



AT A GLANCE

FOUNDED IN 1990, CDW CONSULTANTS, INC. (CDW) is a multi-disciplinary environmental and civil engineering consulting firm offering comprehensive, professional engineering design and management services from initial site review to project completion. The firm's principals have combined their decades of engineering experience in the public and private sectors to provide high-level technical and management services. CDW has earned a reputation over the years for delivering high quality, responsive service, and we offer our clients proven leadership and total familiarity with technical issues, and regulatory processes which govern our projects.

AS A PARTNER IN LARGE DESIGN TEAMS, CDW conducts environmental assessments and completes environmental permitting to repair, rehabilitate, or replace critical transportation infrastructure. This includes assessment of hazardous materials and contaminated sites as well as developing cost-effective mitigation strategies. As a Disadvantaged Business Enterprise (DBE) in Massachusetts, CDW has performed as both a prime and a sub-contractor who is readily and specifically suited for work orders that also coincidentally require the fastest completion time.



WHAT WE DO

ENVIRONMENTAL

- Regulatory Compliance
- Permitting
- Wetlands Delineation
- LSP Services/Brownfields
- Site Assessments
- Contaminated Soil Management
- Remediation/Spill Response
- Hazardous Building Material Studies

CIVIL ENGINEERING

- Site & Roadway Design
- Stormwater
- LID/Green Infrastructure
- Water & Sewer Utility Design/
- Construction Management

PROFESSIONAL AFFILIATIONS

- American Council of Engineering Companies
- Association of Wetland Scientists
- Boston Society of Engineering Companies
- Licensed Site Professional Association
- NE Water Environment Association
- Society of American Military Engineers
- Women Environmental Professionals
- WTS-Boston

CERTIFICATIONS

- WBE** – MA, RI, NY
- DBE** – MA, RI, CT, NY, CA
- WOSB**
- MASSDOT PRE-QUALIFIED**





MBTA EXPERIENCE

CDW CONSULTANTS, INC. (CDW) is a Disadvantaged Business Enterprise (DBE) in Massachusetts and has successfully completed many projects for the Massachusetts Bay Transit Authority (MBTA) as both a prime and a sub-contractor. Our staff is experienced in multiagency coordination and keep abreast of the ever-changing regulatory requirements and challenges.

CDW has extensive experience with hazardous materials testing, abatement techniques and construction challenges within the right of way for a regional transit authority. Our Team has successfully managed projects that involve hazardous materials assessments and removal, schematic design services and Professional Land Surveying, environmental permitting, LNAPL recovery, and the preparation of SPCC Plans as well as several commuter rail and subway transit station upgrades for the Massachusetts Bay Transit Authority (MBTA).



Our Team has also prepared engineering specifications and sketch plans to ensure appropriate hazardous material removal and disposal, and have performed construction administration services, including submittal reviews, clarifications, RFI responses, and site visits to ensure the work was being performed in accordance with the specifications.

Several of our projects have included LSP Services to investigation, manage and remediate sites with current soil and groundwater contamination. CDW has developed sampling plans, performed iterative investigation, and developed cost effective solutions to support environmental mitigation while maintaining an operation railroad system.



We have conducted field analyses of soil and groundwater conditions and used surveying and GIS modeling techniques to evaluate groundwater fate and transport and develop risk-based solutions based upon data obtained. CDW has prepared summary reports of observations and testing results including recommendations, and preliminary estimates of costs associated with the management and abatement of contaminants identified.

CDW has assisted MBTA in the procurement of local, state and federal agency reviews and approvals, under regulatory programs including the Massachusetts: Wetlands Protection Act, MGL Chapter 91, Marine Fisheries, Coastal Zone Management, Air Quality, Section 401 Water Quality, MGL Chapter 21e, MEPA, and Federal: NPDES, NEPA, Section 404 Army Corps of Engineers, and the U.S. Coast Guard Bridge Permit program. To ensure proper operations and tracking of wastewater and stormwater operations, maintenance and compliance within the entire commuter rail system, CDW provides all monitoring, testing, and reporting required under the NPDES Discharge Permits and Multi-Sector General Permits. This permit requires that an estimate of flow, water samples of the discharge, measurement of temperature and pH, and observation of floating solids and foam is performed monthly. The grab samples are analyzed for parameters outlined in the NPDES permit at a MassDEP certified laboratory.



MBTA EXPERIENCE

Reporting includes completion of monthly and quarterly Discharge Monitoring Reports (DMRs). We complete all permit-required monitoring, testing, and reports and submit reports to the MBTA's designated contact in a timely manner such that the MBTA can submit the reports to the EPA and MassDEP by the dates listed in the permit. CDW updates Stormwater Pollution Prevention Plans (SWPPP), as a component of the NPDES permit, with current data and information following site inspections.

