources Plan. Responsible for interviewing 20 key stakeholders and facilitating the Public Advisory Committee Meetings.

#### **Published Works Include:**

- *Tackling Organizational Conflict: Can This Team Be Saved?* – APT Bulletin
- *Leveraging Personalities to Create Powerful Teams* – *Detroit Magazine*
- *Teambuilding That Gets Results* – Contributing Author in book written by Linda Eve Diamond and Harriet Diamond
- *Oppositional Types: What To Do When The Problem is A Family Affair* – APT Bulletin
- *You Can't Be Who You Want To Be Until You Know Who You Are* – *MBPA Magazine*

**Lori Nash Byron**  
 Infographics & Public  
 Relations



**Education**

Bachelor of Arts, English  
 Communications,  
 University of Michigan

**Experience**

23 years, 3 years with  
 Famous in Your Field, 6  
 with OHM Advisors

**Professional Affiliations**

- Society for Marketing Professional Services
- Michigan Business & Professionals Association

**Published**

- ASPIRE Magazine
- CORP! Magazine
- Mining, People & the Environment magazine
- Design Cost Data Magazine
- Great Lakes Reporter Magazine
- Mining Today Magazine
- SMPS Marketer Magazine
- Michigan Municipal Review Magazine
- Zweig Marketing Letter
- Houghton Gazette Newspaper
- Livonia Observer Newspaper

**Background**

The public outreach and education portion of the efforts outlined in this proposal will be led by Lori Nash Byron, in partnership with Project Innovations and OHM Advisors. Prior to launching her own consulting business, Lori spent six years as the marketing director for OHM Advisors.

While with OHM Advisors, she led public engagement efforts on several large projects including the Northwestern Connector Project, a \$40+ million, multiphase transportation project. Most recently, she provided communications and public engagement services on the City of Ann Arbor's \$1.2 million Sanitary Sewer Wet Weather Evaluation project.

Byron has 20 years experience in the communications and marketing field. She excels at writing, public speaking and communicating technical information to non-technical audiences.

**Select Relevant Experience**

**Sanitary Sewer Wet Weather Evaluation Project, Ann Arbor, MI – 2014**

This \$1.2 million study, evaluating portions of the City's sanitary sewer system's performance and capacity during wet weather events, included extensive public engagement. Byron's role is to convey large amounts of technical information to a non-technical audience, using traditional and digital communication methods such as video, infographics, written material and social media.

**Northwestern Connector Project, Road Commission for Oakland County, MI – Ongoing**

The Northwestern Connector project is a \$50M multi-phase traffic improvement project in Oakland County, Michigan, located in two urban communities. NWC includes the largest concentration of multi-lane roundabouts in the US. To educate the public on roundabouts, how they function, the rules of driving and how to negotiate, OHM Advisors Lori created an extensive public education program. This includes a website, a brochure, media event, magazine articles, press releases, group presentations and a video, hosted by radio personality, Paul W. Smith. Here are comments from roundabout experts on the educational video:

**Role on the project:**

- Wrote content for brochure, educational video script, on-camera talent, website content
- Wrote press releases
- Organized project launch media event
- Conducted presentations for community groups
- Organized and conducted public meetings on the project

**ClearVision Business Advisory – 2013-2014**

Provided marketing strategy, execution and publicity services to this coaching and consulting company, serving small business owners. Developed marketing plans, marketing communications, publicity plan, and email campaigns.

Highlights include: ghostwriting and publishing a business book to elevate the business owner's profile in the marketplace.

**Child Care Daily App – 2011-2012**

**Lori Nash Byron**

## Infographics &amp; Public Relations

Provided marketing strategy, execution and publicity services to this technology company, serving the organized child care industry. Developed marketing plans, marketing communications, publicity plan, and email campaigns.

Highlights include: redesigning the company website, developing email campaigns, securing speaking engagements at national industry conferences, front page article in Ann Arbor News business section, radio interviews on WJR and the Lucy Ann Lance Show, and increasing lead volume.

