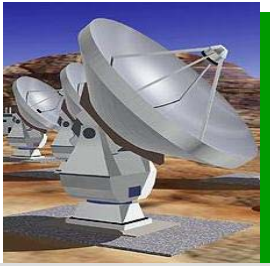


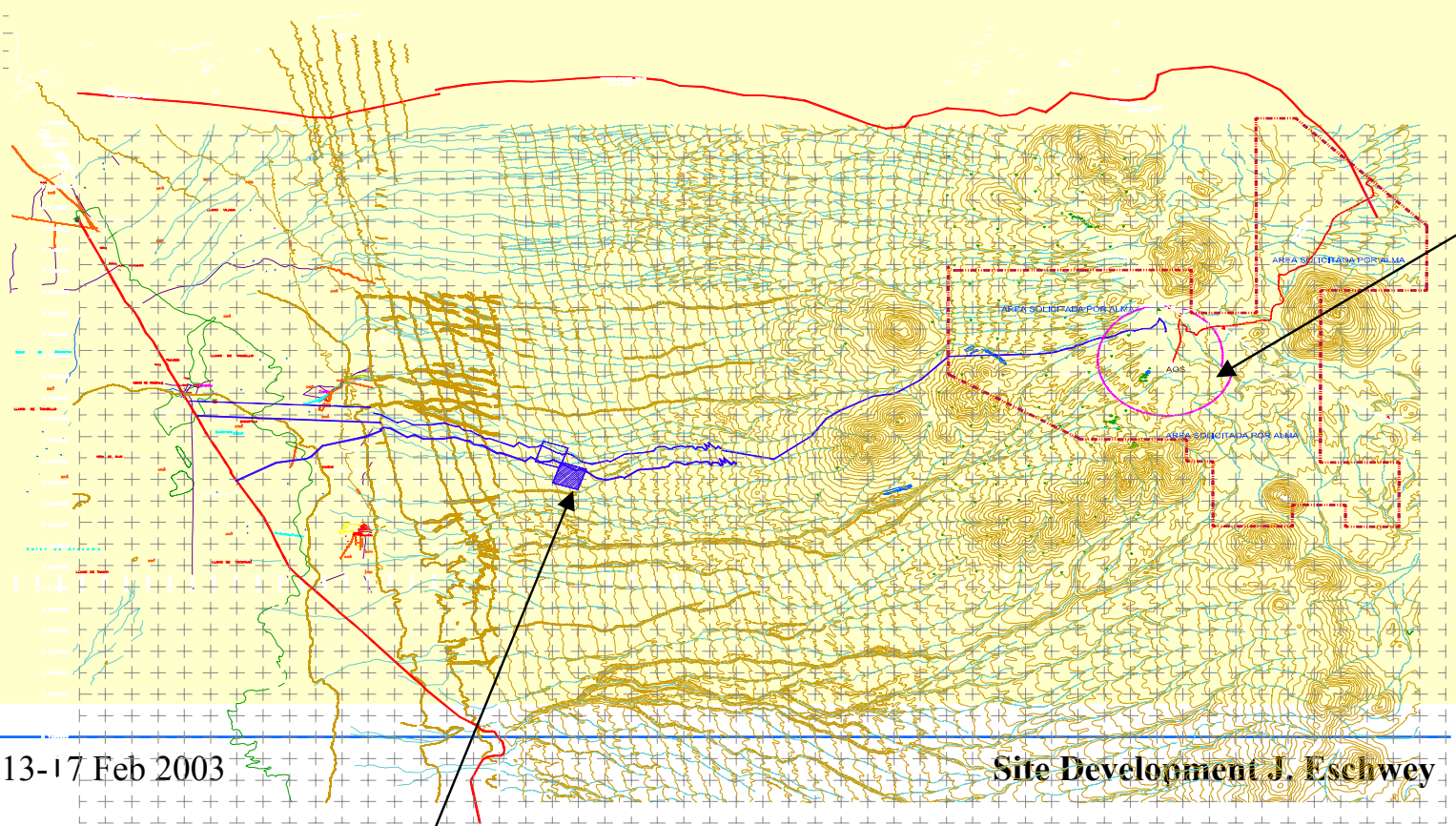


ALMA Project





Master Plan



