



Chartwell Financial Advisory Q2 2020 Chartwell's dedicated architecture and engineering (AE) team serves over 100 industry clients throughout the United States. Our team of professionals has experience with AE firms of all types and sizes and specializes in providing ownership advisory, corporate finance, transaction opinion, and business valuation services.

The Keystone focuses on current trends in M&A and public market activity within the AE sector.

In this Issue: **Our Services** Deals are Still Getting Done, Even in the Midst of a Global Pandemic! Advisory Pages 3-4 Ownership Advisory M&A Activity/Commentary **Executive Compensation Consulting** Pages 5-11 **ESOP** Repurchase Obligation Corporate Sustainability **AE Index Market Performance** Page 12 **AE Index Financial Performance Corporate Finance** Page 13 **AE Index Implied Market Multiples** Mergers & Acquisitions Pages 14 Capital Markets **Special Situations** About Us Corporate ESOP Advisory Portland **Transaction Opinions** Minneapolis 0 New York Chicago Philadelphia Fairness Opinions Solvency Opinions • Orange County Raleigh **Trustee Representation ♥**_{Dallas} Corporate Representation 70 + Valuation 25^{+} Corporate Planning Dedicated Years **ESOP & ERISA** In Business Professionals 50^{+} 500^{+} 100^{+} Equity Compensation Estate & Gift Annual Advisory Annual Valuation Transactions Financial Reporting

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Engagements

Completed Annually

Engagements

Deals are Still Getting Done, Even in the Midst of a Global Pandemic!

Amidst the backdrop of a volatile stock market and significant economic uncertainty, Chartwell closed two M&A transactions in the AE industry during May. The first resulted in a Las Vegas-based geotech firm being acquired by a Florida-based geotech engineering firm. The second involved the significant complexity of combining two 100% ESOP-owned, multi-discipline engineering firms. The following page summarizes Chartwell's efforts in leading both transactions.



"We chose Chartwell as our financial advisor due to their industry experience, reputation, and transaction expertise. Chartwell was instrumental throughout each step of the process, providing indepth analysis and unbiased guidance. They took the lead in evaluating offers and educating us on our options with strategic and private equity investors. Chartwell led the negotiation process in this highly complex transaction. I was very impressed with the superior outcome for our shareholders and employees. We are extremely excited about the future of NOVA and Obsidian."

- James Bristow, CEO

NOVA Geotechnical & Inspection Services, LLC



"We are no strangers to the M&A process and I personally have interacted with many financial professionals throughout my career. We selected Chartwell to lead this important endeavor based on Chartwell's ability to leverage its team of professionals to provide unbiased, comprehensive advice throughout the transaction process. Chartwell's ability to navigate through a complex ESOP transaction during one of the more complex times in recent history was invaluable. It was comforting to know we had a reliable and responsive partner to help us cross the finish line."

> – Todd Kenner, CEO RESPEC, Inc.

Chartwell Advises NOVA Geotechnical on Sale to Obsidian Group

NOVA Geotechnical Background

- NOVA Geotechnical & Inspection Services, LLC ("NOVA" or the "Company") provides geotechnical engineering, environmental consulting, soils inspection and testing, construction materials testing, and special inspection services
- NOVA's staff consists of engineers, geologists, scientists, inspectors, technicians, and specialty consultants with decades of engineering and construction experience
- Founded in 2001, the Company is headquartered in Las Vegas, Nevada with additional offices in Reno, Nevada and Irvine, California

Transaction Overview

- Chartwell was engaged to pursue a recapitalization of the Company
- The equity holders were interested in the sale of the Company to facilitate ongoing growth initiatives, including geographic expansion, and to capitalize on favorable construction trends in the Company's key markets
- Selling shareholders were able to roll their equity into the acquiring entity, allowing them to participate in the future value creation of the combined company

Transaction Details

- Chartwell identified over 160 prospective investors/buyers and conducted a broad marketing process to maximize value for the shareholders
- The Company received multiple indications of interest and management presentations/due diligence were held with interested parties
- The shareholders were able to choose a buyer/partner that most optimally met the Company's current and future objectives
- Chartwell expeditiously worked with both the buyer and the seller to finalize the due diligence process and close the transaction within a tight timeline amid a global pandemic
- The purchase price was funded through a combination of cash and equity in the parent company
- Chartwell was the sole financial advisor to the Company and worked extensively with the shareholders and management team to negotiate favorable deal terms

Chartwell Advises RESPEC on Acquisition of PDC Engineers

RESPEC and PDC Backgrounds

- RESPEC, Inc. ("RESPEC" or the "Company") is a technical consulting and technology services firm specializing in the application of technology to solve complex business, scientific, and engineering problems
- Founded in 1969, RESPEC is headquartered in Rapid City, South Dakota with locations across the country
- PDC Engineers ("PDC") is a multi-disciplinary consulting and design firm that provides services in the facilities, transportation, land development, and utilities markets
- Established in 1953, PDC is based in Fairbanks, Alaska