**Beck Technology, Ltd. – 2010-2012**

Provided marketing strategy, execution and publicity services to this technology company, serving the major construction industry. Developed marketing plans, marketing communications, publicity plan, and email campaigns. Conducted video interviews, organized webinars, pitched publications, wrote articles, white papers, and press releases.

**OHM Advisors, Livonia, MI – 2003-2010**

As OHM Advisors' Marketing Director for six years, Byron led all marketing efforts for the firm. This included developing marketing strategy and executing marketing plans for the firm's multistate offices.

- During her tenure with OHM Advisors, she led public engagement efforts for several large municipal projects.
- Conceived and held dozens of educational workshops, drawing 50-150 attendees at each.
- Wrote educational articles on innovative engineering concepts, resulting in a first place listing on Google, global inquiries, national webinars and media mentions.

**Greg Marker, PE**  
Investigations & Design



**Education**

- Bachelor of Science in Civil Engineering, Lawrence Technological University, 2004
- Bachelor of Science in Biology, Michigan State University, Lyman Briggs College, 2000

**Professional Registration**  
Professional Engineer, MI,  
2009, #6201056617

**Experience**

15 years, 12 with OHM  
Advisors

**Certifications**

- Michigan Public Service Institute, 2013
- Soil Erosion and Sediment Control Act Administrator, 2006
- Office Technician Training, Michigan Department of Transportation, 2006
- Confined Space Entry, 2006
- Waterworks System Operator Class S-3, 2006

**Background**

As Field Client Representative with OHM Advisors' Construction Engineering Department, Greg is responsible for maintaining project scopes, budgets, and quality of work while fostering positive relations with the business owners and residents affected by the ongoing work. He is also responsible for correctly interpreting engineering drawings, authorizing changes from the approved plans, communicating changes to clients and regulatory agencies, and administering the terms of the construction contracts. Greg is the project engineer from the preconstruction meeting through to final closeout.

Greg is familiar with reviewing construction materials in the field for acceptance and is qualified to ensure compliance with plans and specifications. He has recorded and reported quantities used on projects; ensured that daily inspection reports relay clear and concise information to others associated with the project; prepared daily inspection reports with detailed sketches, descriptions and records of quantities used in relationship to the project and filing these records daily as the project engineer. He has been in charge of overall budget tracking, change order and quantity disputes, contract modifications, monthly estimate production, in addition to negotiations with construction company representatives as the project engineer. Mr. Marker is experienced in all facets of a construction project from inspiration of an idea, through to final closeout.

**Select Relevant Experience**

**Pilot Footing Drain Removal, Livonia, MI – 2013-Ongoing**

Project Engineer for 15 sump pump installations in residential homes, including interior and exterior discharge piping. Interior restoration and exterior restoration work on all 15 homes, including landscaping; grass; and sidewalk, road, and driveway concrete repairs. 435 lft of directional drilled of 6" HDPE SDR 17 pipe for underground collection systems.

**2013 Watermain Projects Bradley, Snow and Northeast Area, Ypsilanti Twp, MI – 2013**

Project engineer for installation of approximately 16,000 feet of water main and of appurtenances within portions of sections 2 and 24 of the Charter Township of Ypsilanti. The project will also include 34,000 square yards of HMA pulverizing, 6,100 tons of HMA, and 24,000 square feet of sidewalk improvements within the project limits for the Washtenaw County Road Commission (WCRC). Project included pipebursting, directional drill, and open cut installation with 350 homes (water services), 200 feet of parallel sewer and over 80 sanitary service repairs.

**West Park Storm Water Completion Project, Ann Arbor, MI – 2012**

Project engineer for the construction phase of removing certain storm drainage structures and storm sewer, and constructing new structures on two sections of 54-inch storm sewer that comprise portions of the north and south branches of the Allen creek drain. The work included installing stop log assemblies in two of the structures, constructing HMA and concrete paving, installing various site improvements, completing site restoration and all related work.

