



**ONWARD
ENGINEERING**
أنورد للمهندسة

President's Message



My passion for infrastructure stems from my roots in the Middle East region. Growing up in Kuwait, I quickly realized how much I love infrastructure. I thought of the vast desert region as a beautiful canvas upon which I envisioned a network of roads and highways bringing countries together and connecting people to each other.

I started my career in Saudi Arabia and in Kuwait, working for large US firms. I realized a great disconnect existed between those firms and the rich MENA culture. I understood the differences between Western and local culture, and I knew how to strike a balance between the two. I spent the next 15 years in California, working as a City Engineer and Deputy Director of Public Works. I was responsible for managing a comprehensive multi-million dollar annual infrastructure budget for an entire City.

I opened the doors of Onward Engineering in 2004 with the goal of revolutionizing the field—by making it more personal. This personalization allows us to tailor an approach specific to each project, taking into account the local environment and culture. We use a customized approach instead of the boilerplate methodology of other firms.

We enjoy the privilege of calling some of the most experienced and imaginative individuals in the field our associates. Our team is excellent at calculating designs and supervising construction to bring you some of the most advanced and cost-efficient solutions for your community. As the Middle East moves into the next era of its storied history, we look forward to writing the next chapter with you, our neighbors.

رسالة الرئيس

إن السبب الرئيسي لشغفي في مجال الأشغال العامة في منطقة الشرق الأوسط يرجع إلى نشأتي الأولى في دولة الكويت، عندما أدركت مدى أهمية المنشآت العامة.

حينئذ، كم تصورت المنطقة الصحراوية الشاسعة كلوحة قماشية رائعة الجمال. و كم تخيلت امتداد شبكة من الطرق العادية و السريعة تربط العديد من البلدان المجاورة لكي تيسر ترابط الناس مع بعضهم البعض.

بدأت حياتي المهنية في المملكة العربية السعودية و دولة الكويت بينما كنت أعمل لشركات أمريكية عالمية كبيرة. عندها أدركت أن هناك فرق شاسع بين الثقافة الحضارية لتلك الشركات و الشركات المحلية مما يؤدي إلى تفاوت كبير في كيفية أداء العمل و نتائجه. عدت بعد ذلك إلى كاليفورنيا و قضيت فيها 15 عاما شغرت فيها عدة مناصب منها نائب مدير الأشغال العامة حيث كنت مسؤولاً عن إدارة ميزانية بمليارات الدولارات لمدينة بأكملها.

قررت حينئذ تأسيس شركة أنورد التي فتحت أبوابها عام 2004 بهدف إحداث ثورة في مجال الأشغال العامة. تتركز هذه الثورة حول إيجاد "حلول ذاتية" لعملائنا الكرام. إن هذا التخصص يفسح لنا توفير نهج مخصص و محدد لكل مشروع مع مراعاة البيئة المحلية و الثقافية في المنطقة.

فشركة OE تتبع نهجاً مخصصاً بدلاً من المنهجية العامة المتداوله من قبل الشركات الأخرى مما يساعد في الحفاظ على انسجام طبيعي في تصميم أنظمة البنية التحتية المناسبة لمجتمعاتنا الشرقية. لذا يتميز فريق OE بإيجاد الحلول الفعالة لبناء غد أفضل و إيجاد التوازن بين الحضارة الشرقية و الغربية.

Executive Summary

OUR COMMITMENT TO YOU

Our clients have realized that we are unlike any other firm. Our commitment to quality is matched only by our commitment to building a long-term relationship with our clients. Our interest in the region is not short-term, so we will approach projects with the long-term vision and attention they deserve. We are partners with our clients. Together we can build entire cities and encourage the growth of local communities.

OUR APPROACH

Our priority is to understand the goals of our partners. With this understanding, we can quickly mobilize our team and develop personalized solutions to meet your needs. We realize the importance of good chemistry, and an exceptional fit and high comfort level is essential to a superior business relationship. To meet the growing demands for developing MENA's (Middle East North Africa) infrastructure, we have invested in a staff with international experience, cutting edge technological tools, and innovative design and construction methodologies. This investment allows us to participate in projects with a diversity of scopes. The push to build onward and upward is the beacon of opportunity that we wish to fulfill.

Our Vision

"Moving you forward
by building a better
tomorrow, today."

رؤيتنا
المضي قدماً من أجل
أن نبني اليوم غداً أفضل!