Transaction Overview

- The transaction brought together two 100% ESOP-owned companies with over 110 years of industry experience, over 450 joint ESOP owners, and combined revenue of \$80 million
- The transaction was structured as a merger of the companies, with newly issued RESPEC shares issued in exchange for all of the outstanding PDC shares, followed by a merger of the ESOP plans
- Primary synergies included end market and geographic expansion for PDC and a well-established infrastructure business unit for RESPEC

Transaction Details

- Chartwell worked with RESPEC management to analyze investment merits, valuation, and transaction structuring and facilitated between both companies and their respective ESOP trustees and legal and financial advisors
- Synergies In addition to the implicit value enhancements, such as diverse geography, markets, clients, and in general, a larger company, Chartwell worked with both management teams to quantify potential synergies
- Recapitalization PDC's debt and synthetic equity obligations were satisfied with cash and notes at transaction closing
- ESOP Appropriate treatment of PDC's unallocated ESOP shares was critical to all parties; ultimately, the internal loan was satisfied with a
 combination of contribution and distribution and all of the shares became allocated immediately before closing while participates approved
 the transaction via a pass-thru vote
- RESPEC utilized the "drop-down LLC" legal structure to facilitate the transaction

		Western Reg	ion	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/2/2020	Harley Ellis Devereaux Corporation	Puchlik Design Associates, Inc. - Architectural services	Pasadena, CA	Harley Ellis Devereaux Corporation acquired Puchlik Design Associates on January 2, 2020. Post acquisition, Puchlik Design Associates leadership and staff have joined the Harley Ellis Devereaux Corporation team in Los Angeles.
1/3/2020	WSP Global, Inc.	LT Environmental, Inc. - Environmental consulting services	Arvada, CO	WSP Global (TSX:WSP) acquired LT Environmental on January 3, 2020. Post acquisition, Tom Murphy, President & CEO of LT Environmental, has joined WSP.
1/16/2020	Place Landscape Architecture, LLC	Sage Design Group, PLLC - Landscape architectural services	Kennewick, WA	Place Landscape Architecture acquired Sage Design Group on January 16, 2020. Post acquisition, Tamra Lehuta, Owner of Sage, now operates under the Place LA name and has transitioned into a senior landscape architect employee at Place LA.
1/21/2020	Lionakis Beaumont Design Group, Inc.	Lundstrom & Associates Architects - Architecture and design services	Irvine, CA	Lionakis Beaumont Design Group acquired Lundstrom & Associates Architects on January 21, 2020. Post acquisition, the entire team of Lundstrom & Associates has joined the Lionakis Newport Beach office.
2/18/2020	Provost & Pritchard Consulting Group, Inc.	Parrish Hansen Incorporated - Structural engineering services	Clovis, CA	Provost & Pritchard Consulting Group acquired Parrish Hansen Structural Engineers on February 18, 2020.
2/19/2020	Ei Risk Management Corporation	ABCO Engineering Corporation - Construction management and quality assurance services	Centennial, CO	Ei Risk Management Corporation acquired ABCO Engineering Corporation on February 19, 2020. Post acquisition, Joe Johnson of ABCO continues with the merged companies as Executive Vice President, remaining in Colorado.
2/29/2020	Schnabel Engineering, Inc.	Deere & Ault Consultants, Inc. - Geotechnical, water resources, and other related engineering services	Longmont, CO	Schnabel Engineering acquired Deere and Ault Consultants on February 29, 2020. Post acquisition, the Longmont location retains its name as Deere & Ault Consultants Inc., a Schnabel Engineering Company.
3/31/2020	Sargent & Lundy, LLC	Summit Engineering Services, Inc. - Engineering and design services	Englewood, CO	Sargent & Lundy acquired Summit Engineering Services on March 31, 2020. Post acquisition, Thomas Meehan, Vice President of Sargent & Lundy, supported by legacy leaders from Summit, now leads the energy and industrial business group of Sargent & Lundy.
5/6/2020	Universal Engineering Sciences, LLC	NOVA Geotechnical & Inspection Services, LLC - Geotechnical engineering, environmental consulting, special inspections, and construction materials testing services	Las Vegas, NV	Universal Engineering Sciences acquired NOVA Geotechnical & Inspection Services on May 6, 2020. Chartwell Financial Advisory acted as financial advisor to NOVA Geotechnical & Inspection Services.
5/7/2020	RESPEC, Inc.	PDC Inc. Engineers - Planning, design, and construction services	Anchorage, AK	RESPEC acquired PDC Inc. Engineers on May 7, 2020. Post transaction, the combined company continues to operate as a 100% employee-owned organization. Chartwell Financial Advisory acted as financial advisor to RESPEC.
5/11/2020	P2S, Inc.	Notkin Mechanical Engineers - Mechanical engineering services	Seattle, WA	P2S acquired Notkin Mechanical Engineers on May 11, 2020.

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	Western Region (continued)									
Announce/ Close Date	Acquirer Target		Target HQ Location	Deal Notes						
5/29/2020	West Japan Engineering Consultants, Inc.; Kyuden International Corporation	Thermochem, Inc. - Testing services, consulting engineering, and geoscience services	Santa Rosa, CA	Kyuden International Corporation and West Japan Engineering Consultants executed a share purchase agreement to acquire Thermochem, Inc. on May 29, 2020.						