A representative list of projects includes:

- MBTA Alford Street Bus Garage-Seawall
- MBTA Quincy Bus Repair Garage-Structural Work
- MBTA Canton Viaduct NEC expansion
- MBTA Greenline Extension
- MBTA Commuter Rail – Keolis Commuter Services
- MBTA Ironhorse Park Operations & Control Center
- MBTA Saugus River Drawbridge
- MBTA Merrimack River Bridge
- MBTA Underground Storage Tanks Removal and Replacement
- MBTA Science Park, Copley and Arlington Street Station Renovations





TRANSPORTATION

CDW CONSULTANTS, INC. is a multidisciplinary environmental and civil engineering firm with 30 years' experience providing quality deliverables to federal, state, local, and private clients. CDW's engineers and scientists perform environmental consulting and civil/site engineering services for state and federally funded transportation projects that range from basic roadway design to complex site development, and regulatory compliance and permitting. Our team successfully navigates complex regulatory processes and technical issues to expedite rail, highway, and bridge project goals responsively.

AS A PARTNER IN LARGE DESIGN TEAMS, CDW conducts environmental assessments and completes environmental permitting to repair, rehabilitate, or replace critical transportation infrastructure. This includes assessment of hazardous materials and contaminated sites as well as developing cost-effective mitigation strategies.

NOTABLE HIGHWAY PROJECTS

MASSDOT

Anderson Memorial Bridge Rehabilitation | Cohasset Bridge Study
Craigie Bridge Reconstruction

DEPARTMENT OF CONSERVATION & RECREATION

Bowker Overpass Reconstruction | Charles River Basin Bridge Study
General Edwards Bridge Rehab | Georges Island Lead Abatement
Middlesex Fellsway Reconstruction | Storrow Drive Tunnel Study

CITY OF NEWTON/TOWN OF NEEDHAM

Elliot Street Bridge Rehabilitation Project

NOTABLE TRANSIT & RAILROAD PROJECTS

PASSENGER RAILROAD

AMTRAK Connecticut River Bridge Replacement
P&W Railroad – Cargill Bridge Replacement

MBTA

Alford St. Bus Garage, Seawall Repair
Merrimack River Bridge Rehabilitation
Saugus River Drawbridge Replacement
Quincy Bus Garage Structural Repair
Green Line Extension Final Design
Cabot, Charlestown, Quincy & Lynn Bus Garage USTs
Ironhorse Park Operations Control Center
Canton Viaduct, NE Corridor Expansion

KEOLIS COMMUTER SERVICES

As part of an eight-year prime contract, CDW provides a full range of environmental compliance services including: permitting, waste management, spill response planning, stormwater monitoring, hazardous materials assessment, LSP services, and civil site design services for the operational and maintenance needs of the MBTA's commuter rail system.



CDW AT A GLANCE

ENVIRONMENTAL

Regulatory Compliance
Permitting
Wetlands Delineation
LSP Services/Brownfields
Site Assessments
Contaminated Soil Management
Remediation/Spill Response
Hazardous Building Material Studies

CIVIL ENGINEERING

Site & Roadway Design
Stormwater
LID/Green Infrastructure
Water & Sewer Utility Design/
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ENVIRONMENTAL SERVICES

FOUNDED IN 1990, CDW CONSULTANTS, INC. provides all aspects of environmental engineering services from preliminary site assessments for potential contamination, through the selection and design of cost-effective solutions for remediation of soil and groundwater. Managing the regulatory aspects of these projects can be a complex undertaking, but CDW's highly qualified engineers and scientists have the expertise and decades of combined experience to determine if sites comply with state and federal regulations.

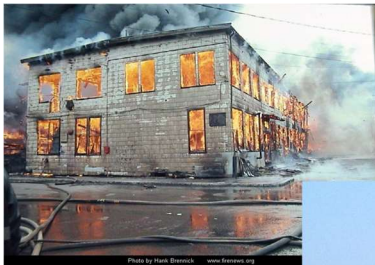
CDW has successfully completed hundreds of site assessments for our private and public sector clients including open-ended environmental and site contamination term contracts for state and federal agencies. CDW utilizes many effective field and laboratory methods to identify and quantify contaminants, and then evaluate risks, prior to implementing any mitigation measures. Our experience in remediation ranges from excavation and disposal, in-situ and ex-situ chemical or biological enhancement remedies, oil recovery/groundwater treatment systems to barrier wall design.

HOTEL PROJECT COMPLETION

Chelsea, MA

EBC-New England Brownfields Project of the Year-2017

The multi-acre property was the location of one of the worst fires in the City of Chelsea in the early 1970s, resulting in widespread heavy metals and PCB contamination. Abandoned due to contamination and economic decline, the City leveraged State and Federal support to attract a successful developer. Working with a number of public and private entities, CDW designed and oversaw an extensive environmental investigation, remedial option analysis and cleanup allowing the site's full transformation to a visible economic engine for jobs and future growth within the City's long-range plan.



