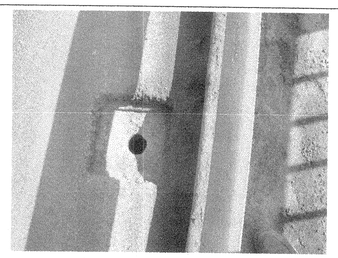
INTERVENTION WORK: B2- ROADWAY SUPERFICIAL DRAINAGE REHABILITATION

The item covers the substitution of the existent drain pipes:
- removal of the existing damaged drain pipes and/or related grids;
- loading and transport of the removal material to an approved dump area;
- procurement, transport,storage and handling of necessary materials and equipment;
- installation of the new drain pipes and/or related grids;
- finishing works to ensure waterproofing;
- verifications after execution in accordance to the design.

DETERIORATION:

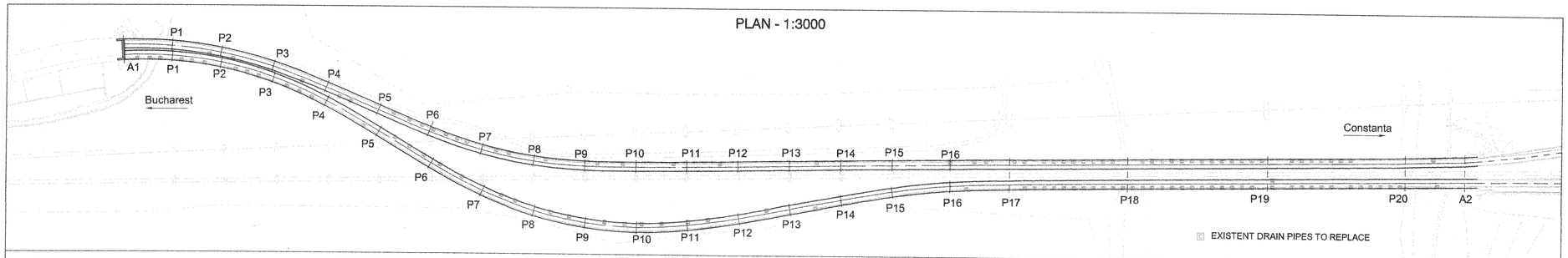


Deteriorated Drain Pipe

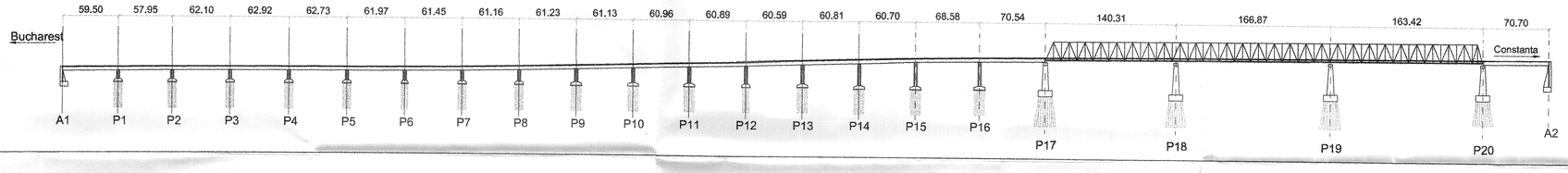
IVANESCU T. TOMA ROMANIA MLPAT DGLA NR. 445 M.Sc.CE INGINER VERIFICATOR PROIECTE

GENERAL VIEWS

PLAN - 1:3000



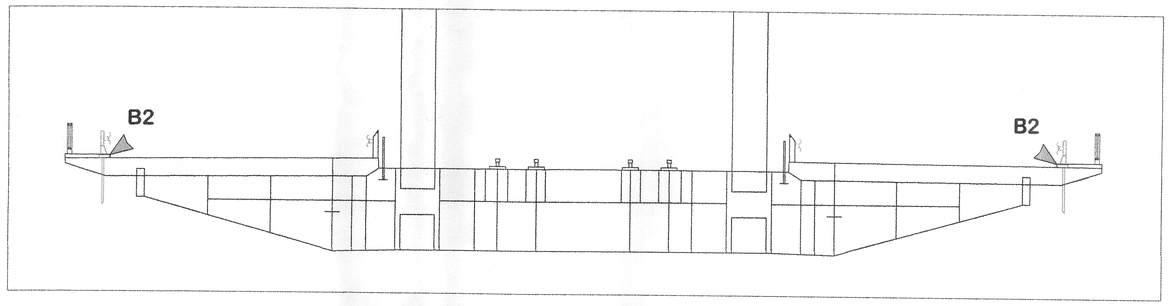
LONGITUDINAL SECTION - 1:3000



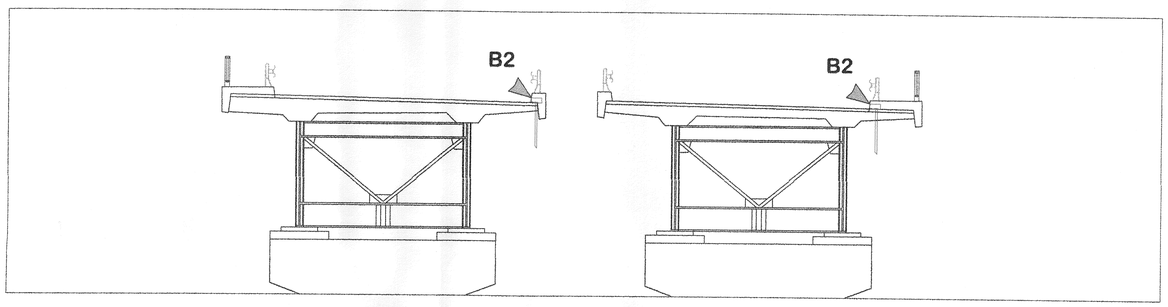
WORKING CODE LIST

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 DRAINAGE CHANNELS - 1:100



INTERVENTION ON VIADUCT DRAINAGE CHANNELS - 1:100

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 - 06

DESIGN TEAM LEADER
Vittorio Ascoli Marcheselli

ORDINE INGEGNERI ROMA N° 12645

PAVEMENTS

CONSULTANTS
SOLIDUS s.r.l. - Roma Italia
Francesco Del Tosto
Romano Tucci

B2
ROADWAY SUPERFICIAL DRAINAGE REHABILITATION

scale	various	file name TD - B07 - 06				
data / date	rev.	revision title	des	ver/chk	CP / PC	APPR. AUTHORITY
08 aug 2008	0	issue	SOLIDUS	ASCOLI		