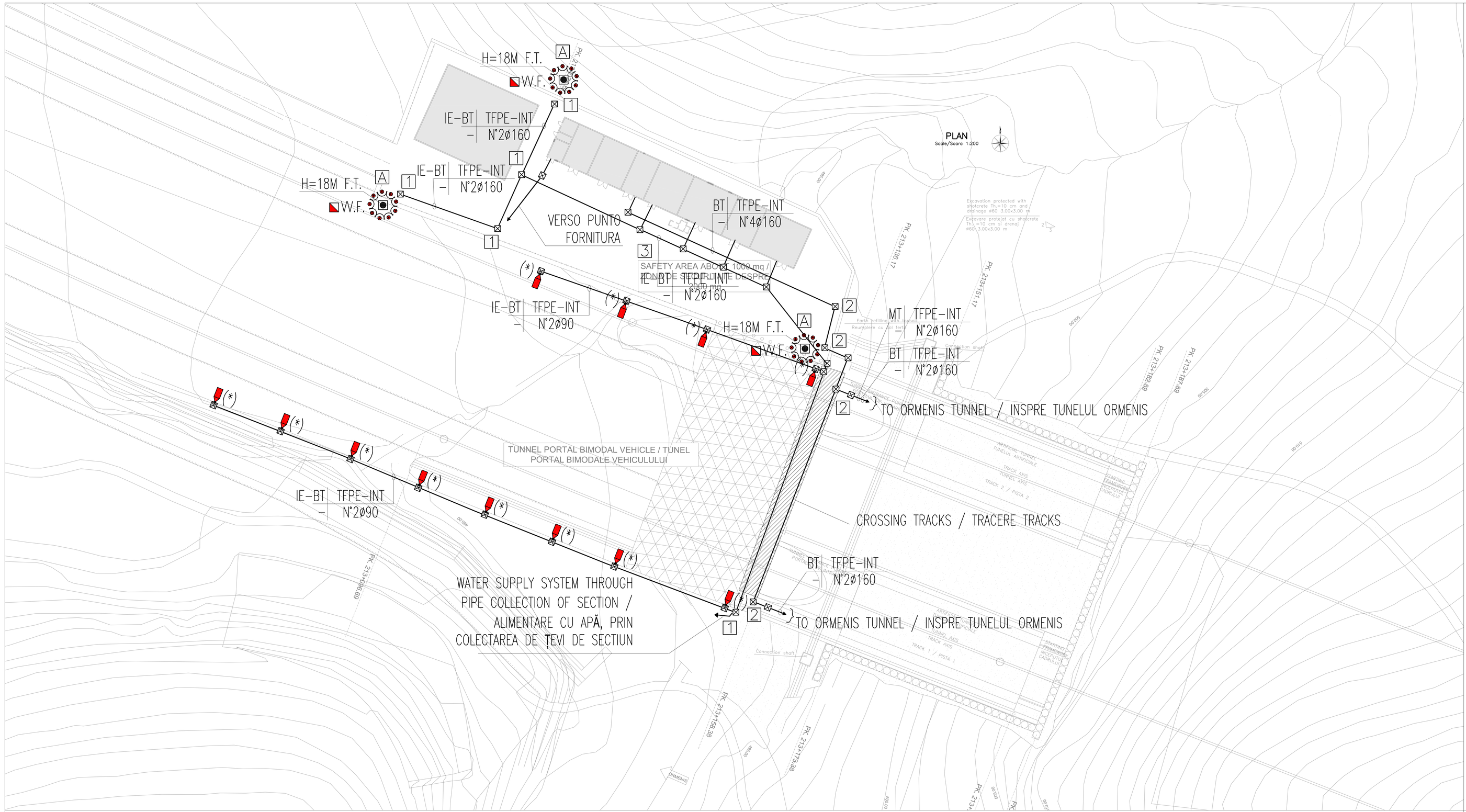
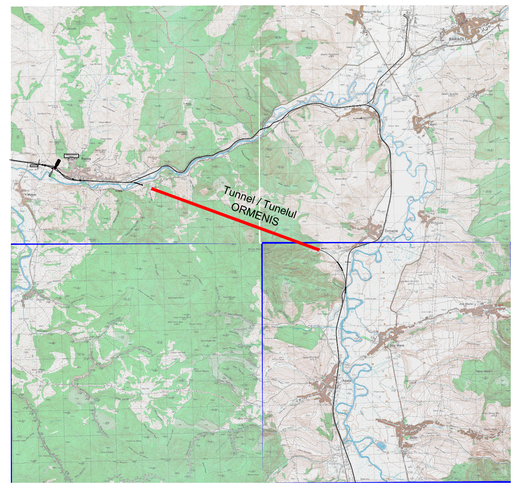