TYPES OF SERVICES

- Phase I Preliminary Site Assessment ASTM 1527-13
- Phase II Site Assessment ASTM E1903-19
- Emergency Response Actions
- Time Critical Release Response
- Imminent Hazard Evaluations
- Phase II Remedial Investigations
- Phase III Feasibility Studies
- Integrated Groundwater/Surface Water Sampling
- Groundwater Flow/Contaminant Transport Modeling
- Identification, Evaluation and Selection of Remedial Response Actions
- Risk Characterizations
- Remedy Implementation Plans
- Remediation Design, Public Bidding, and Construction Oversight
- Institutional Controls

MASSACHUSETTS AGENCY CLIENTS

DCAMM, DCR, MassDOT, MBTA, MSBA, MWRA
Cities of Chelsea, Medford and Waltham

CERTIFICATIONS

WBE – MA, RI, NY
DBE – MA, RI, CT, NY, CA
WOSB

GEORGES ISLAND VISITOR CENTER

MA Department of Conservation & Recreation



CDW performed multiple environmental services to support island-wide building projects and new utilities. CDW conducted assessment, site investigation and mitigation of oil releases, USTs removals, asbestos and lead paint in buildings, and pockets of lead in surface soils. CDW evaluated potential indoor air issues from residual groundwater contamination. CDW's environmental compliance work supported the facility upgrades needed to enhance the recreational benefits of the harbor island resources, while protecting future users.



HAZARDOUS BUILDING MATERIALS INVESTIGATIONS

FOUNDED IN 1990, CDW CONSULTANTS, INC. has decades of experience conducting hazardous material building assessments for the presence of oil, asbestos, PCBs, containerized wastes, lead-based, and other hazardous materials as well as performing AHERA required inspections, asbestos abatement design and associated monitoring. CDW performs comprehensive pre-renovation testing of building materials, and then uses the results to develop construction documents. This documentation includes engineering specifications for the handling and abatement of hazardous substances present for incorporation into contract bid packages. CDW also performs construction services including abatement project monitoring, clearance sampling, and additional testing of hidden hazardous substances encountered during construction. CDW advises clients throughout the project on how to safely and appropriately handle and dispose of hazardous substances. These projects are time-critical and require complete bid documents as well as responsiveness to construction issues. Select projects include:

K-12 SCHOOLS IN MASSACHUSETTS

Ayer-Shirley Regional Middle-High School
Billerica, Parker Elementary School
Burlington, Memorial School
Boston, Charlestown High School
Concord-Carlisle Regional High School
Danvers, North Essex Regional Vocational High School
Easton, Blue Hills Regional Technical High School
Framingham, Fuller Middle School
Grafton High School
Hopkinton, Centre School
Hudson, JFK Middle School
Marblehead: Village School, Glover Elementary, and Eveleth Elementary School
Marlboro, Assabet Regional Technical High School
North Eastham, Nauset Regional High School
Salem, Collins Middle and Saltonstall School
Somerville High School
Southampton, Larabee School
Southwick: Woodland Elementary, Powder Mill Middle, and Southwick High School
Stow Center School
Tewksbury High School
Walpole, Norfolk Agricultural Technical High School
Wellesley High School
Weston Field School
West Springfield High School
Whitman-Hanson, Maquan Elementary School
Winchester High School
Worcester: Jacob Hiatt Magnet, New Citizens, Center, May School, Chandler Magnet School, Lake View School

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COLLEGES AND UNIVERSITIES

Bridgewater State University

Conant Science Center; Maxwell Library

University of Massachusetts

Amherst–Tobin Hall, Lincoln Apts., Student Union
Boston–Parking Substructure, McCormack Science Bldg.
Lowell–Fox Hall Residence Building
Medical Center–Campus Expansion

Worcester State University–Selective Demolition

MASSACHUSETTS PUBLIC AGENCIES

Boston Housing Authority: Charlestown

City of Cambridge: Cambridge Street Overpass

City of Worcester: Worcester RTA Bus Transfer Facility

Department of Conservation and Recreation, Boston

Craigie Bridges, Storrow Drive Tunnel, Bowker Overpass

Division of Capital Asset Management and Maintenance

Danvers State Hospital; Greenfield District Court
Lancaster Surplus Property; Medfield State Hospital
Templeton Developmental Center

MassDOT Anderson Memorial Bridge, Boston MA

MBTA

Billerica: Iron Horse Park Ops Control Center

Boston: Arlington Street Station, Copley Street Station,
Government Center Station, Science Park Station

Haverhill: Merrimack River Bridge

Merrimack Valley RTA Bus Facility, Haverhill, MA

Town of Spencer: Housing Authority, Howe Village

US Veterans Administration

Brockton Medical Center; Jamaica Plain Medical Center
Manchester Medical Center; Providence Medical Center
West Roxbury Medical Center

LSP/ENVIRONMENTAL SERVICES

FOUNDED IN 1990, CDW CONSULTANTS, INC. provides all aspects of environmental engineering and Licensed Site Professional (LSP) services from preliminary site assessments for potential contamination, through the selection and design of cost-effective solutions for remediation of soil and groundwater. Managing the regulatory aspects of these projects can be a complex undertaking, but CDW's highly qualified LSPs have the expertise and decades of combined experience to determine if sites comply with Massachusetts regulations.