		Southwestern F	Region	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/7/2020	T. Baker Smith, LLC	Naismith Marine Services, Inc. - Hydrographic and geophysical surveying and environmental solutions	Rockport, TX	T. Baker Smith acquired Naismith Marine Services on January 7, 2020. Jim Naismith, Founder of Naismith Marine Services, continues to lead the Corpus Christi office.
1/15/2020	GR Engineering Services Limited	Hanlon Engineering & Associates, Inc. - Engineering, procurement, and construction management services	Tucson, AZ	GR Engineering Services Limited (ASX:GNG) entered in an agreement to acquire Hanlon Engineering & Associates on January 15, 2020.
1/28/2020	MOUNTAIN, LTD	Level 5 Consulting Engineers, Inc. - Architecture and engineering services	Garden Ridge, TX	MOUNTAIN acquired Level 5 Consulting Engineers on January 28, 2020. Post acquisition, Level 5 Consulting Engineers, Inc. operates as wholly-owned subsidiary and as MOUNTAIN, LTD. Engineering.
1/31/2020	ERI Solutions, Inc.	BLOC Environmental Solutions, LP - Environmental compliance consulting services	San Antonio, TX	ERI Solutions acquired Bloc Environmental Solutions on January 31, 2020. Post acquisition, Bloc Environmental Solutions continues to operate under its brand as a division of ERI Solutions. All Bloc Environmental Solutions team members have joined ERI Solutions.
2/10/2020	Alliance Source Testing, LLC	METCO Environmental, Inc. - Source emission and air quality testing services	Carrollton, TX	Alliance Source Testing acquired METCO Environmental from TestAmerica Environmental Services, LLC on February 10, 2020.
2/11/2020	Ardurra Group, Inc.	LNV, Inc. - Engineering, surveying, and architectural services	Corpus Christi, TX	Ardurra Group acquired LNV on February 11, 2020.
2/26/2020	Brr Architecture, Inc.	Raymond Harris And Associates, Inc. - Architectural services	Dallas, TX	Brr Architecture agreed to acquire RHA Architects on February 26, 2020. The partnership created a twelfth office location for BRR and adds more than 15 talented teammates to the BRR staff.
2/27/2020	KCI Technologies, Inc.	Civil Engineering and Construction Engineering & Inspection Practices of Landtech, Inc. - Civil engineering and construction engineering and inspection services	Houston, TX	KCI Technologies acquired Civil Engineering and Construction Engineering & Inspection Practices of Landtech on February 27, 2020. Landtech's Civil Engineering and Construction Engineering & Inspection practices now operate under the KCI umbrella and name.
4/24/2020	Davidson, Autrey, Mcdaniel, Dulin & Bruce, LLC	Stevens Surveying Company, LLC - Land surveying services	Lubbock, TX	Davidson, Autrey, Mcdaniel, Dulin & Bruce, acquired Stevens Surveying Company on April 24, 2020. Post acquisition, Norris Stevens, Founder of Stevens Surveying, and his entire staff have joined Davidson, Autrey, Mcdaniel, Dulin & Bruce.

	Southwestern Region (continued)									
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes						
5/30/2020	IMEG Corp.	Cardno Haynes Whaley, Inc. - Structural engineering services	Houston, TX	IMEG Corp. acquired Cardno Haynes Whaley from Cardno Limited (ASX:CDD) on May 29, 2020. Post acquisition, Cardno Haynes Whaley, Inc. now does business as IMEG Corp. and continues to operate out of its existing locations with the same team and leadership continuity.						
6/2/2020	HMT, LLC	Dunham Engineering, Inc. - Structural, storage tank, and corrosion engineering and consulting services	College Station, TX	HMT acquired Dunham Engineering on June 2, 2020. Post acquisition, Travis Tatum, President & CEO of Dunham Engineering and his team have joined HMT.						

