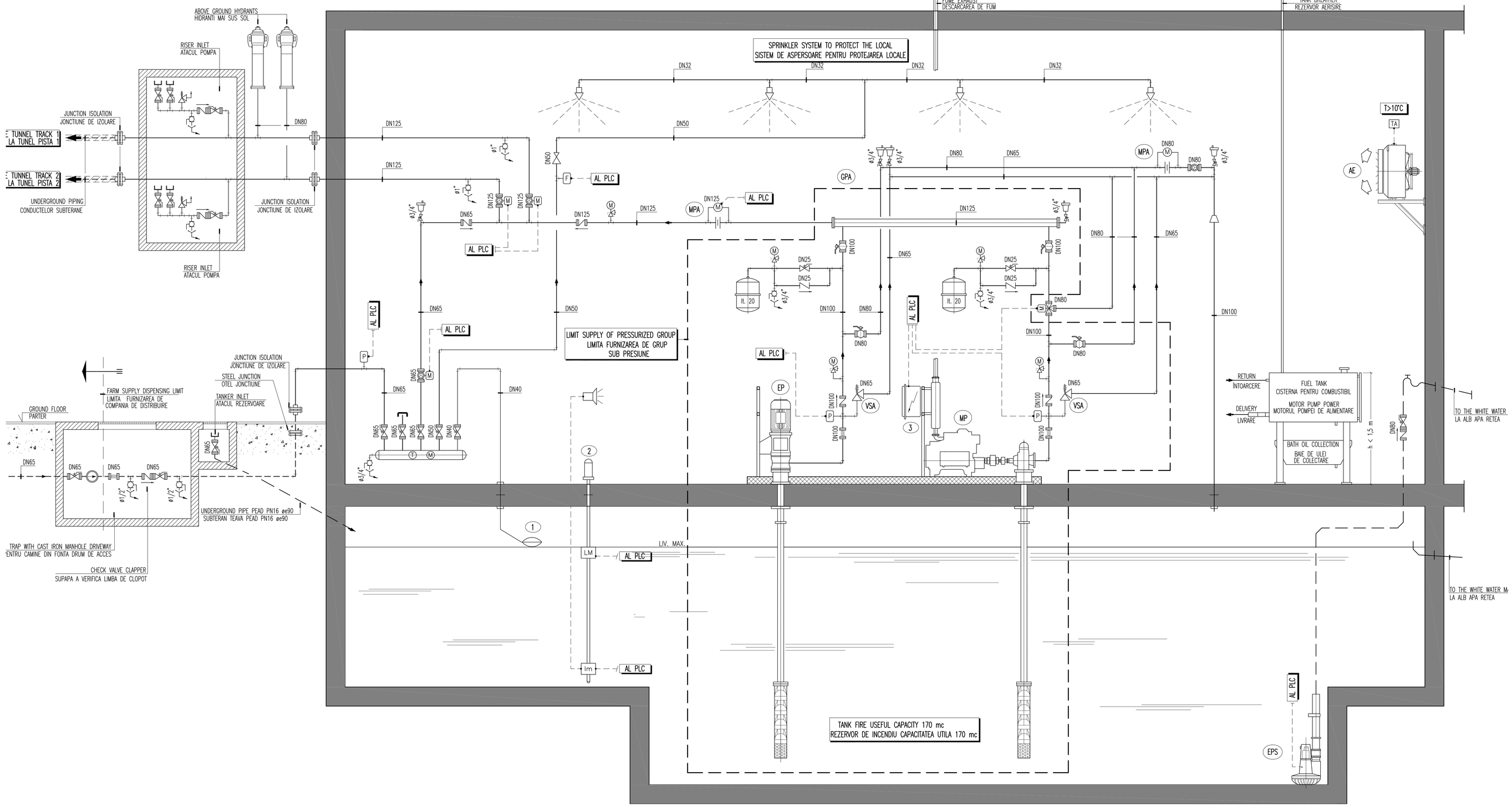
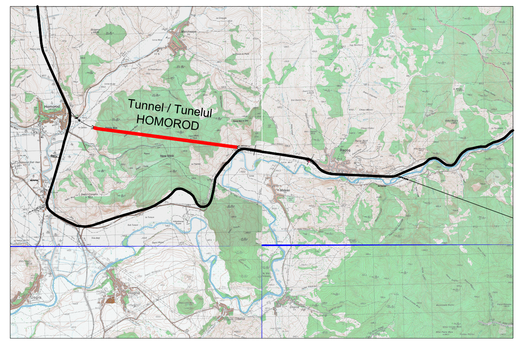
DIAGRAM CENTRAL FIRE/SCHEMA CENTRAL FOC

