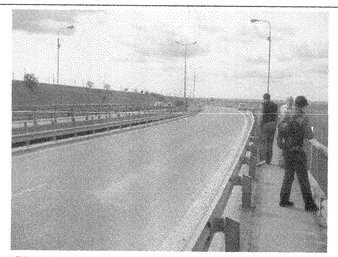
INTERVENTION WORK: B1- ROADWAY PAVEMENT AND WATERPROOFING REPLACEMENT

The bridge pavement execution covers the following activities:
- scarifying and removing the existing bituminous surface;
- loading and transport of the material resulting from the demolition to an approved dump area;
- cleaning and removal of any loose material from the concrete surface by sand blasting;
- procurement, transport, storage and handling of all related materials and equipment;
- execution of the leveling and slope concrete;
- waterproofing execution in accordance with the specific instructions in use;
- performance of the in situ adherence tests of the membrane, at the required frequency;
- execution of the asphalt mortar waterproofing protection;
- assuring water tightness in correspondence of the waterproofing edges using specific elastic materials;
- laying 40 mm thick protective course including surface preparation applying primer coat with bitumen emulsion
- laying 40 mm thick wearing course including surface preparation applying primer coat with bitumen emulsion
- verifications after execution in accordance to the design;
- sampling and laboratory testing.

DETERIORATION:



Pit holes and spalling on road pavement (Bucharest side viaduct)



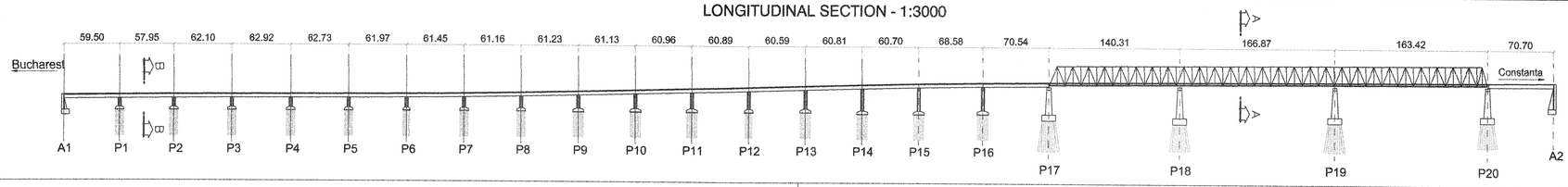
Pit holes and spalling on road pavement (Constanta side viaduct)

IVANESCU T. TOMA ROMANIA MUNICIPIUL BUCUREŞTI NR. 445 INGINER VERIFICATOR PROIECTE

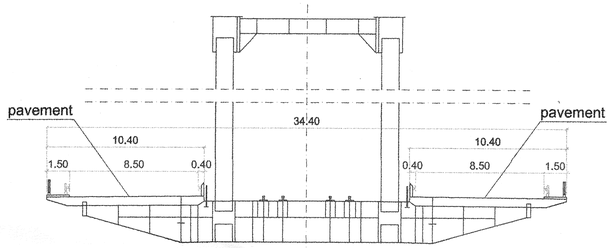
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GENERAL VIEWS

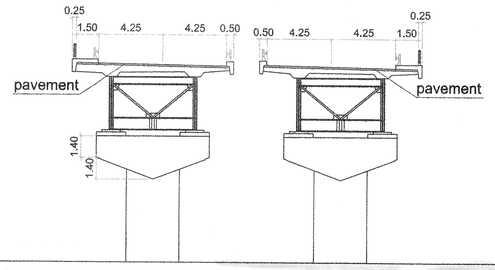
LONGITUDINAL SECTION - 1:3000



BRIDGE TRANSVERSAL SECTION (A-A) - 1:200



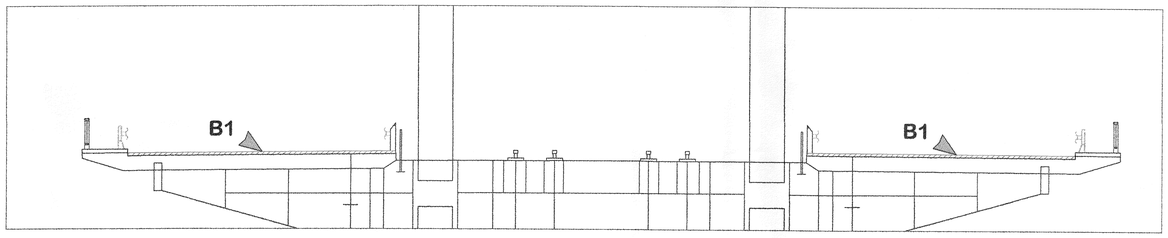
VIADUCT TRANSVERSAL SECTION (B-B) - 1:200



