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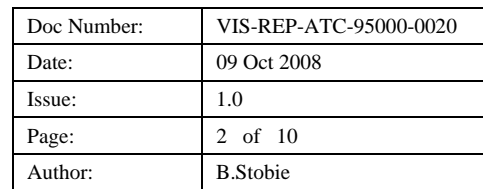
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1 Context

A number of Inspection items in the document 'VISTA Technical Verification Plan', VIS-PLA-ATC-95000-0006 are basic in nature and can be confirmed by visual inspection, but have no formal document record, such as Specification Item 5.7.7 'Office provided with network, communications, heating and ventilation facilities'.

NOTE that any related technical requirement (such as in the above case, network protocols and capacity) are covered by other 'Design', 'Analysis' or 'Test' sections of the Verification Plan, and have appropriate references. In addition, any purely technical 'Inspections' (such as M1 micro-roughness) will refer to the appropriate technical documents.

This document corrects those documentary omissions, and clearly any of the Inspections listed can easily be confirmed by a visit to the VISTA facility – however an appointment should always be made with the VISTA safety officer for safety and operational reasons.

2 Inspection Reports

Verification Plan AD01 Section	Description	Inspected (date)
5.1.16.4.5	<p>Telescope Requirements, Cassegrain cable wrap : <i>Requirement – “The cable wrap shall be populated with services for the Cassegrain rotator and IR Camera.”</i></p> <p>Verified by inspection. Also, the IR Camera has been operated on-telescope using the supplied cabling and services - see TRAC Operating logs for July 2008.</p>	14/07/08
5.4.3.4(1)	<p>Control, Location of Computing Equipment : <i>Requirement – “All LCUs shall be located in the VISTA telescope enclosure, which will also contain any X-terminals required for engineering work.”</i></p> <p>Verified by inspection – See entry for 5.4.3.4(4) for X-terminals. The AZ, ALT and CASS LCU’s are fitted into the MCU rack in the Telescope Plant Room.</p>	19/06/08
5.4.3.4(2)	<p>Control, Location of Computing Equipment : <i>Requirement – “All workstations shall be located in the Cerro Paranal Control Building, unless they are dedicated data-processing devices (“number-crunchers”) associated with particular systems.”</i></p> <p>Verified by inspection – see next item..</p>	21/06/08
5.4.3.4(4)	<p>Control, Location of Computing Equipment : <i>Requirement – “A local control workstation shall be situated in the office in the Enclosure Basement.”</i></p> <p>NOTE – Specification is incorrect, as “workstations” are not allowed to be installed in the VISTA facility. However, local control computers (X-terminals) are located in the basement office, that connect to the VISTA workstations located at the VLT telescope.</p>	21/06/08

Verification Plan AD01 Section	Description	Inspected (date)
5.6.6.2(1)	<p>Enclosure, (Telescope) Access :</p> <p><i>Requirement – “A mezzanine floor shall be provided at a suitable level to access the azimuth bearing and motors of the Telescope for maintenance purposes.”</i></p> <p>Verified by inspection. See enclosure and telescope drawings for design details.</p>	19/06/08
5.6.6.2(2)	<p>Enclosure, Access :</p> <p><i>Requirement – “The basement shall incorporate two stairs to access the mezzanine and azimuth floors and to provide emergency exit routes from the enclosure.”</i></p> <p>Verified by inspection. See enclosure drawings for design details.</p>	19/06/08
5.6.6.6(1)	<p>Enclosure, Primary Washing Requirements :</p> <p><i>Requirement – “An area in the basement, designated for primary mirror stripping, shall be provided with cast in drainage leading to an external storage tank.”</i></p> <p>Verified by inspection. Also see enclosure drawings for design details.</p>	21/06/08
5.6.6.6(2)	<p>Enclosure, Primary Washing Requirements :</p> <p><i>Requirement – “The mezzanine and azimuth floor levels shall provide space above the stripping area for taking the primary mirror from the Telescope to the basement.”</i></p> <p>Verified by inspection and actual usage. See enclosure drawings for design details.</p>	19/06/08
5.6.6.6(3)	<p>Enclosure, Primary Washing Requirements :</p> <p><i>Requirement – “The Azimuth floor shall be covered during normal operation of the telescope with covers meeting the basic floor loading requirements of Section 5.6.4.2.”</i></p> <p>Existence of floors verified by inspection. For loading analysis, see Verification Plan section 5.6.4.2</p>	19/06/08