**Mallet's Creek Stream bank Stabilization, County Farm Park, Washtenaw County Water Resources Commission, MI – 2011-2012**

Field Client Representative and Project engineer for 9,000 feet of stream bank stabilization and construction of a three acre off line detention pond. Stabilization techniques included rock toe protection, coir log with live stakes, and geogrid sandwich layered slope reconstruction. Project was a collaboration of WCWRC, Washtenaw County Parks and Recreation, MDOT,

**Greg Marker, PE**  
Investigations & Design

MDEQ, City of Ann Arbor, and Ann Arbor Township all in, Washtenaw County.

**Rolling Hills County Parks – Phase 1 Master Plan Improvements, Washtenaw County Parks and Recreation Commission, MI – 2010-2011**

Field Client Representative and Project engineer for 9,100 feet of asphalt roadway with a roundabout, 16,700 lft of asphalt non-motorized trail, 170,000 cyd of earth moving, 2,100 syd of porous pavers, parking lot, and storm water improvements installed in three phases in Ypsilanti Township, Washtenaw County.

**Allen Creek Stormwater BMP's - Pioneer, Washtenaw County Water Resources Commission, MI – 2010-2011**

Field Client Representative and Project engineer for 250,000 cft of box culvert underground retention 25 feet deep. The project installed four 25 cfs storm water quality units to clean and retain the first flush from 308 acres of urban streets and neighborhoods. The project was installed under Ann Arbor Pioneer High Schools soccer practice field. 25% of the project cost was spent in extensive improvements to the school property including new sidewalks along two of the four sides of the property, 200 trees planted along the old river route with interpretive signs, two new fields installed, and a new plaza across from the U of M football stadium ADA compliant with brick pavers and architectural curves and details to emphasize and compliment the area.

**2010 Footing Drain Disconnection, City of Westland, MI – 2010-2011**

Field Client Representative and Project engineer for footing drain disconnections in 190 homes in three separate districts. The homes were chosen by approaching volunteers near the existing City storm systems. Assessments inside each home, negotiation with individual homeowners, supervision of the disconnection, and administration of the Contract were our main responsibilities.

**2010 Sanitary Manhole and Pipe rehabilitation, City of Westland, MI – 2010**

Field Client Representative and Project engineer for SRF funded rehabilitation of 350 manholes using both open cut and trenchless technology to rehabilitate structural issues and decrease inflow and infiltration. The pipe rehabilitation was

handled by the City's other engineer while we coordinated the Contract Administration.

**Sanitary Sewer Rehabilitation, Scio Township, MI – 2009-2010**

Field Client Representative and Project engineer for Pipe rehabilitation of 5700 lft of CIPP lining, 700 feet of open cut replacement, and 1800 lft of pipebursting. 11 service laterals were lined from the main to the house. A different project engineer handled the SRF funded rehabilitation of 175 manholes using both open cut and trenchless technology to rehabilitate structural issues and decrease inflow and infiltration on the project. Contract Administration was handled by both of us.

**Holmes Road Water Main and Paving Improvements Phase I, II, and III – Prospect to Michigan Ave, Washtenaw County Road Commission, MI – 2006-2011**

Field Client Representative and Project Engineer 16,000 lft of watermain replacement in collaboration of storm, road, and signal improvements from the Washtenaw County Road commission as part of an MDOT local agency project. The project included utility pole, gas main, phone, and cable relocation.

**Hewitt Valley Congress Watermain Improvements, Charter Township of Ypsilanti and Ypsilanti Community Utilities Authority, MI – 2006-2007**

Field Client Representative and Construction QA/QC Reviewer for abandonment and replacement of 1,400 lft of 12" water main, abandonment and replacement of 10,500 lft of 8" water main, and replacement of 50 Orangeburg sanitary leads. The project involved reconstruction of 1,400 lft of urban collector road, and had 350 water services. The 8" water main was constructed in green belt with no road disturbance using directional drill and open cut with ductile iron pipe.

**Westland RPO Footing Drain Disconnect Program – 2006**

Acted as the Field Client Representative and Project Engineer for the installation of collector pipes and 20 sump pumps in a variety of subdivisions in the City of Westland. Permanent meters were installed so that total flow removed from the homes could be monitored for the community's future information.