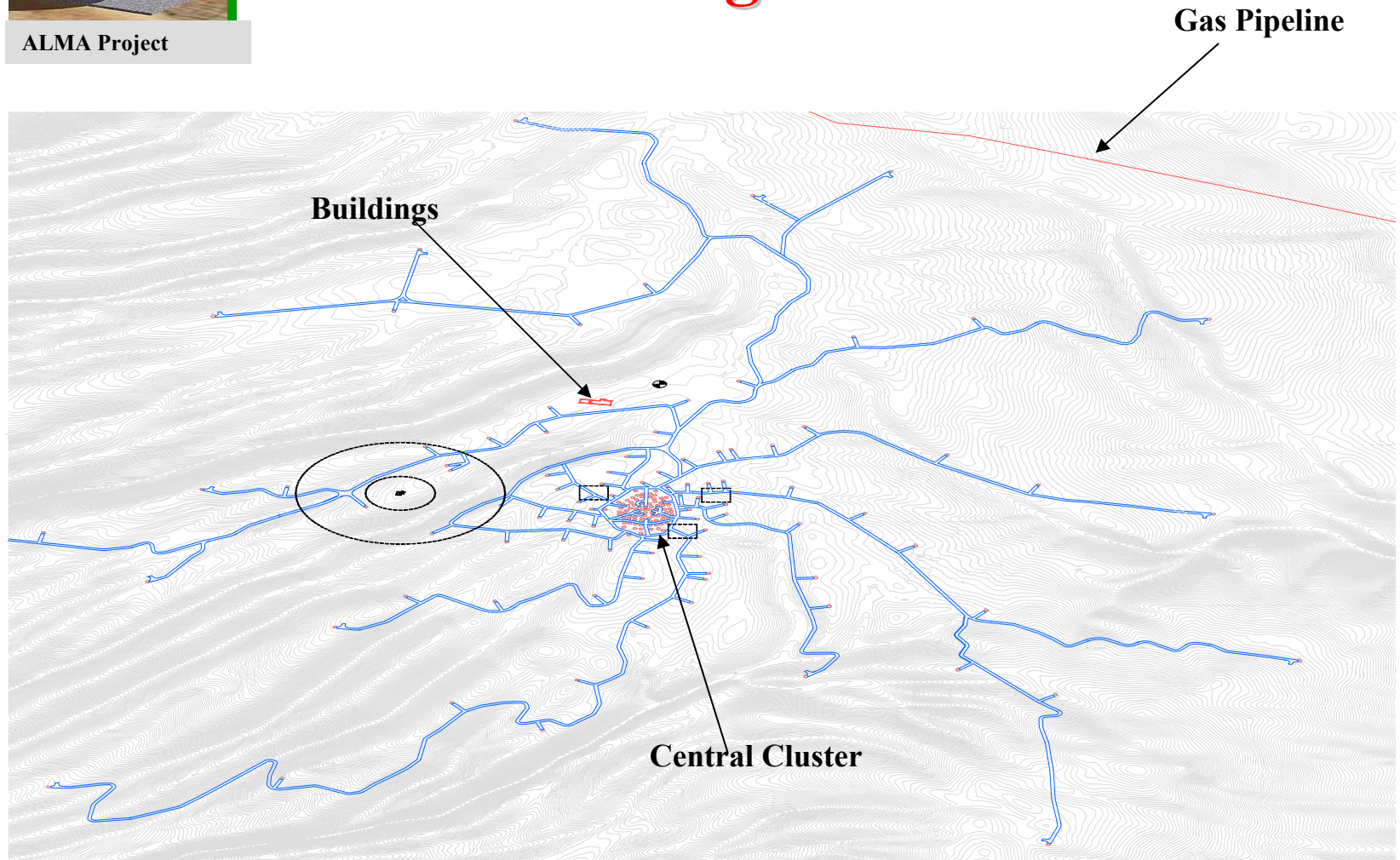
EWR 13-17 Feb 2003

Site Development J. Eschwey



ALMA Project

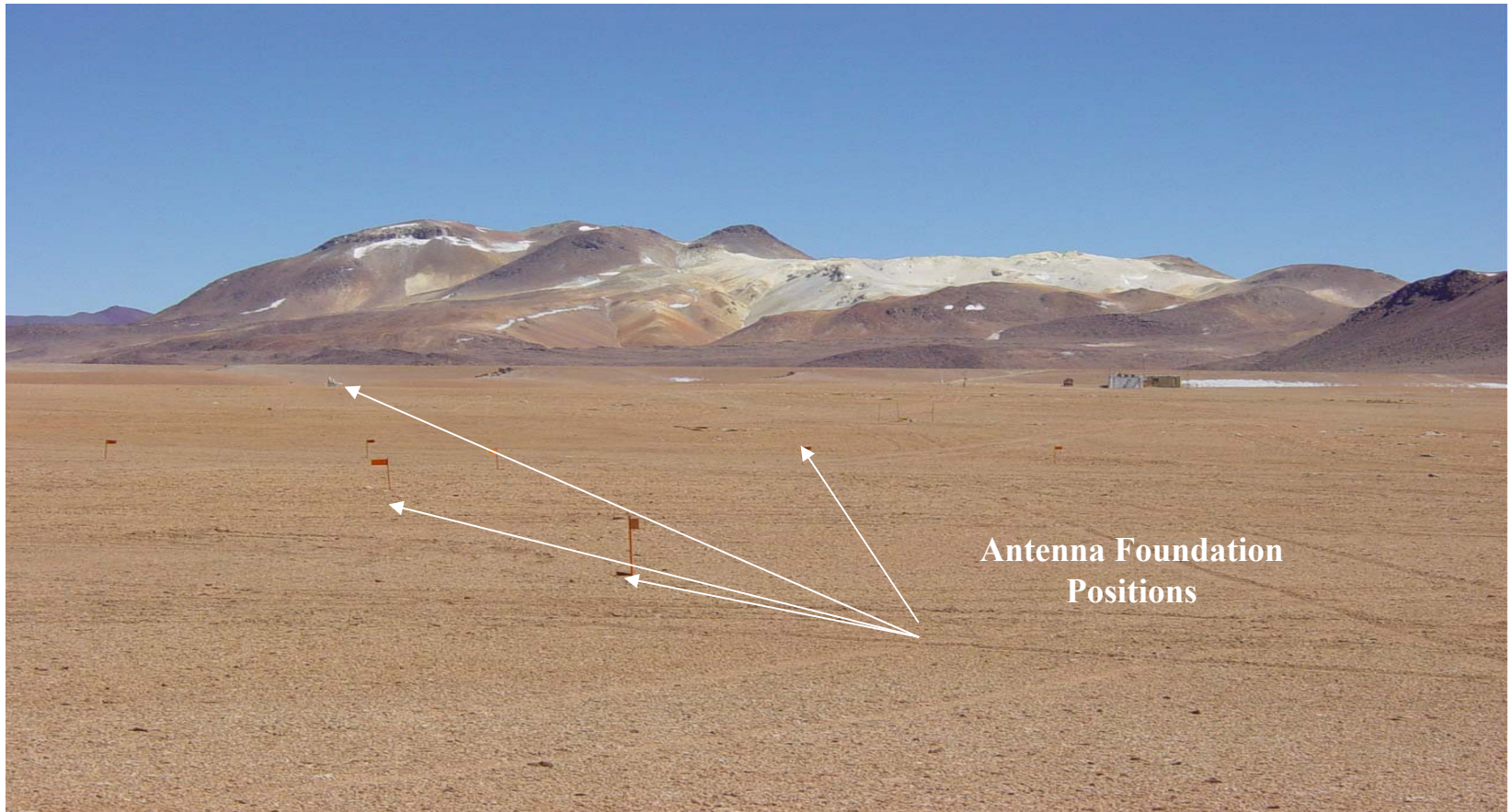
AOS Antenna Stations and Interconnecting Roads



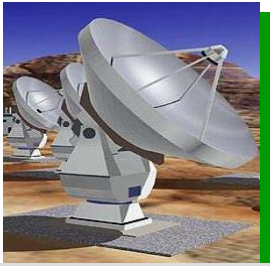


ALMA Project

Antennas configuration at AOS (flags)

