Bundesliga Division 2 and the "two-up" cast pipe

In the summer of 2006, FC Augsburg and TUS Koblenz, two football teams in Germany's Southern Regional Division, were promoted to the Bundesliga Division 2. What this meant, at least for Koblenz, was that they could expect increasing numbers of fans and more vehicles at their future games. The existing stadium on the piece of land known as the "Oberwerth" was only up to the technical standards of the 1950's and suddenly, rather than taking 5,000 spectators, it was going to have to take three times that number. Thing did not look good with the infrastructure either. Access roads, car-parks, toilets and above all capacious roofed stands had to be built or, where they already existed, refurbished at short notice. Places for setting up containerised facilities would have to be made available for the German Red Cross, the police and the press and would have to be connected to the water supply and sewer systems. The city's leaders and the building authorities proved to be very flexible when it came to planning and financing the building work needed. However, there was still one major hurdle that had to be overcome in this area. The entire stadium site is situated in water protection zone II of the city of Koblenz's most important waterworks and borders directly on water protection zone I so the stadium meant a "maximum potential hazard to the water extraction facilities". The supervisory authority responsible laid down very tough requirements. The very highest safety was demanded for the collection and carrying away of both surface water and sewage. The engineering company handling the planning – in consultation with the supervisory authority – was instructed to include only the best and safest equipment that the market had to offer in its plans for this application. So the die was cast for Buderus's ductile cast iron pipes with restrained joints! In line with DWA (German Association for Water, Wastewater and Waste) specification A 142, the sewage pipes actually carrying the sewage had to be laid in a second pipe acting as a protective outer shell so that there would be an annular space between the two pipelines as required for future leak tests. The requirements that the companies doing the installation work had to meet for the laying of the pipes were extremely demanding. Nevertheless, thanks to the easily laid Buderus cast iron pipes and the excellent way in which all parties involved worked together, the work was done and provisionally completed smoothly and quickly.

Cast iron pipes were also selected for the new water supply pipelines which had to be laid.

DN 150, 200, 300, 400, 500 and 600 sewage pipes were used, as well as a cluster of DN 100 socketed pressure pipes as cable-protecting pipes, because of the high traffic loads and shallow top cover during the installation work.