**Greg DeLiso**

## Videos



## Education

New York Film Academy,  
Directing Program, 2005

## Experience

- Project Innovations, Inc. - 2013-Present
- The Found Footage Festival (NYC) - 2009-Present
- Howcast (NYC) - 2009-2010
- MTV Productions (NYC) - 2005-2008
- Imaginasian TV (NYC) - 2006-2007

Business Website  
[www.okraptor.com](http://www.okraptor.com)

**Background**

Greg DeLiso is a founding member of OKRaptor Productions. OKRaptor combines the unique ability to extract simplicity from the complex and the ability to artistically transfer informational chaos from spreadsheet to screen, resulting in effective, creative, and affordable informational videos for savvy governmental officials looking to truly connect, touch, and impart important information into the minds of taxpayers and ratepayers.

OKRaptor Productions will deliver videos with an artistic vibe filled with critical facts, figures, and process information. Their videos translate “gobbledygook” into persuasive communication to ratepayers and taxpayers at an affordable price point.

To put it another way, OKRaptor creates short, coherent, and comprehensible aimed at taxpayers and ratepayers that explain complex governmental and/or organizational processes in simple, educational, and memorable ways.

From the spreadsheet to the silver screen, we change perceptions about what you are doing!

**Select Relevant Experience**

OK Raptor Productions serves the following classifications of clients:

- **Water Districts**
- **Waste Water Utilities**
- **School Districts**
- **Local Governments**
- **Private Businesses**

OK Raptor Productions has worked on the following projects:

- **City of Ann Arbor** - Waste Water Treatment Plant Introduction
- **City of Ann Arbor** - Footing Drain Disconnect
- **Detroit Water and Sewage Department** - Video Newsletters
- **Detroit Water and Sewage Department** - TAC Meeting Highlights
- **City of Ferndale** - In this Day & Age: The Story of Ferndale’s Five Year Strategic Plan
- **Bloomfield Hills School District** - 2008 Choosing Opportunity: The Ten Year Strategic Plan for BHS

## George Tsakoff, PE

### Design Engineer



#### Education

- Master of Science in Civil Engineering, Wayne State University, 2013
- Bachelor of Science in Civil Engineering, Michigan State University, 1998

**Professional Registration**  
Professional Engineer, MI,  
2013, #60848

#### Experience

16 years, 2 with OHM  
Advisors

#### Certifications

LEED Green Associate, US  
Green Building Council,  
2013, #10829562

#### Professional Affiliations

Chi Epsilon National Civil  
Engineering Honor Society,  
Wayne State University  
Chapter

## Background

As a Design Engineer in OHM Advisors' Municipal Services Group, George Tsakoff's responsibilities include general municipal consultation, engineering analysis, design, and contract preparation and administration for a wide array of civil and municipal improvement projects. George works on projects from start to finish including preparing construction plans, contract documents, and detailed specifications as well as assisting with the bidding and construction phases. He also has experience improving and analyzing water systems, water distribution and transmission systems, wastewater systems, storm drain and open channels, shared-use pathways and municipal facility sites. Additionally, he has worked on road replacement and rehabilitation projects.

George specializes in serving as an advisor to municipal clients to help them achieve not only their short-term goals and projects, but to think about and plan for the long-term. In this role, he assists with ongoing general engineering services, capital improvement planning and implementation, and grant and loan funding. He has experience with the State Revolving Fund, Drinking Water Revolving Fund, and the recent round of SAW Grant Funding for stormwater, asset management, and wastewater improvements. He also completes reviews for private roads and site plans for residential, commercial, and industrial developments. George is familiar with the public involvement process and has coordinated public meetings and hearings at all levels of government. Communities George has consulted and provided engineering services for public improvements over the last 15 years include the City of Ann Arbor, Charter Township of Northville, City of Novi, Salem Township, Ann Arbor Township, Plymouth Township, and Pittsfield Charter Township, to name a few.