		Midwestern R	egion	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/14/2020	LJB, Inc.	GGJ, Inc. - Professional landscape architecture, planning, and civil and environmental engineering services	Eastlake, OH	LJB acquired GGJ on January 14, 2020. Post acquisition, GGJ brings 11 employees to LJB's growing national team and adds technical expertise.
1/17/2020	Halstead Architects	R&B Architects - Architecture and planning services	Indianapolis, IN	Halstead Architects agreed to acquire R&B Architects on January 16, 2020. Post acquisition, R&B Architects has merged into Halstead Architects.
1/20/2020	GZA GeoEnvironmental, Inc.	Vieau Associates, Inc. - Environmental consulting and due diligence services	Edina, MN	GZA GeoEnvironmental acquired Vieau Associates on January 20, 2020. Post acquisition, Vieau Associates continues to operate under its name as a GZA division.
1/22/2020	Interstate Waste Services, Inc.	Apex Environmental, LLC - Waste disposal services	Amsterdam, OH	Interstate Waste Services acquired Apex Environmental from Prophet Equity, LLC and others on January 22, 2020. Post acquisition, the combined company operates under the Interstate Waste Services brand.
1/30/2020	Superior Environmental Solutions, Inc.	Resource-One - Recycling programs and environmental services	Blue Ash, OH	Superior Environmental Solutions acquired Resource-One on January 30, 2020. Post acquisition, Resource-One's management team continues to lead its staff under Resource-One, an SES Company
1/31/2020	Farnsworth Group, Inc.	FWAI Architects, Inc. - Architecture and interior design services	Springfield, IL	Farnsworth Group acquired FWAI Architects on January 31, 2020. Post acquisition, all of the FWAI staff has joined Farnsworth.
2/4/2020	The Mannik & Smith Group, Inc.	Associated Engineers & Surveyors, Inc. - Land surveying and civil engineering services	Adrian, MI	The Mannik & Smith Group acquired Associated Engineers & Surveyors on February 4, 2020. Post acquisition, Kevin Pickford, President of Associated Engineers, has joined The Mannik & Smith Group as Vice President and continues to lead daily operations.
2/5/2020	Wallace & Pancher, Inc.	Richland Engineering Limited - Consulting and engineering services	Mansfield, OH	Wallace & Pancher acquired Richland Engineering Limited on February 5, 2020. Post acquisition, Richland Engineering's owners and management team continues in their leadership roles in the new organization.

	Midwestern Region (continued)								
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes					
3/20/2020	ISG, Inc.	Architects Rego + Youngquist, LLC - Architecture design services	St. Louis Park, MN	ISG acquired Architects Rego + Youngquist on March 20, 2020. Post acquisition, the ARY team has moved from its previous space down the boulevard to ISG's recently opened Minneapolis West office.					
4/6/2020	Innovation Studios, LLC	2B Studio, Inc. - Design and engineering services	Ada, MI	Innovation Studios acquired 2B Studio on April 6, 2020. Post acquisition, Bruce Sienkowski, Founder of 2B Studios, remains President of the company.					
4/8/2020	AEA Investors, LP	SitelogIQ, Inc. - Architecture, engineering and design, and project consulting and planning services	Minneapolis, MN	AEA Investors, through its fund, agreed to acquire SitelogIQ from Oaktree Capital Group, LLC on April 2, 2020. AEA Investors financed the transaction with a senior secured credit facility.					
6/8/2020	Therma Corporation	Gilbert Mechanical Contractors, LLC - Engineering, construction, and services company	Edina, MN	Therma Corporation acquired Gilbert Mechanical Contractors on June 8, 2020.					

		Northeastern R	Region	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/6/2020	SLR Consulting Limited	Milone & MacBroom, Inc. - Engineering consulting services	Cheshire, CT	SLR Consulting Limited acquired Milone & MacBroom on January 6, 2020.
1/9/2020	CHA Consulting, Inc.	CME Associates, Inc. - Engineering consulting services	Mansfield, CT	CHA Consulting acquired CME Associates on January 9, 2020. Post acquisition, CME is now known as CME Associates, a CHA Company.
1/10/2020	Delta Engineers, Architects, & Land Surveyors, DPC	Terrestrial Environmental Specialists, Inc. - Environmental consulting services	Phoenix, NY	Delta Engineers, Architects, & Land Surveyors acquired Terrestrial Environmental Specialists on January 10, 2020. Post acquisition, TES staff members have moved to a new Delta office in Syracuse.
1/13/2020	Technical Diagnostic Services, LLC	Potomac Electrical Services, Inc. - Electrical testing, engineering, and field services	Crofton, MD	Technical Diagnostic Services acquired Potomac Electrical Services on January 13, 2020. Post acquisition, both the companies continue to operate independently with distinct brands, locations, and operational leadership.
2/6/2020	Terracon Consultants, Inc.	Skelly and Loy, Inc. - Engineering and environmental services	Harrisburg, PA	Terracon Consultants acquired Skelly and Loy on February 6, 2020. Post acquisition, Skelly and Loy's 150 employees have become part of Terracon.
2/11/2020	CES, Inc.	Haley and Ward, Inc. - Civil and environmental engineering services	Maynard, MA	CES acquired Haley and Ward from Scott Miller on February 11, 2020. Post acquisition, Haley and Ward, Inc. has been rebranded as Haley and Ward, a division of CES, Inc.
2/13/2020	R. S. Mowery & Sons, Inc.	Cumberland Design & Building Company, Inc. - Construction and engineering services	Carlisle, PA	R. S. Mowery & Sons entered into agreement to acquire Cumberland Design & Building Company on February 13, 2020. Post acquisition, R. S. Mowery & Sons has retained seven key employees from Cumberland.