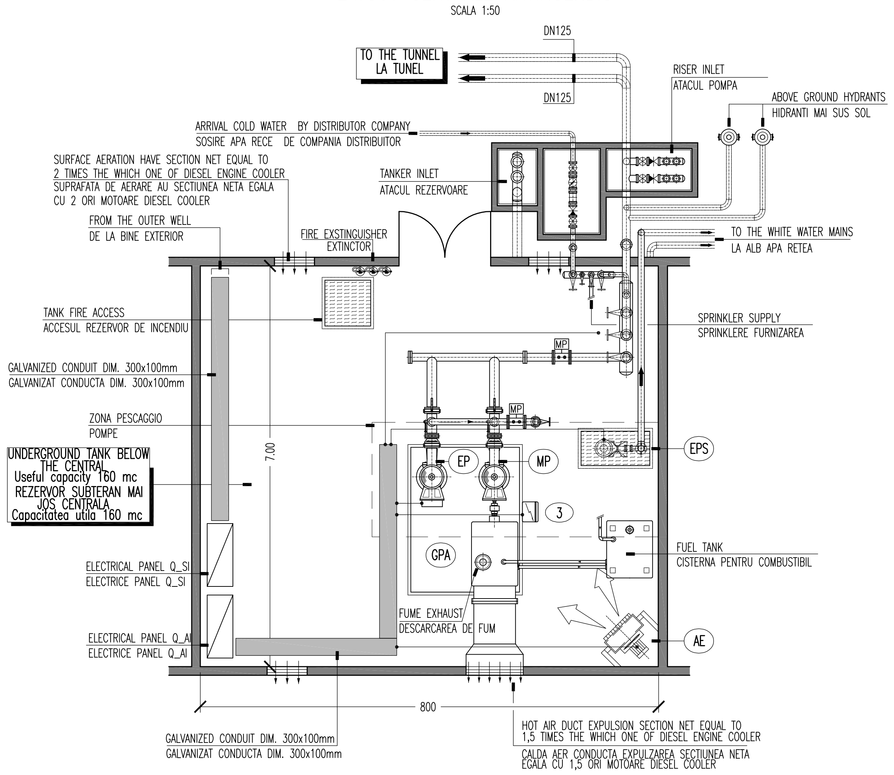


GENERAL PLAN / PLANUL GENERAL



LAYOUT CENTRALE ANTINCENDIO

SCALA 1:50



LEGEND/LEGENDA

GPA	PRESSURE GROUP DETECTION FIRE SYSTEM WITH AXIAL FLOW PUMP IMMERSED CONSISTING OF A MAIN ELECTRIC, RESERVE PUMP, TWO TANKS OF PRESSURE FROM 20 lt, CIRCUIT RELIEF, TEST CIRCUIT MANIFOLDS, INTERCEPTION, VIBRATION TEST CIRCUIT MANIFOLDS, INTERCEPTION, VIBRATION GRUP PRESIUNEA DIN SISTEM DE DETECTARE A INCENDIULUI CU POMPA AXIAL FLOW SCUFUNDATE, ALCATUIT DINTR-O ELECTRIC PRINCIPAL,REZERVA PUMP, DOUA REZERVOARE DE PRESIUNE DIN 20 LT RELIEF CIRCUITUL ,CIRCUITUL VARIETATII TEST, INTERCEPTAREA, VIBRATII

