



<p>BETAR – Consultores, Lda</p> <p>Av. Elias Garcia, 53 – 2º Esq. 1000-148 LISBOA Tel.: (351) 21 782 61 10 E-mail: consultores@betar.pt Web site: www.betar.pt</p>	<p>Corporation form Limited liability company</p> <p>Registered capital 150.000 Euros</p> <p>Board of Directors José Tiago de Pina Patrício de Mendonça, Master in Civil Eng. Luís Miguel Plá de Magalhães Villar, Civil Eng.</p> <p>Permanent personnel Total: 35 Graduates: 24 Other technicians: 4 Administrative staff: 5</p> <p>Turnover (2019) 2.088.338 Euros</p> <p>Main associations • APPC • ASCP • CMM</p> <p>Certifications • NP EN ISO 9001:2000, certified by LUSAENOR</p>	
 <p>PORTUGUESE ASSOCIATION OF ENGINEERING AND MANAGEMENT CONSULTANTS</p> <p>Last update: 14-03-2022</p>	<p>General description BETAR Consultores is part of the Betar Group, which was established in 1988. The firm stemmed from Betar Estudos e Projectos de Estabilidade Lda (established in 1973), in order to render autonomous the bridge design sector which at the time registered a significant expansion as a result of the undergoing modernization of Portugal's road network. Its aim, besides that of bridge design, is to provide consultancy engineering services for all work stages. For this purpose, the firm has strongly invested in technological modernization, acquiring sophisticated hardware and software for analysis, calculation, drawing and information processing. No less important was its investment in training and preparation of its technical staff.</p> <p>Main expertise</p> <ul style="list-style-type: none"> • Bridges and viaducts structural design • Engineering consultancy • Project coordination • Bridges and Viaducts Management System <p>Services</p> <ul style="list-style-type: none"> • Project design of bridges and viaducts • Reinforcement, repair and extension design projects of bridges and viaducts • Coordination of multidisciplinary designs of roads and railways • Bridges and viaducts inspection • Assistance in the management of bridges and viaducts • Special studies in the structural engineering domain • Project revision • Tenders preparation and elaboration of the conditions of contract <p>Significant last works</p> <ul style="list-style-type: none"> • Railway Overpass (300m), Fontainhas, Setúbal • 1 Viaduct over the Mainça Valley (300m) • Codeçal Viaduct (400,0m) • Bridge over the Vale da Teixeira river (452,0m) • Bridge over the Fonte Boa river (452,0m) • Maçaínhas viaduct (335,0m) • Alcaide viaduct – Beira Baixa railway line • Moçarria viaduct (296,4m) • Viaduct over the Moita river (546,0m) • Viaduct over the Fanadia river (337,0m) • Viaduct over the Barranco do Cadavaio (380,0m) • Montinho viaduct (228m) • The New Portela bridge over the Mondego river, Coimbra (189,2m) – composite • Viaduct over the Santo Estevão river (701m) • Bridge over Cabras River – IP5 (349m) • Basis Design of the Bridge (963.5m) and South Viaduct (9139m) over Tagus River in Carregado • Bridge Loures River – A8– composite steel and concrete (192m biggest span 57m) • A1- motorway – 42 composite steel and concrete over-bridges • Penacova steel Bridge (147m) – central span with 80m • Viaduct V4 – A4/IP4 – two box girder with 195m – executed by cantilever method • Viaduct V5 – A4/IP4 – two box girder with 220m – executed by cantilever method • A4/IP4 - 10 Viaducts with length between 90 and 236m. • Preliminary Study of eight viaducts included in Poceirão-Caia stretch, for High Speed line between Lisbon and Madrid. • Av. República Tunnel, Lisbon • Av. João XXI Tunnel, Lisbon • Tunnel under the Bela Vista park, extension of the EUA Avenue, Lisbon • Tunnel under the José Queiroz square, Lisbon • Unlevelling of the Elísio Moura Avenue, (Coimbra beltway) • VICEG – Footbridge next to the School C+5, Guarda • EN115 – Sancheira bridge (270m) – extension and repair • EN16 – Angeja bridge over the Vouga river (260,6m) – reinforcement and repair • EN355-1 - International bridge at Segura over the Erges river – repair and reinforcement • Metallic bridge at Abrantes over the Tejo river (368.0m) – repair and reinforcement • Chamusca metallic bridge over the Tejo river (756.0m) – repair and reinforcement • A1 - Albergaria/Aveiro Sul stretch - Viaduct over Vouga River – repair and reinforcement (990m) • E.N. 244 – km 85+54 – Belver steel bridge (180m) – repair and reinforcement • A8 – Loures/Malveira stretch – Lousa Viaduct (122m) – extension and reinforcement • A8 – Loures/Malveira stretch – Murteira Viaduct (260m) – extension and reinforcement • Steel Bridge over Arade River in Portimão – repair and reinforcement (331.4m) • Condeixa beltway – 3rd phase • Lousã branch line • Principal bridge inspection, special intervention and underwater inspection – 4500 works inspected • Açude Bridge and Access Viaducts in Coimbra - repair and reinforcement (2010) • Nª Srª da Guia Bridge in Ponte de Lima over Lima River - repair and reinforcement (2010) • Marão Highway (A4 / IP4 – Amarante / Vila Real): – Viaduct V4 – Viaduct V5 – Viaducts V6, V7, V8, V9 e V10 • Litoral Oeste – Auto-Estradas Litoral Oeste Concession Agreement - Detail design, of 11 Viaducts. With one or two trays in beam and slab, with precast beams in “I” or “U” and with maximum spans of 39,5m. This studies were carried out in conception/ construction design (2010) <p>International experience</p> <ul style="list-style-type: none"> • Railway bridge over the Cubal river – repair (Angola) • S.Jorge dos Orgãos bridge – (Santiago Island, Cape Verde) – repair • Bridge over Zambezi River – Mozambique – Main Bridge with 710m (137.5m span executed by cantilever method) and Approach Bridge with 1666m (56m span) • Third Bridge over Tagus River – waiting for approving • Tete New Bridge over Zambeze River in Mozambique – Detail design, bridge executed by cantilever with spans of 135m and extension of 716.80m. Access viaduct with spans of 55m and extension of 869.60m. Total extension of 1586m (2011) • Basic Design, Tender Process and supervision of 4 Road Bridges Sofala Province and 5 in Manica Province, Mozambique, for Road National Administration (ANE) (2011/15) • Katembe Bridge in Maputo – Mozambique – Preliminary Design (Variant Solution). Extension of 2700m divided in: – North Viaduct with an extension of 980m, maximum spans of 80m and tray in coffin executed by cantiléver. – Cable-Stayed Bridge with an extension of 700m and a central span of 350m – South Viaduct with an extension of 1020, maximum spans of 56m and tray in coffin executed with launching girder • Highway East-West between Port de Tènes along 22km (Wilaya de Chlef) with 2x3 lanes – road section Bouzghaia-Chlef, in Algeria – 14 viaducts, 17 (under, upper hydraulic) • New Boane railway bridge over the Umbelúzi river, at pk 37+700 in the Goba railway line, Mozambique (360m) • Railway reconnection due to execution of the Moamba Major dam, Ressano Garcia, Mozambique – 7 railway bridges • Urban road network requalification, Maputo, Mozambique (20km) • Livingstonia road section (52km) and rehabilitation of 4 bridges, Malawi (2019/20) • Emergency repair of Pemba Wharf, Cabo Delgado, Mozambique (2019) • Rehabilitation road sections Quelimane/Nicoadala and Nicoadala/Namacurra (70km), Zambezi Province, OPCR framework, Mozambique • Detailed design of 2 bridges in Camama, Luanda, Angola • Detailed design 4 bridges and road accesses in the road section Balantyre/Kameza/ Clock Tower, Malawi • Detailed design new bridge in Balaka, Malawi (2019/20) • Reformulation and widening of road junction in Lilongwe, Malawi (2019) 	