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		Northeastern Region	(continued)	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
3/4/2020	St. Germain Collins, Inc.	MAI Environmental, Inc. - Environmental consulting and geological field-testing services	South Portland, ME	St. Germain Collins acquired MAI Environmental on March 4, 2020. Post acquisition, MAI Environmental's two employees have joined St. Germain Collins' environmental services team.
3/9/2020	Colliers International Group, Inc.	Maser Consulting, PA - Engineering and engineering consulting services - Reported revenue = \$167.0 million	Red Bank, NJ	Colliers International Group (TSX:CIGI) entered into an agreement to acquire an unknown stake in Maser Consulting on March 9, 2020. Post acquisition, Maser's senior leadership remains significant shareholders of the business under Colliers' partnership model. The business will be rebranded as Colliers Engineering Services by the first quarter of 2021.
3/16/2020	P.W. Grosser Consulting, Inc.	KGO Consulting, Inc. - Environmental and land consulting services	Uniondale, NY	P.W. Grosser Consulting acquired KGO Consulting on March 16, 2020.
3/17/2020	The ERM Group, Inc.	M.J. Bradley & Associates, LLC - Strategic environmental and energy consulting services	Concord, MA	The ERM Group acquired M.J. Bradley & Associates on March 17, 2020. Post acquisition, MJB&A has become a strategic unit within ERM: MJB&A - an ERM Group Company.
4/6/2020	Groundwater & Environmental Services, Inc.	Bluestone Environmental Services, LLC - Environmental consulting, compliance, and site remediation services	Somerset, NJ	Groundwater & Environmental Services acquired Bluestone Environmental Services on April 6, 2020. Post acquisition, all Bluestone employees, including Founder Andy Cozzi, have joined GES.
4/30/2020	Comstock Environmental	Green Street Environmental, LLC - Air quality services, environmental due diligence, and remediation services	Baltimore, MD	Comstock Environmental agreed to acquire Green Street Environmental on April 30, 2020. Post acquisition, Comstock Environmental has merged into Comstock Environmental's operations.

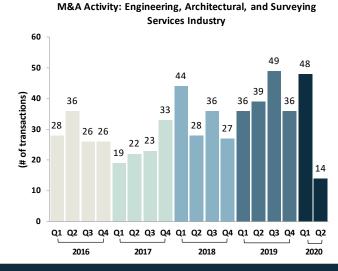
		Southeastern R	egion	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/3/2020	Partner Assessment Corporation, Inc.	Environmental Services Division of MC Consultants, Inc. - Environmental consulting and industrial hygiene services	Altamonte Springs, FL	Partner Assessment Corporation acquired Environmental Services Division of MC Consultants on January 3, 2020. Post acquisition, Partner Assessment Corporation has retained the team members of Environmental Services Division.
1/6/2020	Cotton Creek Capital Management, LLC; Cotton Creek Capital Partners III, LP	Landpoint, LLC - Land surveying services	Bossier City, LA	Cotton Creek Capital Partners III, a fund managed by Cotton Creek Capital Management, acquired Landpoint on January 6, 2020. The acquisition included Landpoint's subsidiaries, which include King Surveyors, LLC and West Company of Midland, LLC.
1/16/2020	American Engineering Associates-Southeast, PA	Hugh J. Gilleece, III, & Associates, PA - Site engineering, environmental, traffic, hydraulic modeling, and landscape designing services	Cary, NC	American Engineering Associates-Southeast acquired Gilleece & Associates on January 16, 2020. Post acquisition, six employees of Gilleece & Associates have been retained by American Engineering Associates.

		Southeastern R	egion	
Announce/ Close Date	Acquirer	Target	Target HQ Location	Deal Notes
1/21/2020	Design House Studio, LLC	Alan David, Inc. - Interior and furniture design and architectural services	Fort Lauderdale, FL	Design House Studio acquired Alan David on January 21, 2020. Post acquisition, the Alan David team has joined Design House.
1/21/2020	Schmidt Associates, Inc.	Arrasmith, Judd, Rapp, Chovan, Inc. - Architecture and planning services	Louisville, KY	Schmidt Associates acquired Arrasmith, Judd, Rapp, Chovan on January 21, 2020. Post acquisition, Arrasmith, Judd, Rapp, Chovan now operates under the new name of Arrasmith, a Schmidt Associates Company.
1/31/2020	Veolia ES Technical Solutions, LLC	Elemental Environmental Solutions, LLC - Hazardous waste treatment services - Reported Enterprise Value = \$250.0 million - Reported Equity Value = \$200.0 million	Little Rock, AR	Veolia ES Technical Solutions agreed to acquire Elemental Environmental Solutions from Alcoa Corporation (NYSE:AA) on January 2, 2020. As per the agreement, consideration included \$200 million in cash paid at closing and an additional \$50 million to be paid if certain post-closing conditions are satisfied.
2/3/2020	HEPACO, LLC	Evergreen AES Environmental Services - Environmental consulting and remediation services	Shelbyville, KY	HEPACO acquired Evergreen AES from Jerry McCandless, Kendrick McCandless, and Jennifer Lanham on February 3, 2020. Post acquisition, Jennifer Lanham, President of Evergreen AES, has joined the HEPACO team as a Vice President.
2/3/2020	Applied Research Associates, Inc.	Consulting Division of Dynatest North America, Inc. - Pavement engineering services to roadway and airfield agencies, contractors, and design consultants	Alpharetta, GA	Applied Research Associates acquired Consulting Division from Dynatest North America on February 3, 2020.
2/6/2020	Abell + Crozier + Davis Architects, Inc.	Architects Southwest, LLC - Architectural design services	Lafayette, LA	Abell + Crozier + Davis Architects acquired Architects Southwest on February 6, 2020. Post acquisition, Chad Abell, Eric Crozier, and Damico are now principal architects at the newly merged firm, ACSW.
2/27/2020	Thomas & Hutton Engineering Co.	Dempsey, Dilling and Associates, PC - Engineering consulting services	Smyrna, TN	Thomas & Hutton Engineering Co. acquired Dempsey, Dilling & Associates on February 27, 2020. Post acquisition, Dempsey, Dilling now operates under the Thomas & Hutton brand.
3/2/2020	Joseph & Joseph Architects	Bravura Corporation - Architectural services	Louisville, KY	Joseph & Joseph Architects acquired Bravura Corporation on March 2, 2020. Post acquisition, the merged firm operates under both names during a transition period.
3/3/2020	BCC Engineering, LLC	Lakes Engineering, Inc.;New Millennium Engineering, Inc. - Engineering services	Miami, FL	BCC Engineering acquired Lakes Engineering and New Millennium Engineering on March 3, 2020. Post acquisition, the merged business will progressively transition into the BCC brand.
4/13/2020	Montrose Environmental Group, Inc.	Center for Toxicology and Environmental Health, LLC - Environmental consulting services	North Little Rock, AR	Montrose Environmental Group acquired CTEH on April 14, 2020.
4/22/2020	faulkner edc	JDS Consulting & Design, PLLC - Engineering, design, and construction material testing services	Raleigh, NC	faulkner edc acquired JDS Consulting & Design on April 22, 2020. Post acquisition, the combined company is known as JDSfaulkner.