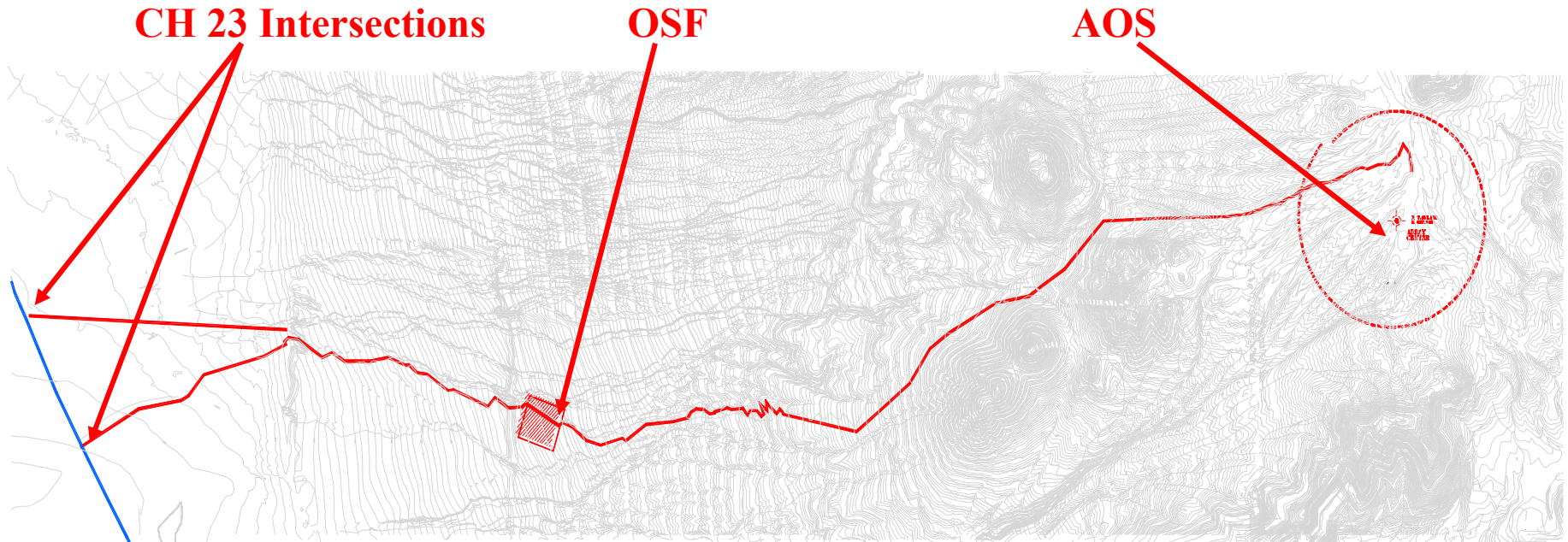


Antenna Foundation
Positions



ALMA Project

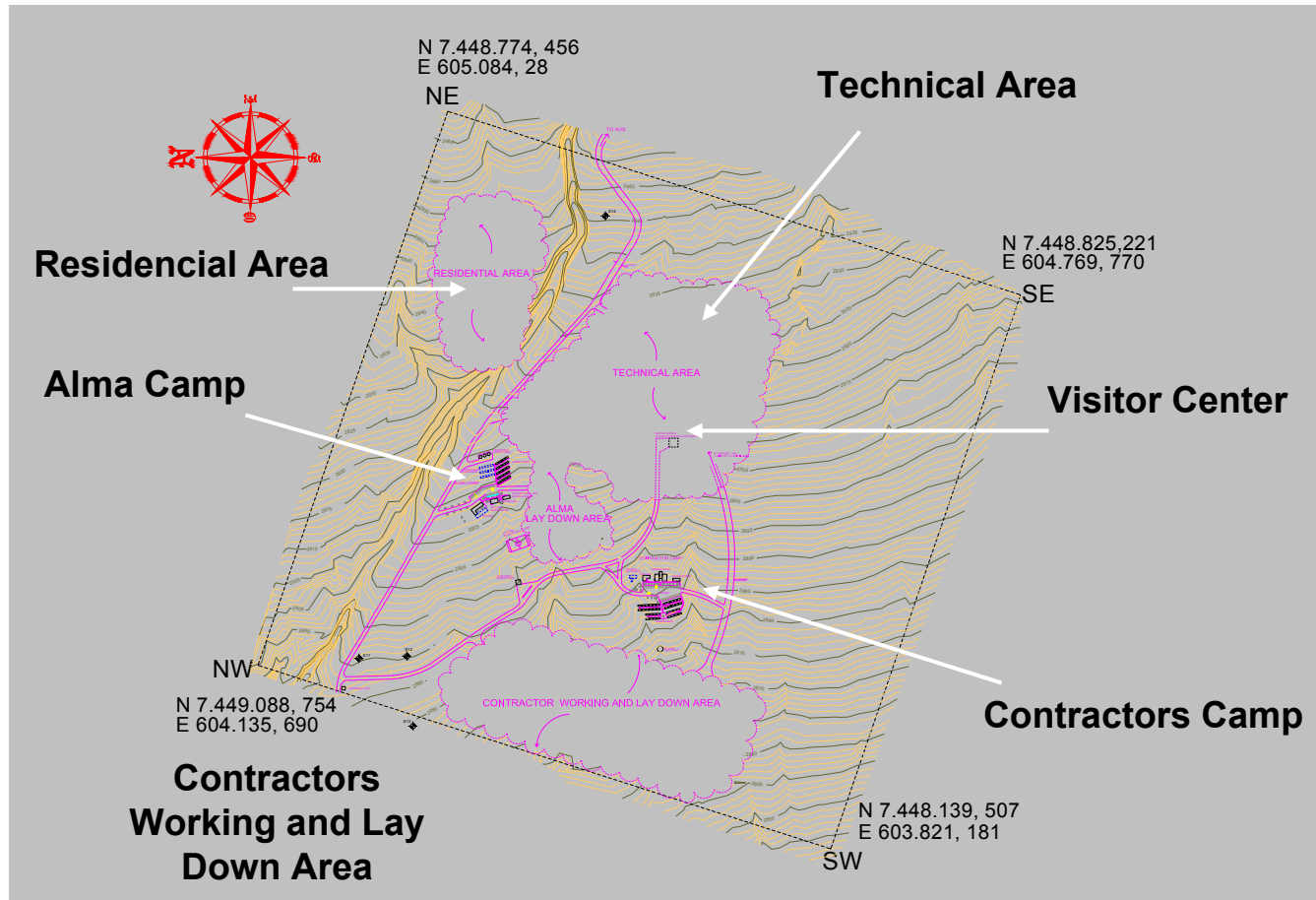
Road from intersection at CH23 to AOS via OSF