CDW has successfully completed hundreds of site assessments for our private and public sector clients including open-ended environmental and site contamination term contracts for state and federal agencies. CDW utilizes many effective field and laboratory methods to identify and quantify contaminants, and then evaluate risks, prior to implementing any mitigation measures. Our experience in remediation ranges from excavation and disposal, in-situ and ex-situ chemical or biological enhancement remedies, oil recovery/groundwater treatment systems to barrier wall design.

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TYPES OF SERVICES

- Phase I Preliminary Site Assessment ASTM 1527-13
- Phase II Site Assessment ASTM E1903-19
- Phase I Initial Site Investigation
- Phase II Comprehensive Site Assessment
- Release Abatement Measures
- Immediate Response Actions
- Imminent Hazard Evaluations
- Phase III Identification, Evaluation and Selection of Remedial Response Actions
- Activity and Use Limitations
- Method 1, 2, 3 Risk Characterizations
- Phase IV Remedy Implementation Plan
- Remediation Design, Public Bidding, and Construction Oversight
- Integrated Groundwater/Surface Water Sampling
- Groundwater Flow/Contaminant Transport Modeling

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WETLANDS PERMITTING

CDW applies a thorough and comprehensive approach in the analysis of regulatory compliance, specifically the MA Wetlands Protection Act (M.G.L. c. 131 §40) and permitting requirements specific to each project we are assigned. Our approach focuses on maximizing time by employing practical solutions that help expedite local, state, and federal permitting processes and meet our clients' project goals. Our staff is experienced in multi-agency coordination and keep abreast of the ever-changing regulatory requirements and challenges. Our experts provide compliance and permitting support to rail, highways, waterways and transit projects for several agencies.



We perform initial field investigations, research, and evaluation of existing environmental conditions to develop the permitting approach and project understanding. During the feasibility and schematic design phases, CDW works with the project team and the agency with jurisdiction to identify reviews and approvals needed. Our Team also identifies special resources requiring mitigation and/or avoidance, and prepares recommendations for design alternatives to minimize impact on such resources. CDW works with the project team through construction to verify adherence with permits and approvals, and confirm implementation of mitigating measures to minimize impacts. In addition, our staff has experience preparing Stormwater Pollution Prevention Plans (SWPPP) and Spill Prevention Control and Countermeasure Plans (SPCC) on a variety of projects.



Wetlands Permitting Projects Include:

- Keolis, MBTA Railway Culvert Crossings
- MA Dept. of Conservation and Recreation, Craigie Bridge and Dam Rehabilitation, Boston and Cambridge, MA
- MBTA Merrimack Bridge Rehabilitation, Haverhill, MA
- Massachusetts Dept. of Transportation, General Edwards Bridge Rehabilitation, Lynn and Revere, MA
- Mass Highway, Installation of an Intelligent Transportation System, Interstate 91
- MWRA – 41 Siphon Structures Rehabilitation

CDW compliance work is tailored to meet each owner's facility and project goals, but generally cover:

RCRA waste management
Stormwater management/treatment
Spill Prevention (SPCC Plans)
Wastewater discharge permitting
Rainfall-Runoff Analysis
Watershed, Stormwater, and Water Quality
Pipe Network Analysis
Integrated Ground Water and Surface Water
Floodplain Analysis
Low Impact Design
Non-Point Source Pollution Control

Stormwater Outlet Control Structure Design
Wetland Restoration and Reconstruction
Stormwater Treatment Design & Evaluation
Rainwater Capture and Re-use
Ground Water Flow/Contaminant Transport
Water Resources Evaluation
Erosion and Sediment Control
Surface Water Quality and TMDL Evaluation
Stormwater Management and BMP Evaluation
USEPA NPDES Permitting
USACE Section 401/404 Permitting

WBE - MA, RI, CT | DBE – MA, RI, CT, NY, CA | WOSB



Kathleen Campbell, PE, LSP, LEED AP, ENV SP
President & Principal Environmental Engineer



QUALIFICATIONS

Ms. Campbell is the President of CDW and has over 30 years of experience in environmental science and engineering in both the public and private sector. She has managed hundreds of projects involving environmental assessments and subsurface investigations. She has been involved in many high visibility national and state model brownfields projects and has successfully achieved regulatory closure allowing redevelopment of contaminated sites by integrating risk assessment and cleanup technologies, demolition strategies, and ultimate re-use goals. She has prepared design plans and specifications for various remedial alternatives including soil and groundwater treatment systems, capping strategies, as well as innovative technologies such as bioremediation.

Ms. Campbell has provided Licensed Site Professional services including IRAs, RAMs, LRAs, RAOs, and AULs under the Massachusetts Contingency Plan (MCP), and has completed numerous Phase I, Phase II, Phase III and Phase IV studies. She has performed and supervised numerous MCP Method 1, Method 2, and Method 3 risk assessments, including human health and environmental impact assessments.