Merger & Acquisition Commentary

Activity in the AE market has been strong for a number of years and was moving at a torrid pace throughout 2019 and into Q1 2020. From 2016 -2019, there were over 500 deals closed in the industry. In 2019, 160 deals were closed (the most robust market in the past five years!) on the heels of 135 deals in 2018, meaning nearly 300 deals were closed in the past two years. Q1 2020 started off with a bang, with almost 50 deals, equating to nearly 135 deals in the past three quarters! And then COVID struck. Market activity across most industries came to a grinding halt in Q2, so the fourteen deals closed in the AE space during the quarter is actually quite positive. Given that in most states and cities engineering firms have been deemed as essential throughout the pandemic, most firms have continued to generate revenue. However, the lack of new work and resulting erosion of backlogs is most concerning at this point.

We obviously do not yet know what the broader impacts of COVID are going to be on the overall economy and how long the recession may last. That said, there are significant infrastructure needs in the U.S. and the issues we faced pre-COVID are still there. Even with the current uncertainty, buyers seem to be taking a long-term view of the industry and are willing to invest in solid companies with proven track records. Longer term, private equity is still sitting on a mountain of cash and there are many aging Baby Boomers that will need to figure out exits for their companies, whether through traditional third parties or sales to an ESOP or their management teams. Accordingly, the long-term outlook for M&A activity in the AE industry remains strong.



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		Enterprise Value				Equity Value			
Company	Ticker	Value \$	02.4	YTD Δ	LTM Δ	Value \$		YTD Δ	LTM Δ
Company			Q2 Δ				Q2 Δ		
Jacobs Engineering Group	NYSE:J	12,347	11.8%	(3.5%)	(10.4%)	11,033	4.6%	(7.8%)	(4.3%)
WSP Global, Inc.	TSX:WSP	8,649	14.9%	4.8%	12.7%	6,915	15.6%	(4.5%)	19.4%
AECOM	NYSE:ACM	7,146	(6.8%)	(23.2%)	(22.5%)	6,016	27.1%	(11.2%)	1.0%
Worley Limited	ASX:WOR	4,641	40.6%	(31.9%)	18.1%	3,140	59.6%	(44.0%)	(41.5%)
Tetra Tech, Inc.	NasdaqGS:TTEK	4,502	9.9%	(7.6%)	1.1%	4,275	10.7%	(9.1%)	(0.8%)
Stantec, Inc.	NYSE:STN	4,485	18.6%	18.1%	13.2%	3,425	20.7%	9.1%	27.7%
SNC-Lavalin Group, Inc.	TSX:SNC	3,896	9.2%	(16.7%)	(39.7%)	2,957	15.0%	(27.1%)	(16.8%)
Arcadis NV	ENXTAM:ARCAD	2,290	10.1%	(8.2%)	11.7%	1,605	13.7%	(22.4%)	(2.8%)
NV5 Global, Inc.	NasdaqCM:NVEE	980	14.2%	45.6%	(4.2%)	663	24.4%	2.4%	(35.2%)
Willdan Group, Inc.	NasdaqGM:WLDN	407	9.1%	(12.4%)	(16.7%)	291	18.1%	(19.0%)	(29.7%)
RPS Group plc	LSE:RPS	311	14.1%	(50.8%)	(20.8%)	133	42.2%	(73.2%)	(55.6%)
IBI Group, Inc.	TSX:IBG	239	19.3%	4.4%	(12.3%)	107	30.7%	(23.7%)	(10.7%)
Cardno Limited	ASX:CDD	190	11.6%	(11.0%)	(48.8%)	74	10.2%	(50.1%)	(74.8%)
Average		3,853	13.6%	(7.1%)	(9.1%)	3,126	22.5%	(21.6%)	(17.2%)
Median		3,896	11.8%	(8.2%)	(10.4%)	2,957	18.1%	(19.0%)	(10.7%)