## Select Relevant Experience

### **Base-Wide Water System Replacement, US Army Garrison, Detroit Arsenal, Warren, MI – 2013-Ongoing**

Lead Project Engineer for this multiple-phase project that replaces the existing fire and domestic base-wide water system. Professional services for the project include completing a hydraulic network analysis for a proposed dual water system to provide an optimal design of water main sizing and routing through the site. The project also required oversight of hydrant flow testing on both the City of Warren and DTA water systems related to establishing boundary conditions for the model. Upon completion of this hydraulic analysis, pipe sizing was finalized based on fire suppression demand recommendations for the site, as well as process and domestic water demands for existing buildings. A water main design was then completed with over 17,500 feet of new main installed.

### **Old US-23 Water Main Extension, Brighton Township, MI – 2013-Ongoing**

Lead Project Engineer for the engineering and design of a water main extension consisting of approximately 5,200 feet of 16-inch and 12-inch water main to be installed along with a booster station on the north side of I-96 on the west side of Old US-23. A majority of the water main installation was designed as directional drilling. George's project responsibilities include overseeing water main design and engineering, preparing the water main construction plans, providing site design and construction plans for the pump station site, detailed specifications, as well as assisting with bidding and contract administration throughout the entire project until final completion and system start-up.



**George Tsakoff, PE**

Design Engineer

**Sanitary Pump Station Upgrades, Canton Township, MI – 2011-2012**

Client Representative for work associated with upgrades to three existing package sanitary pump stations. George's role included QAQC of site plans, Wayne County permitting assistance, and project oversight related to quality and schedule.

**General Engineering Services, Charter Township of Northville, MI – 1998-2012**

Client Representative, Project Manager, and Field Services Representative to provide ongoing engineering and construction services to this community on an as-needed basis. George's tasks included completing engineering site plan reviews for private residential, commercial, and industrial development projects, hydraulic network analysis for water systems related to new developments, coordination of construction observation services, and final acceptance of projects. These tasks regularly involved attending Board of Trustee meetings and regular update meetings. George assisted with general maintenance or public improvement projects involving water supply, sanitary sewerage, shared-use pathways, and storm water management. He helped with funding for implementing public improvement plans. He also provided engineering consultation in regards to updating the Township Design Standards Ordinance for water, sanitary sewer, storm sewer, and paving requirements and provided regular updates to Township Standard Details for water, sanitary sewer, and storm sewer. From 1998 to 2000, he also provided field related services for private development projects in the Township related to construction observation and administration and supervision of internal field services staff.

**Water Main Loop at Arboretum, City of Ann Arbor – 2011**

Lead Project Engineer for 8" water main installation to create water system loop between two dead end water mains in neighborhoods bordering the park, installed along the limit of the Arboretum. Project consisted of approximately 1,200 feet of HDPE directional drill. Professional services included preliminary engineering, plan preparation, permitting, and contract documents.

**Low Pressure Sewer and Grinder Station Replacement, Hamburg Township, MI, Ore Lake – 2010-2011**

Project Manager and Lead Project Engineer for 4" and 3" low pressure sewer replacement by directional drill, approximately 20,000 feet of HDPE pipe. The project included replacing 500 grinder stations, one at each house around the lake, with E-1 Stations. Professional Services included preliminary engineering, engineering analysis, plan preparation, contract documentation, and contract administration.

**Main Street Sanitary Sewer Extension, Charter Township of Northville – 2010**

Project Manager and Project Engineer for 8" gravity sanitary sewer extension along Main Street to expand sewer service district within area of existing septic fields, approximately 2,000 feet. Professional services included preliminary engineering, plan preparation, permitting, contract documentation, and contract administration.

**Hudson Sanitary Pump Station Replacement, City of Novi, MI – 2010**

Project Manager for the design and contract administration for replacement of this existing pump station. Work effort consisted of engineering and design for replacement of the wet well structure and pumps and by-pass pumping design.