ALMA Project

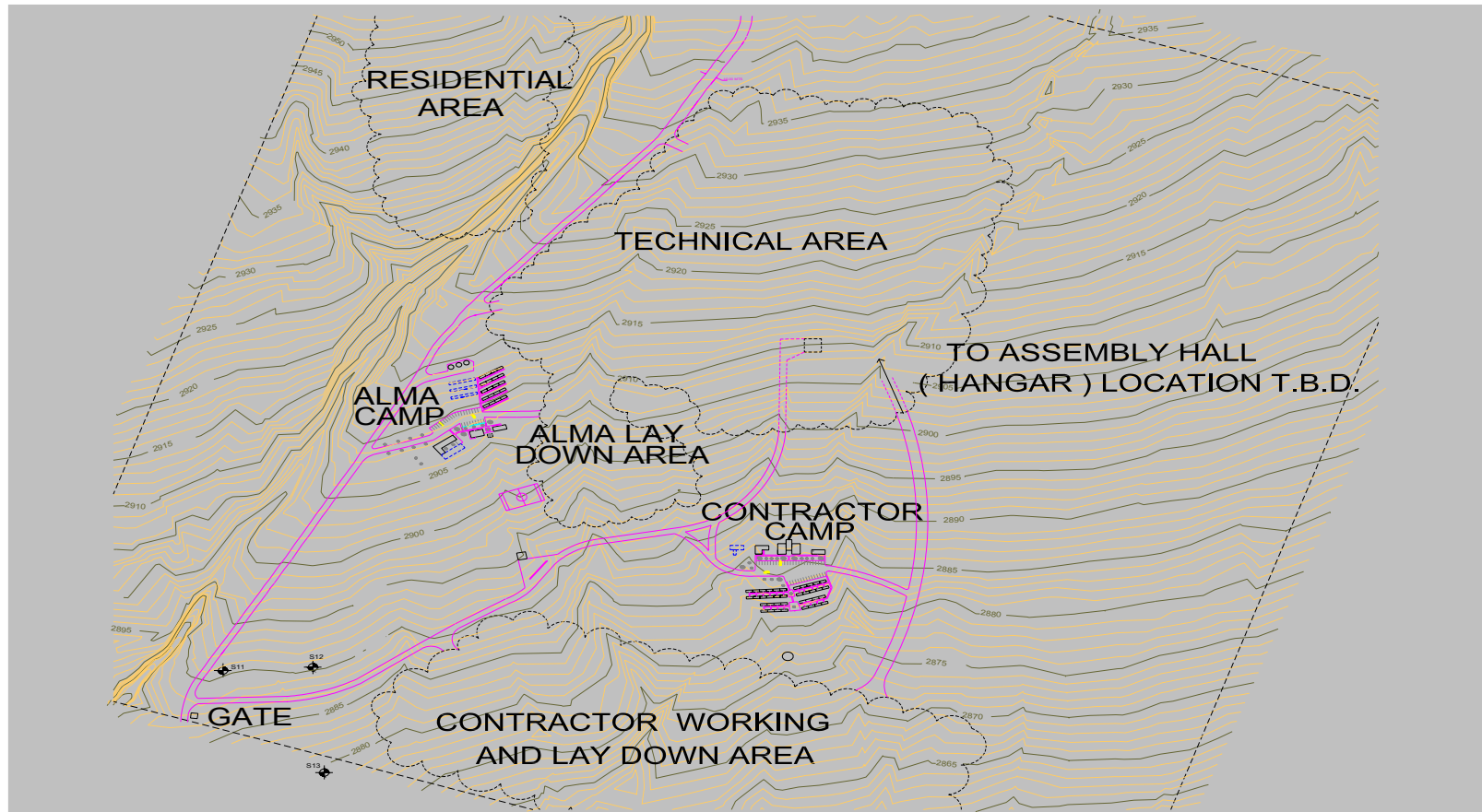
OSF Area General Lay-out





ALMA Project

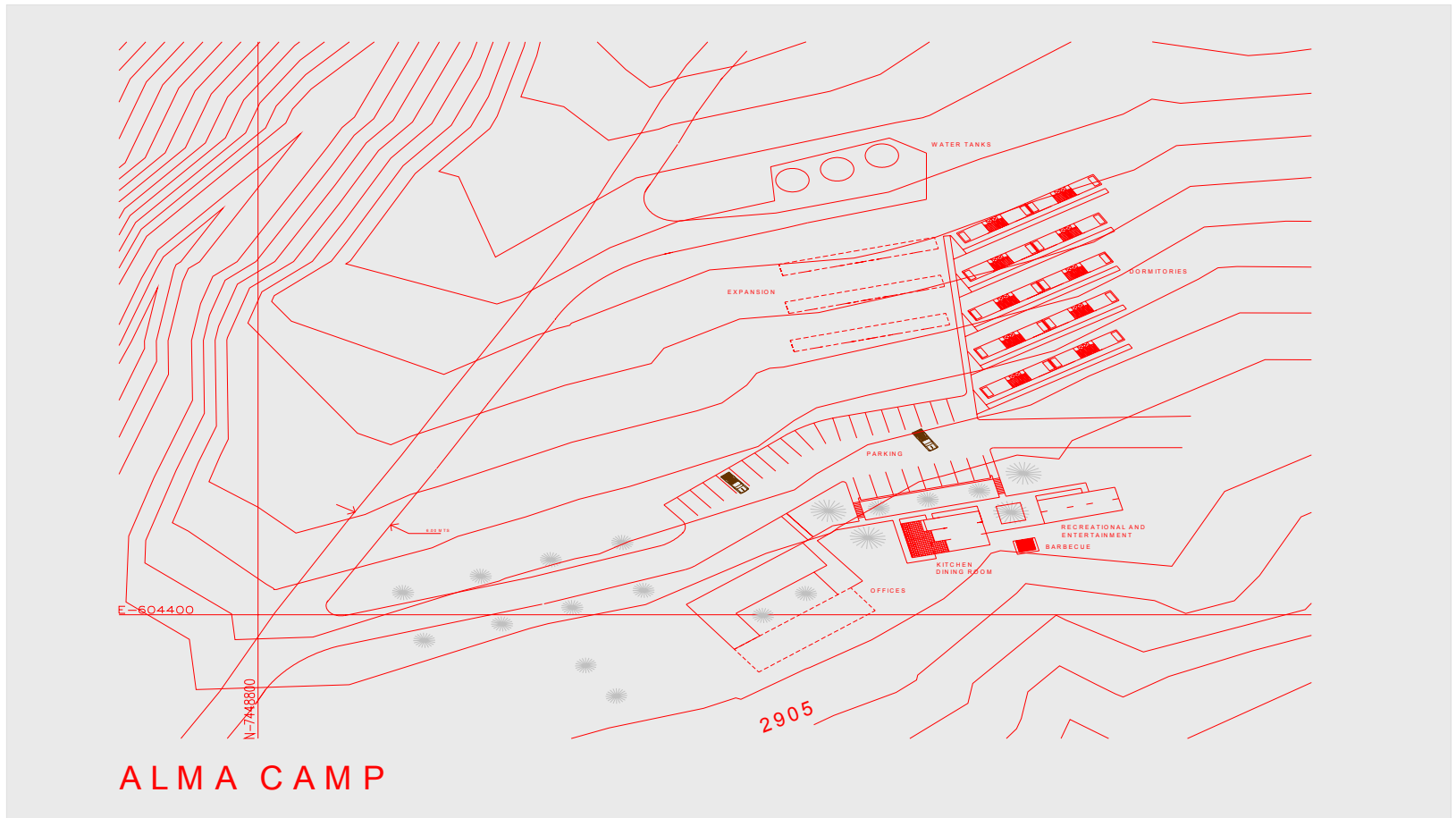
OSF General Lay-out





ALMA Project

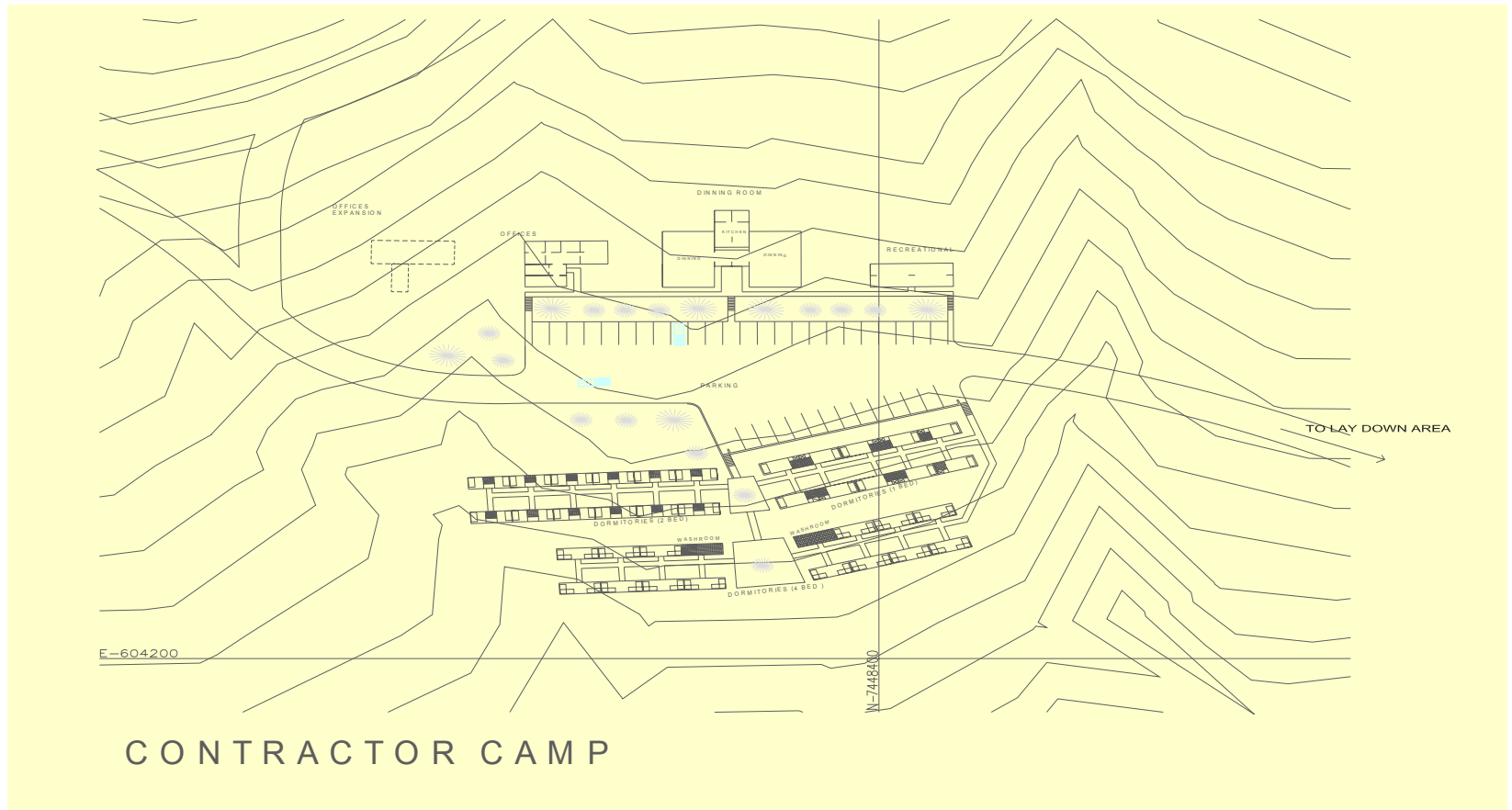
Alma Camp





ALMA Project

Contractors Camp





ALMA Project

OSF Area



Residential Area



ALMA Project

OSF Area



Alma Camp Area



ALMA Project

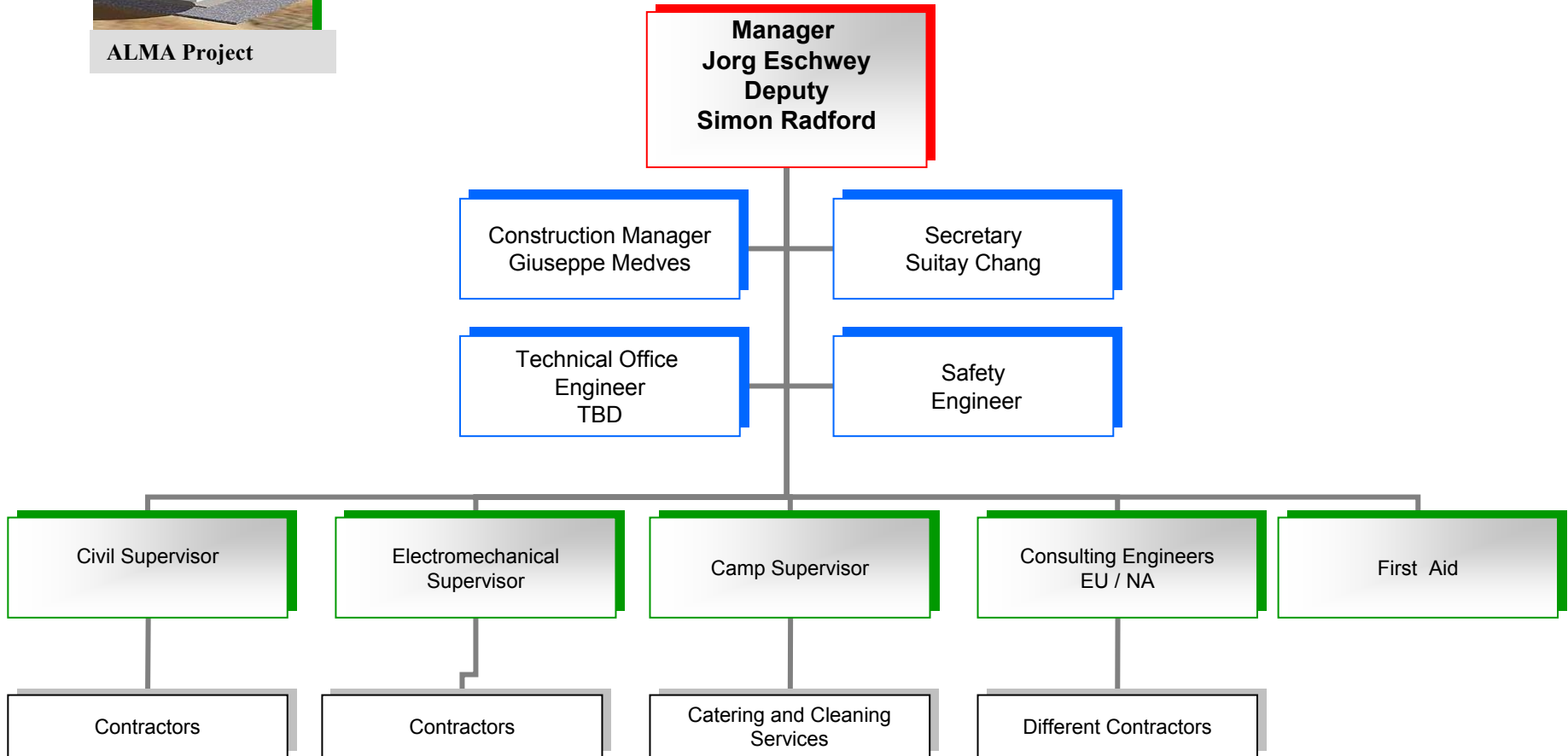
Site Development Budget

Total	(in 2002 US Dollars)	67,951
North American Tasks	36,2 %	24,623
European Tasks	63,8 %	43.328

AWE	AWE Group Header	Total Task Amount (2002 US Dollars)
200	Site Construction Management	5,535
210	Site Infrastructure	3,177
220	Array Site (AOS)	34,819