AE Index Market Performance - Q2 2020

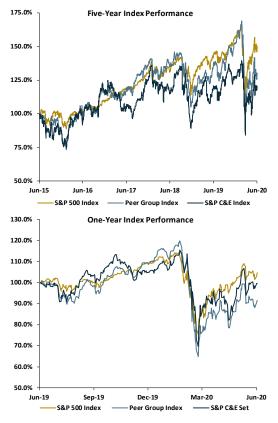
\$ in millions

Source Data Provided by Capital IQ as of 6/30/2020

YTD = Year To Date | LTM = Last Twelve Months

Can't get much more volatility than what we saw in the first half of the year! Consistent with the rest of the market, our AE Index saw significant variability with average Q2 equity growth of 22.5% and a YTD decline of 21.6%. Interestingly, both YTD and over the LTM, the average decline in enterprise value is in the 7-10% range meaning in aggregate, there isn't much difference in where the index was at the end of 2019 versus June 2019 (although the one-year index performance chart shows a bit more variability during this time period due to the market weighted nature of the index). And while the median enterprise value and market cap are only down approximately 10.5% over the LTM, there were four companies that experienced enterprise value declines of more than 20% and five that had market cap declines of approximately 30% or more.

The two major movers in terms of the Q2 value rebound were AECOM and Worley. While its equity value was up 27.1% in Q2, AECOM's enterprise value declined 6.8%. Worley, on the other hand, had increases in both equity and enterprise value of 59.6% and 40.6%, respectively, during Q2. NV5 was the other firm that significantly bucked the trend, with value growth of over 30% in Q1 and a YTD increase of 45.6%. Stantec also weathered the storm quite well, incurring only a minimal dip in enterprise value in Q1. Overall, only four companies have higher enterprise values YTD and only five over the LTM.



AE Index Financial Performance – Q2 2020

		Revenue		EBITDA			EBITDA Margin		
Company	LTM \$	LTM Δ	ΝΤΜ Δ	LTM \$	LTM Δ	ΝΤΜ Δ	5-Year Avg.	LTM	NTM
AECOM	19,886	15.5%	(35.1%)	962	28.7%	(24.8%)	4.7%	4.8%	5.6%
Jacobs Engineering Group	13,350	10.3%	0.5%	967	(2.3%)	7.6%	6.6%	7.2%	7.8%
Worley Limited	7,833	119.7%	0.8%	510	96.6%	29.4%	5.1%	6.5%	8.4%
SNC-Lavalin Group, Inc.	6,619	(11.7%)	(5.6%)	258	(23.2%)	95.9%	6.2%	3.9%	8.1%
WSP Global, Inc.	6,361	4.1%	NA	516	8.1%	NA	7.5%	8.1%	NA
Arcadis NV	3,898	4.6%	(0.6%)	253	10.8%	16.7%	6.4%	6.5%	7.6%
Stantec, Inc.	2,654	2.8%	7.9%	316	10.8%	39.8%	11.2%	11.9%	15.4%
Tetra Tech, Inc.	2,449	8.3%	(4.6%)	241	(0.6%)	5.4%	10.6%	9.8%	10.9%
Cardno Limited	954	31.4%	(27.9%)	38	8.7%	(20.5%)	3.1%	3.9%	4.4%
RPS Group plc	811	(0.1%)	(35.0%)	69	(12.3%)	(26.9%)	10.1%	8.5%	9.6%
NV5 Global, Inc.	557	26.4%	18.2%	65	11.9%	41.3%	12.0%	11.7%	14.0%
Willdan Group, Inc.	457	47.8%	(5.7%)	35	28.4%	(0.9%)	7.8%	7.6%	8.0%
IBI Group, Inc.	330	(3.4%)	(14.9%)	32	4.7%	(3.3%)	10.1%	9.8%	11.1%
Average	5,089	19.7%	(8.5%)	328	13.1%	13.3%	7.8%	7.7%	9.2%
Median	2,654	8.3%	(5.1%)	253	8.7%	6.5%	7.5%	7.6%	8.2%

\$ in millions

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LTM = Last Twelve Months | NTM = Next Twelve Months

Data from the U.S. Census Bureau suggests revenue in the engineering, architectural, and related services sector posted a 5.1% increase for 2019 after rising at similar rates in both 2017 (+5.2%) and 2018 (+5.3%). Heading into 2020, the industry was still going strong and poised for another year of growth. Even through Q2 2020, revenue performance continued to be strong over the LTM for most of the AE Index firms, with average and median growth of 19.7% and 8.3%, respectively. In fact, only SNC-Lavalin experienced a material revenue decline during the LTM. WSP, Arcadis, Stantec, RPS and IBI each experienced revenue fluctuations of less than 5.0%. The remaining firms achieved growth ranging from 8.3% (Tetra Tech) to 119.7% (Worley). Worley's growth was fueled by the purchase of Jacob's Energy, Chemicals and Resources business during 2019.