**Andy Schripsema,**  
**PE, PS**  
 Survey



#### Education

- Bachelor of Science in Land Surveying, Michigan Technological University, 2000
- Bachelor of Science in Civil Engineering, Michigan Technological University, 2000

#### Professional Registration

- Professional Engineer, State of Michigan, 2005, #52605
- Professional Surveyor, State of Michigan, 2008, #55483
- Professional Surveyor, State of Wisconsin, 2009, #2915-008

#### Experience

14 years, 7 with OHM Advisors

#### Certifications

- Integrated Distance Learning Environment (FAA IDLE) Level 3 Training for FAA Advisory Circulars AC 150/5300-16A, AC 150/5300-17C, AC 150/5300-18B, Certification, 2014

#### Background

Andy Schripsema's field experience includes crew supervision, data collection, boundary surveys, establishment of horizontal and vertical control using conventional and GPS methods, construction stakeout for buildings and roads, and underground utility studies.

Andy's office experience includes topographic data clean-up and processing using AutoCAD 2000, Land Development Desktop and Eaglepoint software packages; earth volume computations; building, road and bridge layout computations, least squares adjustments (conventional and GPS), performing boundary calculations, writing and checking legal descriptions; construction of Digital Terrain Models for use in machine grading, and interpreting engineering drawings. His responsibilities also include QA/QC of staking, deliverables and engineering plans.

Andy also has project management and design experience pertaining to site developments and road projects.

#### Select Relevant Experience

##### **Wolfe Drain Improvements, Wayne County Department of Environment, Wayne County, MI – Ongoing**

Project Surveyor responsible for collecting data for approximately 1.5 miles of drain in Brownstown Township. This was a typical drain project and included survey of heavily overgrown open channel sections and several difficult to locate enclosed drain sections.

##### **Rolling Hills County Park, Washtenaw County Parks and Recreation Commission, Washtenaw County, MI – Ongoing**

Andy served as the Project Surveyor and orchestrated aerial and ground surveying for more than 180 acres of topographic surveying. He has coordinated surveying efforts with the contractor for the layout of the project using GPS.

##### **Mill Street "Green Street" Project, Village of Pinckney, MI – Ongoing**

Project Surveyor for this project, which included procuring funding, analysis, design and construction engineering for what will be the first "green street" in Livingston County, Michigan. In anticipation of potential ARRA funding for "green" projects, our team approached the Village and agreed to prepare the required documents to attempt to obtain funds for the project. It is anticipated that 40 percent of the total project will be paid for through stimulus funds. The project will include porous pavers, infiltration trenches, infiltrative storm sewer and bioretention basins. This is one of only twelve stormwater projects to be funded by 2009 stimulus dollars in the state of Michigan.

##### **City of Dearborn CSO Program, Dearborn, MI – 2009-2010**

Survey Project Manager of approximately two miles of topographic surveying along roads and alleys and two site surveys. As a subconsultant to CDM, OHM Advisors provided local engineering and surveying services for the evaluation of different alternatives for the Dearborn 2010 CSO project. The project is to assist the City of Dearborn on revising the Design Basis Report and the combined system improvements to meet their commitments to the State of Michigan and the Federal Government.

**Andy Schripsema, PE, PS**  
Survey**Taft & Bishop Regional Detention Basin Enhancements, City of Novi, MI – 2010**

Project Surveyor for this project, which included modifications to the basin grading and outlet structures of two inline detention basins within the City of Novi. The intent of the project was to maximize storage within the basins to attenuate peak flows and reduce erosion along the Walled Lake Branch of the Rouge River and along the Bishop Creek. The completed project provided additional water quality benefits through redesign of the detention basins, restored over 500 feet of natural stream incorporating bioengineering, native plants and enhanced wild-life habitat to both areas.

**Adams Drain, Wayne County DOE, Wayne County, MI – 2010**

Project Surveyor responsible for collecting data for the 1.5 mile long Adams Drain in Huron Township in Wayne County. The design and analysis for this project focused the stream bank stability problems that were occurring along the drain. The analysis of the drain consisted of providing a balance between maintaining gradual channel side-slopes and provide enough channel capacity to adequately convey peak flows. Providing a cost effective solution was of paramount concern on this project such that the landowners in the drainage district were not burdened with excessively high assessments for the drain improvements. Construction for this project is tentative scheduled for summer 2011.