What We Do

Our core strength is providing consistently high quality. By providing a tailored approach to each project, maintaining open lines of communication with your staff, and utilizing the valuable knowledge and experience our global team possesses, we are able to deliver consistently high quality without sacrificing cost-effectiveness. Our services include:

- Design Engineering/Peer Review
- Construction Management
- Program & Project Management
- Inspection
- Staff Augmentation
- Land Development
- Master Planning
- Training and Mentoring

We know that with good infrastructure we are better able to guarantee basic life necessities. People are better enabled to realize their importance in life and to find greater wealth and comfort. We would be glad to serve you and look forward to the opportunity of becoming your consultant of choice.

ما هي خدماتنا؟

تتميز شركة أنورد الهندسية في استمرارية توفير خدمات ذات جوده عاليه لعملائنا الكرام. ويتم ذلك عن طريق توفير نهج عمل مصمم خصيصاً لكل من المشاريع، و براعة في المحافظه على التواصل مع موظفي عملائنا، و الاستفادة من المعرفة و الخبرات التي يتميز بها فريق العمل لدينا، فنحن نتميز في تقديم الجودة العاليه و بدون زيادة تكلفة المشروع. هذا، و تشمل خدمات الشركة الآتي:

- تصميم و هندسة مدنية
- إدارة الأعمال الإنشائية
- إدارة المشاريع و البرامج
- خدمات معاينة و رقابة
- توفير موظفين ذوي خبره
- تهيئة الأراضي
- تخطيط مدن
- تدريب و تطوير المهارات

Regional Understanding

45%
increase in engineering and construction year-on-year starting in 2013 in MENA

\$157 bn
in rail work planned or underway in the MENA region

\$100 bn
annual investments in infrastructure necessary to sustain current GDP growth

40%
of the total road network in the MENA region is still unpaved



Why This Matters

As countries in the MENA region embark on massive public improvement projects to improve the quality of life for the local populations, Onward Engineering realizes the importance of the incredible opportunity presented to each.

With entire cities being constructed at once, and backbone infrastructure being designed and installed on parallel tracks, choices are being made that will set the foundation for future generations. We are committed to the region—as partners and as neighbors.

Because every partner and every project is unique, we find solutions that are customized. “Culture, geography, budget, size, and staffing capability play a large role in determining what methods are best for us to employ. This comprehensive approach to project understanding is the cornerstone to us being able to offer the personalized, tailored solutions that are the core of what Onward Engineering does.”

We believe in molding the solution to fit your needs, not molding you to fit a solution. The pace at which development is currently progressing presents great risk for cost overruns, lapsed budgets, deficiencies in construction quality, and rushed master planning. Onward Engineering is sincerely interested in partnering with local governments to assist in mitigating these risks. We make it our business to celebrate distinctions, whether by creating an iconic design for an expressway, or taking into account local practices when developing Construction Management processes.



A Custom Fit

Engineering solutions should be tailored. While there is room for efficiency in creating processes, conditions for each project are unique and always require a fresh perspective. Onward Engineering uses defined processes to control quality throughout a project, yet we remain creative in our approach to each project. We remain creative, however, in our approach to each project. Creative solutions. Solid Quality. That's the Onward difference.

We focus on the long-term. Both with our team and with our clients, we are interested in a devoted relationship. So we invest heavily in our team to make sure they are equipped with knowledge of the latest technologies and trends, and we make sure they have the necessary tools to do their job well. We become invested in our clients as well; our expectation is that we will be working together for decades to come. By staying apprised of the latest methodologies and standards, we are able to save time, cut cost, and improve safety.

We provide scheduling control, value engineering, and risk management—setting the standards in excellence. That's the Onward Difference. Our commitment to tailored solutions is a commitment to providing better quality at a better price. This means our clients win.

**We hope to become
a permanent fixture
in the MENA region
so our attention is
focused on providing
the highest quality
service possible.**



Design Engineering

- Highway and Roadway Design
- Commercial Development
- Residential Development
- Green Engineering
- Intelligent Transportations Systems
- Hydrology/Hydraulic Studies
- Flood Control Systems
- Storm Drain Systems
- Water Systems
- Sewer Systems

Design is about more than simply producing a set of plans. Onward Engineering is able to assess existing conditions and design comprehensive solutions. From the earliest planning stage to the project closeout, our team can design with innovation and ingenuity. We understand that planning new infrastructure and replacing or restoring existing infrastructure requires different approaches. Our experience and understanding ensures success on any project.