GENERAL PLAN / PLANUL GENERAL




NOTES/NOTE:
- EVERY LIGHTING HAVE A CONTROL DEVICE ON LINE CARRIER (PMAE) / TOATE APARATULUI DE ILUMINAT CU PMAE
- (*) GALVANIZED STEEL POLE H=8M F.T./GALVANIZAT OTEL POLE H=8M F.T.
- CONDUITS WILL BE PLACED OUTSIDE THE DEPTH TO A MINIMUM OF 500MM /CONDUCTE VA FI PLASAT ÎN AFARA ADÂNCIMEA LA UN NIVEL MINIM A 500MM

## COLORS LEGEND/COLOR CHEIE

| | |
|---|---|
| | LIGHT DRIVING FORSE SYSTEM/SISTEMUL DE LUMINA FORTA MOTRICE(LFM) |
| | SUPERVISION SYSTEM/SISTEMUL DE SUPERVEGHERE (LFM) |
| | EMERGENCY TELEPHONE AND SOUN DIFFUSION SYSTEM/SISTEME DE TELEFON DE URGENTA SI DUFUZARE DE SUNET (TEM_DS) |
| | INTRUSION, ACCESS CONTROL AND VIDEO SURVEILLANCE SYSTEMS/ SISTEMUL DE EFRACTIE, CONTROL ACCES SI SUPERVEGHERE |
| | FIRE DETECTION SYSTEM/SISTEMUL DE DETECTIE INCENDIU |
| | GSM/UMTS RADIO SYSTEM/SISTEMUL DE RADIO GSM/UMTS |
| | FIRE PROTECTION SYSTEM/SISTEMUL DE INCENDIU |
| | VENTILATION SYSTEM/SISTEMUL DE VENTILATIE |
| | EMERGENCY DATA NETWORK SYSTEM/SISTEMUL DE RETEA DE DATE DE URGENTA |

## indicator cable ducts/cablu indicator

A | B–C
D | E

A – LEGEND NETWORKS / LEGENDA REȚELE

| | |
|---|---|
| MT | MEDIUM TENSION / MEDIE TENSIUNE |
| BT | LOW TENSION / JOASĂ TENSIUNE |
| IE | OUTDOOR LIGHTING / ILUMINAT EXTERIOR |
| IL | TUNNEL LIGHTING / ILUMINAT TUNELURI |
| TT | TELECOMMUNICATIONS SYSTEMS / SISTEME DE TELECOMUNICATII |
| R | RESERVE / REZERVĂ |

B – LEGEND TYPE / CHEIE DE TIP

| | |
|---|---|
| TFPE | FLEXIBLE TUBE POLYETHYLENE / FURTUN POLIETILENA |
| CAIP | FULL STAINLESS STEEL CHANNEL WITH COVER / CANAL FULL INOX CU INTENTIE |
| CAIF | EMPTY STAINLESS STEEL CHANNEL WITH COVER / CANAL GOL INOX CU INTENTIE |
| CAZSP | FULL CHANNEL STEEL GALVANIZED SENDZIMIR WITH COVER / OTEL U FULL ZINCATE SENDZIMIR CU INTENTIE |
| CAZSF | HOLE CHANNEL GALVANIZED SENDZIMIR / HOLE CHANNEL ZINCATE SENDZIMIR |
| TAI | STAINLESS STEEL TUBE / TUB INOX |

C – LEGEND PLACEMENT / CHEIE DE INSTALARE

| | |
|---|---|
| INT | UNDERGROUND / SUBTERANE |
| SPS | MOUNT VIEW / MOUNT VEDEREA |
| CUN | WITHIN BURROWS OR UNDER TECHNICAN FLOOR / ÎN CADRUL BURROWS TEHNICAN PODEA SAU SUB |

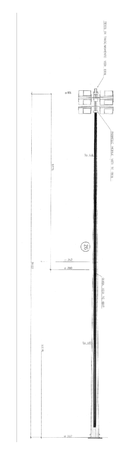
D – SEPTA NUMEBER / NUMĂRUL SEPTURI

E – NUMBERS AND DIMENSIONS (mm) / NUMĂRUL DIMENSIUNI (mm)