**Allens Creek Stormwater Project, City of Ann Arbor, MI – 2009**

Project Surveyor for this stormwater project which included assisting the WCDC and City of Ann Arbor in identifying retrofit opportunities and developing alternatives to implement stormwater management improvements in the Allens Creek watershed. The project included preparation of a MDEQ State Revolving Fund project plan to obtain funding for several of the proposed opportunities.

**Stormwater Management Retrofits, City of Auburn Hills, MI – 2009**

Project Surveyor for this project to improve stormwater quality, increase on-site infiltration and strive to meet the goals set forth in the Clinton River Watershed's Management Plan including reducing stormwater runoff to help restore the natural flow regime of the Clinton River. The City is retrofitting seven sites owned by the City with stormwater improvements that will reduce runoff quantity and improve quality through enhancing infiltration. Infiltration BMPs include rain gardens, bioretention basins, planter boxes and revegetation with native plantings.

**Harvard Drain and Nichols Arboretum Drainage Improvements, City of Ann Arbor and University of Michigan, MI – 2009**

Project Surveyor for this unique project that featured native landscaping and stepped pools for stormwater management. Our team was responsible for project oversight of analysis, design, and construction engineering services.

## Scott Habowski

### Inspector

#### Education

Bachelor of Science in  
Political Science, Eastern  
Michigan University, 2010

#### Professional Registration

- Professional Engineer,  
State of Michigan,  
2005, #52605
- Professional Surveyor,  
State of Michigan,  
2008, #55483
- Professional Surveyor,  
State of Wisconsin,  
2009, #2915-008

#### Experience

7 years, 2 with OHM  
Advisors

#### Certifications

NASSCO Pipe Assessment,  
PACP, MACP and LACP,  
expires 7/18/2017

## Background

Scott Habowski is a Construction Field Engineering Technician representing OHM Advisors' municipal clients during construction. He is responsible for daily communication, the oversight and supervision of inspection, construction engineering and contract administration for projects ranging from major utility construction and local road reconstruction.

## Select Relevant Experience

### Sanitary Sewer Pipe and Manhole Lining, Scio Township, MI – 2014-2015

Lead Field Engineering Technician for the Cured in Place lining of 2500 linear feet of sanitary pipe, including Vitrified Clay Pipe and Reinforced Concrete Pipe, and the lining and repair of sanitary manholes.

### Lakehaven, Geddes Lake Condos, Ann Arbor, MI – 2014

Lead Field Engineering Technician for the installation of 427 linear feet of 12" HDPE storm sewer, and the 4" PVC and Perforated Drain Tile connections from roof drains to the new sewer. Removal of asphalt and repaving of parking lot.

### City of Livonia Pilot Footing Drain Removal, Livonia, MI – 2013

Lead Field Engineering Technician for 15 sump pump installations in residential homes, including interior and exterior discharge piping. Interior restoration in all 14 homes. Exterior restoration work on all 15 homes, including landscaping and grass. 435 lft of directional drill installation of 6" SCH 40 pipe for underground collection systems.

### 2013 Water Main Projects Bradley, Snow and Northeast Area, MI – 2013-2014

Field Engineering Technician for installation of approximately 16,000 feet of water main and of appurtenances within portions of sections 2 and 24 of the Charter Township of Ypsilanti. The project included 34,000 square yards of HMA pulverizing, 6,100 tons of HMA, and 24,000 square feet of sidewalk improvements within the project limits for the Washtenaw County Road Commission (WCRC). Project included pipebursting, directional drill, and open cut installation of fusible pvc and Ductile iron with 350 homes (water services), 200 feet of parallel sewer and over 80 sanitary service repairs.

### Smokler Textile, Ypsilanti Community Utilities Authority, MI – 2013

Field Engineering Technician for replacement of 10,500 feet of water main and appurtenances within the Smokler-Textile Subdivision. Project included directional drilling of fusible PVC, 200 homes, and two jack and bores.

**CITY OF ANN ARBOR  
LIVING WAGE ORDINANCE  
DECLARATION OF COMPLIANCE**

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that employers providing services to the City or recipients of grants for financial assistance (in amounts greater than \$10,000 in a twelve-month period of time) pay their employees who are working on the City project or grant, a minimum level of compensation known as the Living Wage. This wage must be paid to the employees for the length of the contract/project.

*Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from the Ordinance. If this exemption applies to your firm, please check below:*

- This company is exempt due to the fact that we employ or contract with fewer than 5 individuals.  
 This non-profit agency is exempt due to the fact that we employ or contract with fewer than 10 employees.

The Ordinance requires that all contractors/vendors and/or grantees agree to the following terms:

- a) To pay each of its employees performing work on any covered contract or grant with the City, no less than the living wage, which is defined as \$12.70/hour when health care is provided, or no less than \$14.18/hour for those employers that do *not* provide health care. It is understood that the Living Wage will be adjusted each year on April 30, and covered employers will be required to pay the adjusted amount thereafter. The rates stated above include any adjustment for 2014.
- b) Please check the boxes below which apply to your workforce:
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage without health benefits Yes \_\_\_\_\_ No \_\_\_\_\_
- OR
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage with health benefits Yes X No \_\_\_\_\_
- c) To post a notice approved by the City regarding the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- d) To provide the City payroll records or other documentation as requested; and,
- e) To permit access to work sites to City representatives for the purposes of monitoring compliance, investigating complaints or non-compliance.

The undersigned authorized representative hereby obligates the contractor/vendor or grantee to the above stated conditions under penalty of perjury and violation of the Ordinance.

OHM Advisors

Company Name

Signature of Authorized Representative

Vyto Kaunells, PE - Principal

Type or Print Name and Title

03/20/2015

Date signed

34000 Plymouth Rd, Livonia, MI 48150

Address, City, State, Zip

(734) 466-4435

Phone (area code)

vyto.kaunells@ohm-advisors.com

Email address

Questions about this form? Please contact:  
Procurement Office City of Ann Arbor  
Phone: 734/794-6500

**ATTACHMENT \_\_**  
**LEGAL STATUS OF PROPOSER**

(The Respondent shall fill out the appropriate form and strike out the other two.)

By signing below the authorized representative of the Respondent hereby certifies that:

The Respondent is:

- A corporation organized and doing business under the laws of the state of Michigan, for whom Vyto Kaunelis, PE bearing the office title of Principal, whose signature is affixed to this proposal, is authorized to execute contracts on behalf of respondent.\*

\*If not incorporated in Michigan, please attach the corporation's Certificate of Authority

- A limited liability company doing business under the laws of the state of \_\_\_\_\_, whom \_\_\_\_\_ bearing the title of \_\_\_\_\_ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.
- A partnership organized under the laws of the state of \_\_\_\_\_ and filed with the county of \_\_\_\_\_, whose members are (attach list including street and mailing address for each.)
- An individual, whose signature with address, is affixed to this RFP.

Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.

 Date: 03/20/2015  
 Signature

(Print) Name Vyto Kaunelis, PE Title Principal

Firm: OHM Advisors

Address: 34000 Plymouth Rd, Livonia, MI 48150

Contact Phone (734) 466-4435 Fax (734) 522-6427

Email vyto.kaunelis@ohm-advisors.com



**Vendor Conflict of Interest Disclosure Form**

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

**Certification:** I hereby certify that to my knowledge, there is no conflict of interest involving the vendor named below:

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Vendor Name	Vendor Phone Number
OHM Advisors	(734) 522-6711
Conflict of Interest Disclosure *	
Name of City of Ann Arbor employees, elected officials, or immediate family members with whom there maybe a potential conflict of interest.	( ) Relationship to employee _____ ( ) Interest in vendor's company _____ ( ) Other _____
OHM Advisors has no conflicts of interest.	

\*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that the information provided is true and correct by my signature below:

*Vyto Kaunelis*  
Signature of Vendor Authorized Representative

03/20/2015  
Date

Vyto Kaunelis, PE - Principal  
Printed Name of Vendor Authorized Representative

**PROCUREMENT USE ONLY**

- Yes, named employee was involved in Bid / Proposal process.
- No, named employee was not involved in procurement process or decision.



## D. Fee Proposal