Ms. Campbell has performed regulatory compliance audits for clients including public agencies and municipalities. She also has extensive experience in the preparation of Federal, state and local permit applications. She has responsibility for all aspects of environmental permitting and compliance, including remediation, resource protection, wetlands, historical, and hazardous waste management. She has prepared permit applications under the Massachusetts Environmental Policy Act, the DEP Wetlands Protection Act, DEP Chapter 91 Waterways regulations, U.S. Army Corp. of Engineers regulations, US Coast Guard, US Fish & Wildlife, National Environmental Policy Act, and the USEPA National Pollutant Discharge Elimination System.

CERTIFICATIONS

Professional Engineer – Massachusetts, Rhode Island, Connecticut
Licensed Site Professional – Massachusetts
LEED Accredited Professional (Building Design & Construction)
Envision© Sustainability Professional
OSHA 8-hour Health and Safety Supervisor Training and 16-hour Confined Space Trained
OSHA 40-hour HAZWOPER Trained

EDUCATION

Bachelor of Mechanical Engineering, Manhattan College, NY
Groundwater Pollution and Hydrology; The Princeton Course
Environmental Risk Assessment, Graduate Certificate, UMASS Lowell

AFFILIATIONS

Massachusetts Governor appointment - LSP Board of Registration (2013-current)
Board of Directors, Environmental Business Council of New England (2019-current)
WTS International, Boston Chapter, multiple Committees and Board appointments (1994-current)
Licensed Site Professional Association (1995-current)
Society of American Military Engineers, Small Business Committee (2001-current)
Society for Women Environmental Professionals



William J. Betters, P.G., L.S.P.
Associate Principal & Director of Environmental Services

QUALIFICATIONS

William Betters has more than 30 years of experience in the environmental services industry. He is a Licensed Site Professional (LSP) in Massachusetts, and a licensed Professional Geologist. He has extensive experience at integrating project, personnel, and management elements in an efficient and progressive manner. Mr. Betters was among the first LSPs when the program was established. He has served as President of the LSP Association (LSPA) and was Chair of the LSPA Regulations Committee where he was responsible for representing the LSPA during significant regulatory revisions and presenting new legislation. He has opined on state policy development and federal regulatory changes. He was chosen as one of two Experienced LSPs for establishing LSP licensing exam cut-scores.



EXPERIENCE

Mr. Betters oversees the CDW Team that performs site investigations including ASTM Phase I and Phase II Investigations to satisfy All Appropriate Inquiry for multi-state real estate portfolio asset management. Additionally, he has performed numerous comprehensive site investigations and risk characterizations in support of regulatory requirements for waste site cleanup activities. He has been responsible for subsurface drilling and contractor oversight, soil and groundwater sampling and analysis, groundwater flow surveys, soil gas surveys, indoor air sampling, and soil and groundwater remediation planning and implementation. Mr. Betters has managed numerous projects involving soil excavation and disposal, in-situ remediation, as well as the documentation and sampling for underground storage tank (UST) removals, and asbestos and lead paint surveys. He has extensive experience with the Massachusetts Contingency Plan (MCP) including preparation and submittal of MCP Phase I through V reports, Release Notification Forms, Release Abatement Measure Plans, Immediate Response Action Plans, and Response Action Outcome Statements and has served as LSP-of-record for dozens of sites. He has the overall responsibility for client operational compliance with federal and state environmental regulations for many contracts providing services such as: hazardous materials, above ground and USTs, flammables storage and handling, industrial wastewater discharge, federal and state air emissions reporting, and stormwater discharge monitoring and management. He has a multi-agency understanding of environmental compliance and the intersection of local, state, and federal programs.

Mr. Betters is also responsible for feasibility evaluations, remedial action plans, and remediation programs for both state and federally regulated projects. He works closely with clients who are in the business of Site Development assisting them in identifying an array of options for risk management and mitigation. He provides expert opinion in support of mediation and litigation of disputes related to identification of release source areas, fingerprinting and forensic review of co-mingled contaminant plumes.

EDUCATION

M.S., Geology, Boston College, Boston, MA, 1989

B.S., Earth Sciences, Physics Minor, Salem State College, Salem, MA 1983

Graduate Studies, Epidemiology, Remediation, Risk Assessment, Environmental Impact Analysis, Tufts University, Medford, MA

REGISTRATION/CERTIFICATIONS

Massachusetts Licensed Site Professional, License Number 3163

New Hampshire Professional Geologist, License Number 500

OSHA HAZWOPER Standard 29 CFR 1910.120 and SARA Section 126 (d)

QUALIFICATIONS

Mr. Wilhelmsen is a Registered Professional Engineer with more than 25 years of experience in project management, design and permitting for commercial, residential and industrial developments in New England, and is familiar with lean construction concepts and principles. He has prepared construction plans and specifications for the design of residential and commercial engineering projects ranging from site plans, layouts, grading, stormwater and utility plans. He has had extensive experience with the Massachusetts School Building Authority projects providing feasibility studies, schematic designs, construction documents and construction administration. Further, he is experienced in site permitting with various local and state departments, including the preparation and presentation of projects to regulatory boards in a public hearing format, and interaction with stakeholders and review and regulatory agencies.