240	Operation Support Facility (OSF)	14,289
260	Access Road to OSF and AOS	7,365
280	AOS-OSF Communication Links	2,223
300	Chilean Phase 2 Facilities (APO)	543



ALMA Project





ALMA Project

Progress

Access Road Opening (Establishment of a construction access to OSF and AOS)

- | | | |
|---|--|----------------------|
| - | Tender to bidders | 15-Febr-2003 |
| - | Tender opening | 15-March-2003 |
| - | Contract signature | 01-April-2003 |
| - | Road opening to OSF complete | 30-April-2003 |
| - | Road opening from OSF to AOS complete | 30-Sept-2003 |

Concerns

- **Restrictions imposed by the Environmental Impact Study**
- **Protection and Preservation of Archaeological Monuments**
- **Land Access on 01-April-2003**



ALMA Project

Progress

Design/Engineering of the Access Road to OSF and AOS

- | | |
|---|-------------------------|
| - Tender to bidders | 05-Dec-2002 done |
| - Tender opening | 23-Jan-2003 done |
| - Contract signature | 13-Febr-2003 |
| - Provisional Acceptance of Road Design/Engineering Documentation | 16-July-2003 |



ALMA Project

Progress

OSF Facilities

Technical Area Facilities (Phase 1)

Tender Documents complete	15-Febr-2003
Design/Engineering Contract awarded	01-June-2003
Critical Design Review complete	15-Sept-2003
Construction/Tender documents complete	31-Dec-2003
Construction contract awarded	01-April-2004
Provisional Acceptance	31-July-2005

Residence and Visitor Center Facilities

Tender Documents complete	15-Febr-2008
Design/Engineering Contract awarded	01-Oct-2008
Critical Design Review complete	31-March-2009
Construction/Tender documents complete	01-July-2009
Construction contract awarded	01-Jan-2010
Provisional Acceptance	01-Oct-2011



ALMA Project

Progress

Alma Camp

Design/Engineering contracted	8-Jan-2003
Construction Documents complete	01-Mar-2003
Tender to bidders	15-Mar-2003
Construction Contract signature	01-May-2003
Provisional Acceptance	15-Aug-2003

Contractors Camp and Working Areas

Design/Engineering contracted	8-Jan-2003
Construction Documents complete	01-Mar-2003
Tender to bidders	15-Mar-2003
Construction Contract signature	01-May-2003
Provisional Acceptance	30-Oct-2003