PUMPING FEATURES:	DELIVERY/LIVRAREA
ELECTRIC PUMP/POMPA ELECTRICA	
FLOW RATE/FLUXUL CURS:	48 mc/h
PRESSURE GAUGE/PRESIUNE GAUGE:	950 kPa
POWER/PUTERE:	30 kW
* RISER/POMPA (MP)	
FLOW RATE/FLUXUL CURS:	48 mc/h
PRESSURE GAUGE/PRESIUNE GAUGE:	950 kPa
GIRI/MIN	2900
POWER/PUTERE:	26,5 kW

EPS	SUBMERSIBLE PUMPS FOR EMPTY TANK – POWER 1,9 kW POMPE SUBMERSIBILE PENTRU REZERVOR GOL – PUTERE 1,9 kW
MPA	FIRE WATER FLOW METER DEBITMETRULUI APA PENTRU STINGEREA INCENDIILOR
VSA	RELIEF VALVE CALIBRATION SUPAPA CALIBRARE
AE	ELECTRIC AIR HEATER WITH THERMOSTAT – THERMAL POWER 6.5 kW ELECTRICE DE INCALZIRE A AERULUI CU TERMOSTAT – 6.5 kW PUTERE TERMICA
1	POWER VALVE FLOAT BOWL POWER ROBINET FLOTOR BOL
2	LEVEL/NIVEL
3	ELECTRIC STARTER MOTOR PUMP ELECTRIC STARTER MOTOR POMPA

LEGEND/LEGENDA

	NORMALLY CLOSED VALVE/NORMAL ÎNCHIS ROBINET
	NORMALLY OPENED VALVE/NORMAL DESCHIS ROBINET
	VALVE BALL FULL BORE PN16 – THREADED INLET ROBINET CU BILA COMPLET BORE PN16 – ATACUL FILETATE
	VALVE BALL FULL BORE PN16 – FLANGED INLET ROBINET CU BILA COMPLET BORE PN16 – ATACUL FLANSA
	BUTTERFLY VALVE – FLANGED INLET ROBINET FLUTURE – ATACUL FLANSA
	GATE VALVE, CAST IRON SCREW EXTERNAL PN16 – FLANGED CONNECTIONS GATE VALVE, CAST IRON SCREW EXTERNAL PN16 – FLANGED CONNECTIONS
	SWING CHECK VALVE – FLANGED CONNECTIONS SWING SUPAPA – ATACUL FLANSA
	CHECK VALVE – THREADED CONNECTIONS SUPAPA DE RETINERE – ATACUL FILETATE
	PRESSURE REDUCER/REDUCTOR DE PRESIUNE
M	POWERED BY-PASS VALVE FOR THE OPERATION OF THE PUMP OPEN DURING DELIVERY AND CLOSED AT TIME OF FILLING – FLANGED CONNECTIONS PRESURIZATE TUB DE BYPASS PENTRU FUNCTIONAREA POMPEI DESCHIS ÎN TIMPUL NASTERII SI ÎNCHISA LA TIMPUL UMPLERII – FLANSA
	JOINT VIBRATION PN16 – FLANGED CONNECTIONS/MIXT VIBRATION PN16 – ATACUL FLANSA
	BALL VALVE DRAIN WITH HOSE/ROBINET CU BILA DE EVACUARE CU FURTUNUL
	FUNNEL DRAIN/FUNNEL SCURGERE
	AIR VENT VALVE WITH SHUT-OFF VALVE/AER VENT VALVE CU ROBINET DE ÎNCHIDERE
T	DIAL THERMOMETER CHARGE OF INERT GASES: -10 to 50 ° C SCALE DIAL CHARGE TERMOMETRU DE GAZE INERTE: -10 LA 50 ° C SCALA
M	DIAL GAUGE, BOURDON SYSTEM, COMPLETE THREE-WAY VALVE AND CURLY GAUGE APEL, BOURDON SISTEMUL, COMPLET TREI CAI SI CÂRLIONTAT SCALE 0-..... bar
P	PRESSURE SWITCH/PRESOSTAT
L	LEVEL SWITCH-(LM) MAXIMUM-(LM) MINIMUM/COMUTATOR DE NIVEL-(LM) MAXIM-(LM) MINIMUM
F	FLOW SWITCH/FLUXOL SWITCH
	VE – EXPANSION VALVE CLOSED/ROBINET DE EXPANSIUNE ÎNCHIS