Mr. Wilhelmsen has extensive experience with the Massachusetts Wetland Protection Act and Local Wetland by-laws as well as MEPA thresholds, procedures, schedules and jurisdiction. He is well versed in modern stormwater management techniques, including low impact development. He is familiar with Title 5 regulations, policies and interpretations pertaining to Subsurface Sewage Disposal Systems.

EXPERIENCE

Site Development

Mr. Wilhelmsen has served as the project engineer on numerous and diverse site development projects. Projects have included residential, commercial, institutional, recreational, educational, and hospital sites. This work has involved utilities, roadways and parking areas, pedestrian facilities, grading, erosion and sediment control, stormwater management, and permitting required for the work. Many projects have also included construction administration services.

Stormwater Management

Mr. Wilhelmsen has been responsible for stormwater evaluation, design, treatment, and management systems for several private and public projects. These include both open channel and piped systems. He has designed various treatment systems to provide water quality treatment, infiltration for groundwater recharge, and peak flow attenuation, based on hydraulic and hydrologic studies and modeling. He has prepared erosion control and construction site stormwater management plans for numerous sites.

Computer Design

Mr. Wilhelmsen is proficient in AutoCAD Civil 3D and has developed plans for various projects. This work has included site plans, utility plans and profiles, roadway plans, profiles, and sections, erosion control and stormwater management plans, and numerous figures for planning, analysis, and presentation. He is also skilled in Haestad Methods, Hydrocad, as well as various hydraulic modeling software packages.

EDUCATION

B.S. Civil Engineering, University of Massachusetts-Lowell

REGISTRATIONS/CERTIFICATIONS

Professional Engineer: MA #41596, RI #0011457, CT #32523, NH #15497, NY #096280, and ME #15135

MA Certified Soil Evaluator
MA Title 5 System Inspector

MA Hydric Soil Evaluator
MA SIT

INTENTIONAL FROM THE START

Since its founding as a woman-owned business in 1990, CDW Consultants has strived to create a dynamic workplace that promotes and values:

DIVERSITY: The representation of different and unique identities, characteristics, experiences, and perspectives.

EQUITY: Giving everyone what they need to succeed by providing access, resources, and opportunities for all; especially for those who are underrepresented in the fields of engineering science and have been historically disadvantaged.

INCLUSION: A welcoming culture in which differences are celebrated and everyone is valued, respected, and able to reach their full potential.

CDW recognizes that companies that recruit, hire, mentor and promote those who are diverse in age, gender identity, race, sexual orientation, physical or mental ability, ethnicity, and perspective are proven to be better companies. Promoting diverse hiring practices is only the first step.



Developing and nurturing a culture where everyone, from any background, can feel included allows them to do their best work and is simply the right thing to do. We've been committed from the start and are stronger for it.

We are demonstrating our commitment by acting on the following DEI objectives:

1. Identify, attract, and retain diverse candidates.
2. Look for professional development opportunities to increase awareness and education, to keep the conversation going about overcoming systemic and institutional racism, and to acknowledge economic inequities in the engineering community.
3. Financially support one or more regional organizations that are engaged in overcoming poverty, hunger, and barriers to career advancement experienced by undervalued communities.
4. Engage with regional universities to reach and recruit diverse applicants.



5. Hire and pay financially challenged students as interns and mentor those hires in support of their career advancement.
6. Recognize that barriers exist for underserved communities to enjoy healthy air, water, and soil and evaluate ways to help eliminate them.
7. Maintain a culture where open discussion and debate are encouraged on issues of privilege, inequity, and the role of race and racism in society to promote continued learning.

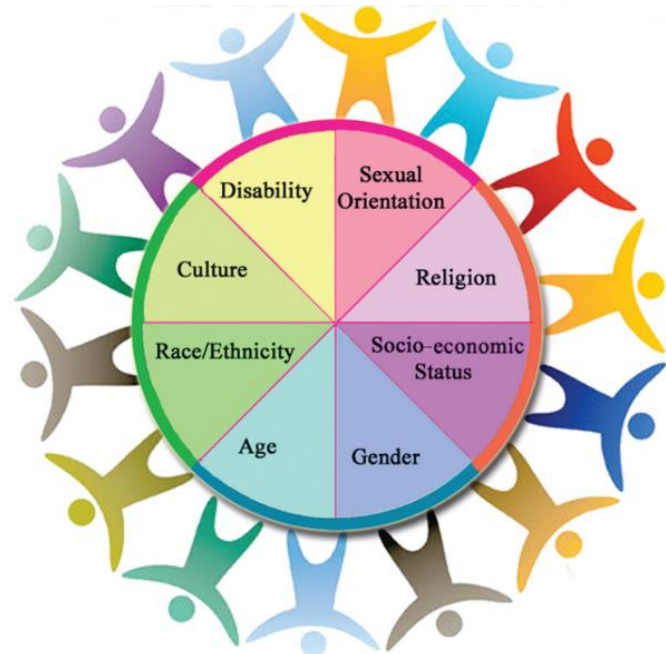
CDW maintains the commitment to equity and inclusion for diversity itself to be most successful. To get diversity to work, our company strives to create an environment in which people from diverse backgrounds experience a sense of equity and belonging. Research suggests that this is more likely to happen in organizations that do not see the “business case” as their primary reason for caring about diversity. We want our employees to care because it’s the right thing to do—as people caring for the “right” reasons will more likely feel included and committed to the organization.