Onward Engineering has a strict internal quality standard for design. Our team mobilizes quickly to conduct thorough research prior to design and incorporates that information into plan sets as early as possible in the design phase. We do not cut corners, and we do not sacrifice on quality. We understand that designing the best solution for our clients, and providing comprehensive information early on, will save us time and the client money. We also know that providing an unmatched level of service ensures we are developing long-term relationships with our clients.

Construction Management & Inspection

Onward Engineering takes a comprehensive approach to Construction Management. We cross-train our entire team on the fundamentals allowing us to consider the work of a Construction Manager in all phases of a project—including the project inception phase, design phase, and the construction phase. No matter when we come into a project, we continuously assess constructability, project risks, quality controls, phasing, and communication methods.

Construction Management is a balance between costs, quality, and time. The overarching task for each Construction Manager is to assist our client in assessing which two of these three are most important: cost, quality, or time/schedule. Once we understand your priorities, we develop a plan to ensure we can deliver on those priorities.

We understand that Inspection Services are a form of Quality Control and Quality Assurance. Our team of Certified Inspectors work diligently to ensure contractors maintain a high level of quality over the course of the project. Inspectors become thoroughly familiar with contract plans and specifications, in addition to all local laws and requirements. They observe work as it is being performed to ensure the correct materials are being used along with the correct methods of installation.

We understand that each country in the MENA region is unique, and local preferences will vary. We expect that. We also know, however, that there are many synergies and similarities in local environmental factors and professional practices in the region; whether intentionally developed, as is being done to some degree in the GCC, or whether simply a factor of similar geographies. Onward looks at each project as an opportunity to build our knowledge and understanding so that we can better serve each client.

- Highway and Roadway Construction
- Rail Construction
- Bridge Construction
- Water System Construction
- Sewer System Construction
- Storm Drain Construction

- High Rise Construction
- Commercial Construction
- Residential Construction
- Industrial Construction
- Coastal/Port Construction
- Slope Repairs



**We are equipped
with decades of
knowledge, ready to
tailor that knowledge
to local conditions.**

Program & Project Management

Project Management means setting and maintaining a high standard for the life of a project. At Onward Engineering, our team of certified Project Management Professionals (PMPs) will partner closely with your team to define, plan, implement, and integrate every aspect of each project.

We utilize the most advanced collaboration tools to facilitate smooth communication and tracking of information, training your team and passing on our expertise along the way. Our team of global professionals are adept at designing sustainable Program Management systems as well. We take a multi-disciplined approach in establishing a Program Management Office or system, assessing the needs of all potential, current, and future stakeholders. We are able to conduct a large-scale analysis of a region and work with you to design management solutions to help manage highly complex systems.

Our staff's expertise includes both horizontal and vertical projects, and we provide expert advice and comprehensive management at each and every stage of a project. Our Project Managers align themselves closely with our project controls specialists to ensure that the tools and expertise are in place to minimize risk and position each project to be completed on time, within budget, and at the highest quality.

Planning without action or action without planning are approaches that lead nowhere. By instituting internationally recognized project management solutions, we are able to find common solutions to problems and innovate solutions where none exist.



Staff Augmentation

Quality infrastructure design and construction will yield a great value for countries in the MENA region. Clearly the need is there. Our goal with Staff Augmentation is to transfer our expert knowledge from us to you. We partner with our clients and act as a change catalyst to assist in improving management processes, quality controls, design standards, and/or communication methods.

Our team remains nimble throughout every engagement. Whether the need is for us to establish a Construction Management Office, to create a Long-term Asset Management Plan, or to develop a Quality Control Methodology to improve construction quality, we form a team to meet your needs. We can then scale that team up or down as we progress forward and as our client's needs change. We offer a tailored approach for every engagement.

Clients receive our full attention, resources, knowledge, and commitment. Our staff is experienced in directing and analyzing needs and preparing both long and short-term programs that are consistent with the client's vision. The Onward Engineering team has the expert knowledge and experience to implement and manage a wide array of initiatives.