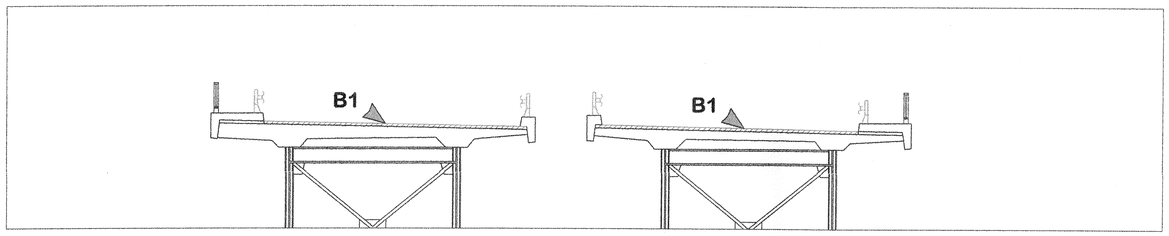
WORKING CODE LIST

CODE	MAINTENANCE AND REHABILITATION WORKS	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
	ROAD FINISHES AND EQUIPMENT										
A1	Painting of pedestrian parapet										
A2	Replacement of pedestrian parapet										
A3	Guard rail replacement										
A4	Electrical equipment replacement										
A5	Walkway slab substitution										
	PAVEMENTS										
B1	Roadway pavement and waterproofing replacement							■			
B2	Roadway superficial drainage rehabilitation										
B3	Walkway pavement replacement										
B4	Expansion joints replacement										
B5	Bearings replacement										
	CONCRETE REPAIR										
C1	Deck slab repair										
C2	Prestressed concrete beams repair										
C3	Pier caps concrete repair										
C4	Piers concrete repair										
C5	Tower leg concrete repair										
C6	Structural strengthening										
C7	Superstructure replacement										
	STEEL WORKS										
D1	Painting of steel structures										
D2	Stay cables maintenance										
D3	Strengthen of anchor bolts										
D4	Rehabilitation of inspection gantry and rails										
	EARTHWORKS										
E1	Ashlar stoneworks repair										
E2	Repair of strutture connection with embankment										
E3	Cone quarters rehabilitation										
E4	Rehabilitation of storm water collecting system										
E5	River bank improvement										

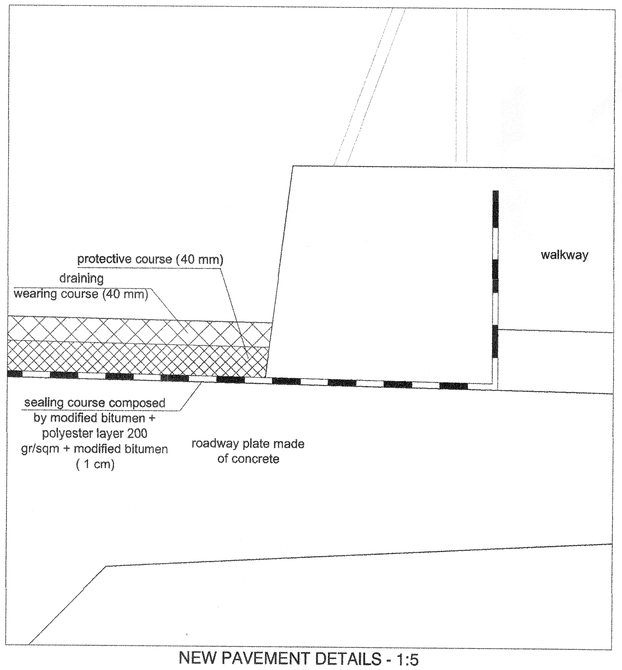
INTERVENTION DETAILS



INTERVENTION ON BRIDGE PAVEMENT - 1:100



INTERVENTION ON VIADUCT PAVEMENT - 1:100



NEW PAVEMENT DETAILS - 1:5

INVESTOR/INVESTITOR

ROMANIAN NATIONAL COMPANY OF MOTORWAYS AND NATIONAL ROADS
COMPANIA NATIONALA DE AUTOSTRAZI SI DRUMURI NATIONALE DIN ROMANIA

DESIGNER/PROIECTANT

LOUIS BERGER GROUP inc.

CONSULTING SERVICES FOR DESIGN AND WORKS SUPERVISION OF 10 BRIDGES IN DOBROGEA AREA

TECHNICAL DESIGN

B07-BRIDGE A2 CERNAVODA

TD - B07 - 05

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B1
ROADWAY PAVEMENT AND WATERPROOFING REPLACEMENT

scale	various	file name TD - B07 - 05				
data / date	rev.	revision title	des	ver/chk	CP / PC	APPR. AUTHORITY
08 aug 2008	0	issue	SOLIDUS	ASCOLI		