IMPACTS OF DIVERSITY

CDW recognizes the idea that diversity is a valuable asset unto itself, and that diverse teams can generate higher levels of creativity and effectiveness in their work. Having employees of diverse backgrounds, races, ethnicities, sexual orientation, and more helps to create a powerful sense of culture around our mission. It helps ideas flow more easily and with higher quality.

Interdisciplinary knowledge and walks of life are crucial to the holistic success of a company. We have set out as a company to be an advocate for diversity and inclusion and we are dedicated to not only making our office diverse, safe and inclusive but also by showing ourselves as a model to others. Promoting diversity as normative in a company's culture results in intangibles such as positive vibes and a sense of community well-being but will also eventually reap tangible benefits to the Company such as worker retention and increased productivity.

Some of the ways we are imbedding more inclusive thinking in our culture are:



1. **Targeted Internships:** We actively seek out racially diverse candidates for summer internships with the goal to grow a diverse team organically.
2. **Support Economically Disadvantaged:** CDW is one of the founding partners with the University of Massachusetts – Boston's newly launched Federal Work Study Internship Program. Each semester we hire a disadvantaged students and support them through paid work, mentoring, and opportunities to experience meaningful work in the environmental science field, a step towards equity as they chart their future career path.
3. **Participate in Meaningful Ways:** CDW employees participate in both the Environmental Business Council of New England (EBCNE), and ACEC-Massachusetts Diversity, Equity and Inclusion (DEI) Committees. EBCNE is an environmental and energy business organization that provides education to its members on environmental issues and regulations. ACEC-MA represents companies engaged in the development of transportation, environmental, industrial, and other infrastructure. The intersection of environmental protection, infrastructure development and the business community within these organizations provides opportunities for meaningful involvement and elevation of environmental and infrastructure issues that affect historically ignored communities.

One barrier to increased diversity in hiring is the apparent “white-washing” of the environmental field. One reason is that many Black and Latinx youth are raised in urban food deserts that lack greenspace and exposure to the natural world. This results in little connection between an environmental discipline as a career path and their lived experience. This trend extends to academic majors as well. For example, in 2015, 73.4 percent of people who were awarded environmental science degrees across the country were white. In comparison, 47.7 percent of people who were awarded biological or physical science degrees were white. At that time, only 2.9 percent of students awarded a degree in environmental engineering nationwide were Black. Oftentimes in environmental engineering, there is little focus on the social aspects behind the problems engineers work to solve, which is why there may be so few students of color within the discipline.

One of the ways that CDW overcomes this hurdle is to recruit from colleges and universities that have a large and diverse student body in the civil and environmental engineering fields, such as the Boston and Lowell campuses of the University of Massachusetts. Those universities often have within their network a higher percentage of non-white people and can be a powerful source of referral hires.

COMBAT RACISM



CDW is doing the work to examine systemic racism, sexism, gender, economic and race disparities, as well as unconscious biases.

CDW stands against racism in all forms but also knows that meaningful action is more important than words. We acknowledge that racism can be unconscious or unintentional, and that identifying racism as an issue does not automatically mean those involved in the act are racist or intended the negative impact. To combat racism, we vow to purposefully identify, discuss, and challenge

issues of race and color and the impact(s) they have on our organization, its systems, and its people. We will also challenge ourselves to understand and correct any inequities we may discover and gain a better understanding of ourselves during this purposeful process.

In response to the police killing of George Floyd, a national time of reckoning, we recognized that maintaining silence was to be complicit in ongoing white supremacy. We initiated conversations about ways to amplify support for Black Lives Matter and join in peaceful protest.

In June 2020 CDW began a partnership with YW Boston, a local organization that works to change policies, practices, attitudes, and behaviors with the goal of creating more inclusive environments where women, people of color, and especially women of color can succeed. As a woman-owned business, their work resonated with us.

CDW first hosted a fundraising drive and double-matched employee contributions to YW Boston. Then, we promoted their online events to employees and purchased reading materials from YW to promote continuing conversations. One of the highlights was an event entitled “Becoming Part of the Solution: Author Robert Livingston’s *The Conversation: How seeking and speaking the truth about racism can radically transform individuals and organizations.*” Through actions and steady persistence, we provide opportunities for all of us at CDW to learn and grow, expand our individual and collective understanding of harmful systems and attitudes, and do our part to end racism. This consciousness is now part of CDW’s company culture and philanthropic activities.