LEGEND/LEGENDA

	ELECTRICAL CONNECTION/CONEXIUNI ELECTRICE
	GALVANIZED STEEL PIPE FIRE/GALVANIZAT TEAVA DE OTEL FOC
	UNDERGROUND PIPE GALVANIZED STEEL COATED/TEAVA SUBTERANE ZINCATA FILMATE OTEL

* PROVIDE VENTS IN SYSTEM HIGH POINTS AND DISCHARGE IN LOW POINTS
* THE VALVES MUST BE KIND OF FLANGED/ROBINETI TREBUIE SA FIE FEL DE FLANSA:
THE CHARACTERISTICS OF SEAL (PN) AND TEMPERATURE SHOULD BE SUITABLE FOR FLUID CONSIDERING AN INCREASE OF 20% COMPARED TO THE MAXIMUM VALUES REACHED IN THE CIRCUIT SERVED/
CARACTERISTICILE DE FOCA (PN) SI TEMPERATURA TREBUIE SA FIE ADECVATA DE LICHID AVÂND ÎN VEDERE O CRESTERE DE 20% FATA DE MAXIME ATINSE ÎN CIRCUITUL SERVIT
* FOR ALL THE INTERCEPTION, UNLESS OTHERWISE SPECIFIED, PREDICT/PENTRU TOATE INTERCEPTARE, CU EXCEPTIA CAZULUI IN CARE SE PREVEDE ALTFEL, PREDICT:
– BUTTERFLY VALVE PN16 ON THE PRESSURE GROUP/ROBINET FLUTURE PN16 ASUPRA GRUP DE PRESIUNI
– CAST IRON VALVES/EXPRIMATE SUPAPE DE FIER
* FORECAST FOR THE CHECK VALVES VALVES SWING/PROGNOZA PENTRU SUPAPE DE RETINERE VENTILE SWING
* THE VALVE MUST HAVE DIAMETER NOT LESS THE PIPES ON WHICH ARE INSTALLED/
VALVE TREBUIE AU DIAMETRUL NU MAI CONDUCTELE CARE SUNT INSTALATE
* ALL WASTE, TO BE PERFORMED IN GEBERIT (MAX WATER UP TO 80 ° C) OD GALVANIZED STEEL MUST BE CONNECTED AND PIPED TO THE WELLS OR PREPARED CONDUIT /
CATE DESEURILE, SA FIE EXECUTATE ÎN GEBERIT (MAX APA PÂNĂ LA 80 ° C) OTEL GALVANIZAT TREBUIE SA FIE CONECTAT SI TRANSMIS PUTURI SAU CANALE PREGATITE