## SYMBOLS LEGEND/LEGENDA SIMBOLURI
### SAFE AREA SYSTEM/SISTEME DE ZONA SIGURA

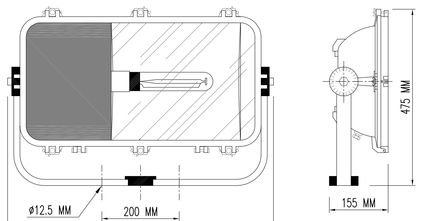
| | |
|---|---|
| | WELL WITH CONCRETE MANHOLE DIMENSIONS/ BINE CU CAMINE CONCRETE DIMENSIUNI : 1 400x400 MM; 2 600x600 MM; 3 1000x1000 MM |
| | NETWORK MV / RETEA MT |
| | PIPELINE LV / PIPELINE LV |
| | PIPELINE ASCENDING-DESCENDING / PIPELINE URCARE / DE COBORARE |
| | WELL WITH CONCRETE MANHOLE 300x300 MM |
| | FIBERGLASS POLE H=5M F.T./POLE DIN FIBRA DE STICLA H=5M F.T. |
| | TOWER / TURN |
| | LIGHT S.A.P. 70W / LUMINĂ S.A.P. 70W |
| | PROJECTOR S.A.P. 400W / PROIECTOR S.A.P. 400W |
| | PROJECTOR S.A.P. 100W / PROIECTOR S.A.P. 100W |
| | LIGHT FIXTURES 1X18 W EMERGENCY LIGHTING/PROGRAME DE LUMINĂ 1X18 W ILUMINAT DE URGENȚĂ |
| | LIGHT FIXTURES 1X18 W GENERAL LIGHTING/PROGRAME DE LUMINĂ 1X18 W ILUMINAT GENERAL |
| | SWITCH WITH INDICATOR LIGHT/SWITCH CU INDICATOR LUMINOS |
| W.F. | FIRE BRIGADE SOCKETS ELECTRICAL PANEL INSIDE TRAP/BRIGADA DE POMPIERI PRIZE PANOU ELECTRIC DIN INTERIORUL TRAP |
| | COCKPIT OF LAND 600X600 MM INSPECT, COMPLETE PUNTAZZA W = 2000 MM MANHOLE AND DRIVE-OVER/CARLINGA MM 600X600 LAND INSPECT, COMPLET PUNTAZZA W = 2000 MM SI CAMINE DRIVE-OVER |
| | BURIED IN A SINK 0.5M ROPE BARE COPPER S = 35MMQ / ÎNGROPAT ÎNTR-O CUPRU ROPE CHIUVETA 0,5 M BARE S = 35MMQ |

## DETAIL TOWER/DETALIU TURN H=18m

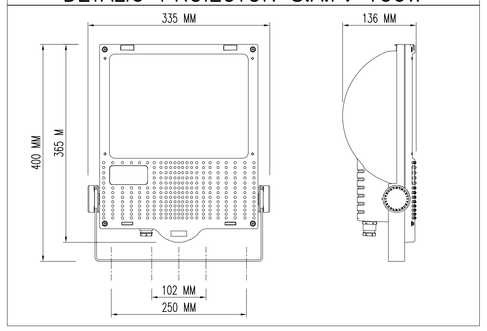


## DETAIL SOCKETS PANEL IN COCKPIT FOR FIRE BRIGATES
## DETALIU CADRU PRIZA POMPILI

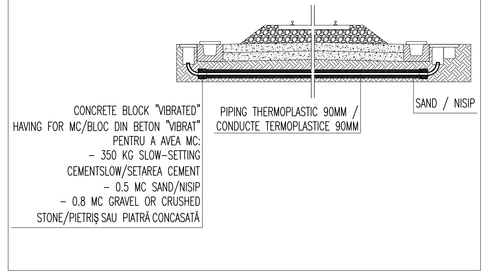
## DETAIL PROJECTOR S.A.P. 400W
## DETALIU PROIECTOR S.A.P. 400W



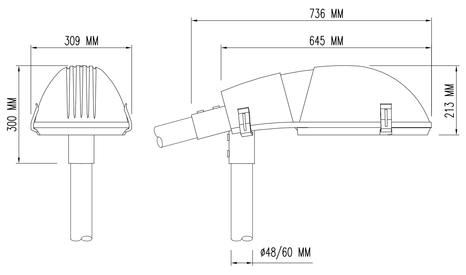

## DETAIL PROJECTOR S.A.P. 100W
## DETALIU PROIECTOR S.A.P. 100W




## DETAIL CROSSING TRACKS
## DETALIU TRACKS TRECERE




## DETAIL LIGHT S.A.P. 70W
## DETALIU ILUMINARE APARATURA S.A.P. 70W




| 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 FINANȚAT 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 | Șef proiect Project manager | R. Liuzza | | |
| Aprobat Approved | Coordonator Secțiune 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 Brașov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h.
Secțiune 1 Brasov - Sighisoara

Rehabilitation of the railway line Brașov - 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 ORMENIS**
**ORMENIS SIDE/INSPRE ORMENIS**

**Safety Tunnel Power Supply system /Sistem de alimentare de siguranță a tunelui**
**Layout plan LFM system/Plan de situatie Sistem LFM**

| Codificare / Codification System | Scara / Scale | LOT | Nr. / No |
|---|---|---|---|
| E A 5 1 0 1 C 1 0 L X T S 1 0 2 6 | 1:200 | | 0 0 1 0 |