UNDERSTANDING ENVIRONMENTAL INEQUITY

There is widespread data on disproportionate cancer and asthma rates in communities of color, from releases of oil and hazardous materials affecting air, water, and soil. While the regulations governing environmental cleanups in Massachusetts are strict, the reality is that some industries continue to impact non-white communities by violating environmental regulations, accepting pollution penalties in lieu of mitigation, or otherwise prioritizing profits over people.



CDW has had a client-screening tool in place for more than ten years that is used to evaluate each potential client relationship. As part of that, we consider the client’s local, regional and national reliance on fossil fuels, coal-fired power plants, and long-haul supply chains. We gravitate towards and seek out clients who have established sustainability objectives as a meaningful part of their business practices.

Through no fault of their own, communities of color also experience disproportionate climate change impacts due to aging infrastructure, little public investment, and lack of access to environmental data. The most vulnerable people are subject to more powerful storms and floods, intense heat waves, droughts, and other threats from the climate crisis.

CDW has partnered with the non-profit Climate Creative on a project called Rising Waters. The Project creates participatory art projects for communities on the impending effects of rising flood levels. It translates complex data into simple visuals that people can immediately understand and relate to viscerally, helping them visualize what is at risk from coastal and freshwater flooding. The project includes climate community education materials and forums.

Armed with knowledge and data, community activists can more readily participate in government decision-making. CDW amplified Climate Creatives' own outreach by introducing its Executive Director to officials at the Department of Conservation and Recreation (DCR). As an environmental agency working on creating and maintaining public access to parklands, DCR is an ideal partner for showcasing information in an artistic form to far-reaching communities.

CDW knows that this is a critical moment to pursue bold and equitable solutions that address the legacy of systemic, institutional, and environmental injustices. We will continue to seek out opportunities like those described to advance the goals of economic, gender, racial, climate, and environmental equity to improve the public health and well-being of all communities.





Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Testler, Secretary & CEO

massDOT
Massachusetts Department of Transportation
DBE Certification Office | MassUCP

March 23, 2022

Ms. Kathleen Campbell
CDW Consultants, Inc.
6 Huron Drive
Natick, MA 01760

This letter serves as sole and exclusive proof of your firm's DBE certification

Dear Ms. Campbell:

Congratulations! The Massachusetts Unified Certification Program (MassUCP), is pleased to notify you that we have renewed your company as a disadvantaged business enterprise (DBE). Your company continues to be assigned **NAICS Code(s) 541330 and 541620** with the certified business description of **ENGINEERS AND ENVIRONMENTAL CONSULTANTS: HAZARDOUS MATERIALS AND LICENSED SITE PROFESSIONAL SERVICES, PERMITTING, ENVIRONMENTAL ANALYSIS, SOLID WASTE, CIVIL, SITE AND SANITARY ENGINEERING; AND SURVEYING AND LEED AP SERVICES** and will remain listed in our certified business directory.

As a DBE, you must inform MassUCP in writing of any change in circumstances affecting your ability to meet size, disadvantaged status, ownership, control requirements or any material change in the information provided in your application form. Changes in management responsibility among members of a limited liability company are covered by this requirement. You must attach supporting documentation describing in detail the nature of such changes. The notice must take the form of an affidavit sworn to by the owners of the firm before a person who is authorized by state law to administer oaths or of an un-sworn declaration executed under penalty of perjury of the laws of the United States. You must provide the written notification within 30 days of the occurrence of the change. If you fail to make timely notification of such a change, you will be deemed to have failed to cooperate under 49 CFR 26.109(c).

To renew your firm's DBE certification and if it continues to meet the applicable criteria, on or before your firm's certification anniversary date of **April 18, 2023**, and each year thereafter, please send the MassUCP the following documents:

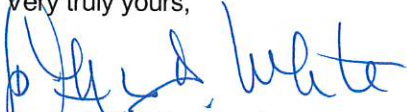
- (1) No Change Affidavit (**will be sent with reminder letter**)
- (2) A **signed** copy of your company's, and all of its affiliates', U.S. Tax Returns including all schedules and attachments for the year(s) indicated.
- (3) A **signed** copy of your personal tax returns for years(s) indicated.
- (4) If a sole proprietor, a **signed** copy of your Schedule C for year(s) indicated.
- (5) A **statement** of the **number only** of full and part-time employees (including owner) for each year indicated.

If you have changed your company name or address, please notify Ms. Nedra D. White, in writing on the company's letterhead in order to update your state vendor file.

MassUCP reserves the right to monitor, perform random spot checks, re-evaluate the firm or revoke the firm's certification if it no longer meets the certification criteria.

During the period of your certification, if you have further questions regarding annual review, please contact Ms. Nedra D. White, Director, MassUCP at (857) 368-8659.

Very truly yours,



Nedra D. White, Director
MassUCP/DBE Certification Program