**Our clients are our partners,
and we understand that to create
a great community there must be
equity in every relationship for
all those involved.**



Land Development

To be done well land development requires careful planning. It also requires a great deal of collaboration between the many stakeholders affected by a proposed development. Onward Engineering's method for managing land development projects is a multi-disciplinary approach. Our team of Professional Project Managers and Design Engineers work together with our client's staff to organize a discussion with all potential stakeholders at the earliest planning stage of a project. We seek to gain a comprehensive understanding of goals for the project being discussed, as well as potential future development on adjacent land. The benefit of the Onward approach is a reduction in the risk of developing a patchwork of disjointed sites.

Onward Engineering understands the value in setting strict requirements for land development projects. Our team is able to manage such projects, bringing with us the tools and strict standards that we are accustomed to implementing every day. Our clients rely on us to ensure they are moving their cities and communities forward in the right direction. Clients rely on us to recommend the best construction methods and the correct construction materials to address real problems they encounter. We take that responsibility very seriously, and we partner with our clients to build better communities and improve quality of life.

Master Planning & City Planning

A quality Master Plan places people as the primary consideration. Onward Engineering starts with the community. We consider who will be impacted by the projects we work on and how they will be affected; we then work our way backward to come up with the best possible result for the communities we work with. When partnering with a client to develop a comprehensive Master Plan, we think long-term and short-term, and consider real and potential stakeholders. Quality of life and closer relationships. That's our focus. That's the Onward Difference.

Developing a Master Plan involves many perspectives and an intimate knowledge of local conditions. We assemble a team of experts with backgrounds in economics, geology, city planning and development, sociology, and anthropology, and other expertise as needed. These team members, in addition to our Design Engineers and Professional Project Managers, form a Master Plan conception at an early stage. There are many complexities involved with designing a development strategy—from the phasing to the financial considerations, economic development, and quality of life. Our approach ensures a Master Plan accounts for an entire community.

Training & Mentoring

Quality should be sustainable. Onward Engineering is very capable of carrying projects through any phase of the development cycle, whether in the Planning Phase, Engineering Design Phase, Construction Phase, or in Construction and Project Management. Ultimately, however, we are only doing our job well if we are teaching our clients in the process. Knowledge transfer is fundamental to what we do, because we know we cannot be everywhere at all times. We must be educators in our work to ensure we can continue to deliver high quality.

With our formal knowledge transfer programs, Onward Engineering brings our team of professionals directly to our clients for the sole purpose of educating them on industry best practices or newly implemented processes. We collaborate with our clients to understand their needs and goals, then develop an action plan to help realize those goals and meet their needs. Because we place a strong value on educating our partners in all situations, our team is very good at discovering what our client's needs are.

We also know that knowledge flows in all directions. Onward Engineering knows that the more we can learn from our clients, the more we can teach them in return. Our relationships with clients are symbiotic; we learn so we can teach, and teach so we can learn. It's a comprehensive approach. That's the Onward Difference.

- Total Quality Management
- Risk Analysis & Mitigation
- Project Quality Controls Development
- Bid Request Controls

- Project Quality Assurance
- Cost Efficiency Analysis
- RFQ/RFP Development
- Resource Allocation

Looking Onward

Onward Engineering looks forward to strengthening its position in a changing Middle East. Our diversified team is ready to provide services for all of your design engineering, construction management, inspection, project management, land development, master planning, training, and staff augmentation needs. Contact us so that we can find ways to provide you value and help you become a regional leader in your industry. A quick email or short phone call can make a big difference. Let us together build a better tomorrow, today.

إن شركة أنورد الهندسية تطمح في تعزيز مكانتها الإستراتيجية في منطقة الشرق الأوسط السريعة التطور. فإن فريقنا ذا القدرات و الإمكانيات المتعددة، على استعداد كامل لتقديم كافة الخدمات الخاصة المتعلقة في مجال الهندسة و التصميم، إدارة الأعمال الإنشائية، الرقابة و المعاينة، إدارة المشاريع، تهيئة و تطوير الأراضي، تخطيط مدن، تدريب الموظفين، و توفير الطاقة البشرية. نرجو من عملائنا الكرام الإتصال بنا كي نتمكن من توفير السبل الناجحة المؤدية للوصول إلى مكانة رائدة و مميزة، و ذلك حتى نبني معاً اليوم غداً أفضل!





300 S. Harbor Blvd., Suite 814
Anaheim, CA 92805 USA
Phone: +001 714-533-3050
Fax: +001 714-948-8978
info@oe-eng.com
www.oe-eng.com