PIPES/TEVI

* FIRE SYSTEM PIPING IN CENTRAL IN STEEL GALVANIZED/CONDUCTE SISTEM DE FOC IN CENTRALE IN OTEL GALVANIZAT
* FIRE SYSTEM PIPING NETWORK, GALVANIZED STEEL PLAIN END, POLYETHYLENE COATING/
CONDUCTE SISTEM DE FOC, RETEAUA DE DISTRIBUITE,OTEL GALVANIZAT,CAPETE NETEDE, DE ACOPERIRE DIN POLIETILENA
* UNDERGROUND PIPE GALVANIZED STEEL PLAIN END, POLYETHYLENE COATING, STAY IN SIMILAR PIPE CHARACTERISTICS
CONDUCTA SUBTERANA, GALVANIZAT OTEL, CAPETE NETEDE, DE ACOPERIRE DIN POLIETILENA, STATI ÎN CARACTERISTICI SIMILARE DE CONDUCTA
* WATER SUPPLY PIPE GALVANIZED STEEL DRAWN S-S/CONDUCTA SISTEM DE APA GALVANIZAT OTEL ÎNTOCMITE S-S
* THE PIPES NOT ISOLATED OR NOT COATED, MUST BE PAINTED WITH RUST OR PRIMER IF ZINC AND TWO HANDS OF POLISH OLEOSINTETICO IN TRADITIONAL SOLID (RED FIRE)/
CONDUCTE NU IZOLATE ACOPERITA SAU NU, TREBUIE SA FIE VOPSITE CU RUST SAU PRIMER SI ZINC DACA DOI MÂINILE DE TRADITIONALE POLONEZA (ROSU FOC)

INSULATION/IZOLATIE

* COLD WATER: INSULATING AI CLOSED CELL, TYPE ARMAFLEX, RESISTANCE TO STEAM> 3000, THICK. 13 mm
APA RECE: IZOLARE A CELULE ÎNCHISE, TIP ARMAFLEX, REZISTENTA LA ABUR> 3000, GROSIME 13 mm
* FINISH FOR ALL THE INSULATION WITH SHEATH IN SEMI-RIGID PVC TYPE ISOGENOPACK/
FINISAJ PENTRU TOATE IZOLATIE CU TECII DIN PVC SEMI-RIGIDE TIP ISOGENOPACK
* CONDUCTIVITY INSULATION <0.04 W/m'C At 40' C/CONDUCTIVITATE IZOLATIE <0,04 W/m'C la 40'C
* CLASS OF REACTION TO FIRE INSULATION <1/CLASA DE REACTIE LA FOC IZOLARE <1
* THE INSULATION SHOULD BE OF APPROPRIATE TYPE TO TEMPERATURE OF FLUID THAT RUNS THE PIPELINE
IZOLATIA TREBUIE SA FIE TIPUL POTRIVIT DE LA O TEMPERATURA DE LICHID CARE EXECUTA CONDUCTE

PLEASE NOTE THAT FOR ALL EQUIPMENT AND COMPONENTS MINIMUM MECHANICAL PN16
VA RUGAM SA RETINETI FAPTUL CA PENTRU TOATE ECHIPAMENTE S COMPONENTE MECANICE MINIME PN16

Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT

ITALFERR GRUPPO FERROVIE DELLO STATO Joint Venture leader

Scott Wilson

OBERMEYER PLANEN + BERATEN GmbH

TECNIC Consulting Engineers

CONSULTANT / CONSULTANT

			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Tunel Expert Tunnel Expert	C. Gambelli		
Întocmit Elaborated	Proiectant Designer	P. Amodio		

SUBCONSULTANT / SUBCONSULTANT

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible			
Întocmit Elaborated	Proiectant Designer			

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h.
Sectiune 1 Brasov - Sighisoara

Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h.
Section 1 Brasov - Sighisoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
P.Th. / T.D.

Denumire desen / Drawing Title : **TUNNEL/TUNELUL HOMOROD**
HOMOROD SIDE/INSPRE HOMOROD
Emergency and fire protection systems/Sisteme de urgenţă şi de incendiu
Emergency system - Plan and schema central fire C2/Sistemul de urgenţă - Plan şi schiţă de incendiu centrale C2

Codificare / Codification System

Scara / Scale	LOT	Nr. / No
-		-

E A 5 1 | 0 1 | C | 1 2 | L X | T S | 2 0 | 8 | 3 | 0 0 1 | 0