The outlook is a bit more dire. Given the dwindling pipelines for many firms, we are beginning to see significant pull-back on revenue forecasts over the NTM, with a projected average decline of 8.5%. AECOM, Cardno, and RPS are leading the way with anticipated revenue declines of 35.1%, 27.9%, and 35.0%, respectively. Only two firms are projecting material growth over the NTM, with NV5 being the most significant at 18.2%, primarily fueled by a number of acquisitions in 2019.

Interestingly, while the mood on the revenue side is rather dour, apparently many of these firms (7 out of the 12 with NTM estimates) are going to find a way to actually improve EBITDA! That's right, forecasts suggest median growth in EBITDA over the NTM of 6.5%. Why? Well, margin improvement of course! In fact, every company in the index is projected to have higher EBITDA margins over the NTM than they achieved during the LTM. Further, every one of these companies is projecting to have better EBITDA margins over the NTM than they have averaged over the past five years. Gotta love the optimism. Anyone buying?!

	Enterprise Value / EBITDA						
			Lintoi				
Company	5-Year Avg.	Q2 2019	Q2 2020	Q2 2021E	Q2 Δ	YTD Δ	$LTM \Delta$
NV5 Global, Inc.	16.3x	17.6x	15.1x	10.7x	+0.3x	+4.1x	-2.6x
Worley Limited	15.4x	15.2x	9.1x	7.0x	+2.6x	-13.6x	-6.1x
Tetra Tech, Inc.	15.1x	18.4x	18.7x	17.7x	+1.8x	-1.9x	+0.3x
SNC-Lavalin Group, Inc.	15.0x	19.3x	15.1x	7.7x	+3.2x	NA	-4.1x
WSP Global, Inc.	14.6x	16.1x	16.8x	NA	+3.4x	+1.2x	+0.7x
Stantec, Inc.	13.7x	13.9x	14.2x	10.2x	+3.1x	+1.5x	+0.3x
Willdan Group, Inc.	13.2x	18.1x	11.8x	11.9x	+1.9x	-2.6x	-6.3x
Jacobs Engineering Group	11.8x	13.9x	12.8x	11.9x	+1.5x	-1.0x	-1.2x
Cardno Limited	10.5x	10.7x	5.1x	6.4x	+0.6x	-0.5x	-5.7x
AECOM	10.1x	12.3x	7.4x	9.9x	-0.6x	-2.7x	-4.9x
Arcadis NV	8.8x	9.0x	9.0x	7.8x	+0.8x	+0.1x	+0.1x
IBI Group, Inc.	7.8x	8.8x	7.4x	7.6x	+1.6x	+1.0x	-1.4x
RPS Group plc	7.2x	5.0x	4.5x	6.1x	+0.6x	-4.0x	-0.5x
Average	12.3x	13.7x	11.3x	9.6x	+1.6x	-1.5x	-2.4x
Median	13.2x	13.9x	11.8x	8.8x	+1.6x	-0.8x	-1.4x

AE Index Implied Market Multiples - Q2 2020

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As one would expect, EBITDA multiples rebounded from where they were at the end of Q1 2020 (except AECOM) but are generally still down relative to the year prior and even relative to the 5-year average. A couple exceptions here including Tetra Tech, whose current multiple is over 3.0x higher than its 5-year average. WSP too is trading at a premium relative to its historical average, up over 2.0x. Jacob's is up 1.0x versus its 5-year average. SNC, Stantec, Arcadis, and IBI are relatively close to their historical figures. The most significant gaps relative to their 5-year averages include Worley (-6.3x), Cardno (-5.4x), AECOM (-2.7x), and RPS (-2.7x).

When looking at the NTM multiples, there appears to be some upside if the lofty EBITDA growth can be achieved... "if" being the operative word! NV5's NTM multiple is 5.6x below its 5-year average, Worley's is 8.4x below, and SNC's multiple is 7.3x below. These three companies are projecting EBITDA growth of 55.9%, 22.2%, 129.5%, respectively. AECOM, the only company trading at a lower multiple than at the end of Q1, actually has a higher NTM multiple given they are one of the few companies projecting an EBITDA decline. In aggregate, the average and median NTM multiples are below the long-term measures by 2.7x and 4.4x, respectively.

In total, there is a 1.0x to 1.5x discount to the historical multiples as of the end of Q2. The forward-looking multiples are a bit more muted but recall, these multiples are being calculated off some pretty lofty EBITDA projections in the midst of falling revenue streams. Does that feel right in the current environment? To what degree are investors believing the forecasts? Is the market betting on a significant infrastructure package coming out of Congress in the near term? Hard to say for sure but it will be interesting to see where these valuations go over the next six months!