Verification Plan AD01 Section	Description	Inspected (date)
5.6.6.6(5)	Enclosure, Primary Washing Requirements : <i>Requirement – “Safety cabinets shall be provided for storage of stripping and washing materials when not in use.”</i>	19/06/08
5.6.6.7(1)	Enclosure, Camera Storage and Support : <i>Requirement – “Facilities to store one camera shall be provided in the basement. These shall include all necessary support to operate the camera remotely from the telescope.”</i> Verified by inspection, and operation of camera in Camera Prep room, June-July 2008.	19/06/08
5.6.7.1(2)	Enclosure, Enclosure Temperature Stabilisation : <i>Requirement – “Air-conditioning the inner volumes, above the azimuth floor during the day and below the azimuth floor level during observing. Cooled air shall be distributed throughout the entire volume by means of air outlets distributed along the inner surface, including the upper part of the dome when the dome is locked in its parking position.”</i> Verified by inspection during system operation, see also enclosure HVAC system drawings.	19/06/08
5.6.9.3(3)	Enclosure, Vibration : <i>Requirement – “No equipment shall connect between the Telescope Pier and the Enclosure base in such a manner that vibration can be transmitted through the coupling.”</i> Verified by Inspection – Only telescope cabling and flexible cooling pipes in ‘twister’ connect the pier to the base. Refer to EIE structural drawing for construction details.	21/06/08

Verification Plan AD01 Section	Description	Inspected (date)
5.7.3.2(2)	<p>Auxiliary Equipment : <i>Requirement - A 500ltr storage tank shall be provided with plumbing feed to point of use.</i></p> <p>Partially verified by inspection – Storage tank is supplied, but no fixed plumbing feed is supplied – Waiver Required.</p>	21/06/08 (Tank only)
5.7.3.5(2)	<p>Auxiliary Equipment, Hazardous Materials, Suitable storage cabinets supplied <i>Requirement – “Chemical and Flammable materials shall be stored in appropriate cabinets.”</i></p>	24/08/08
5.7.3.5(3)	<p>Auxiliary Equipment, Hazardous Materials : <i>Requirement – “Data sheets shall be kept for all substances at an appropriate designated location on site.”</i></p>	24/08/08
5.7.7(1)	<p>Auxiliary Equipment, Office/Rest area : <i>Requirement – “An office and document store shall be provided.”</i></p> <p>Verified by inspection – Office used for document store.</p>	19/06/08
5.7.7(2)	<p>Auxiliary Equipment, Office/Rest area, Equipped with network, communications, heating and ventilation facilities <i>Requirement – “This room shall be equipped for network, communications and heating and ventilation.”</i></p> <p>Verified by inspection.</p>	19/06/08
5.7.8	<p>Auxiliary Equipment, Sanitary provision <i>Requirement – “Toilet and washroom facilities shall be provided.”</i></p> <p>Verified – Toilet room, plus two sinks with hot and cold water for hand washing.</p>	19/06/08
5.9.1(3)	<p>Service and handling Equipment, general : <i>Requirement – “Any special tools necessary for maintenance shall be provided.”</i></p> <p>Verified by inspection and actual usage during maintenance.</p>	19/06/08

Verification Plan AD01 Section	Description	Inspected (date)
5.9.1(4)	Service and handling Equipment, general : <i>Requirement – “Sufficient basic tools shall be provided for maintenance of VISTA and servicing of the sub-systems.”</i> Verified by inspection and actual usage	19/06/08
5.9.3(1)	Basic handling Equipment : <i>Requirement – “Manual pallet trolley (provided), capacity 5 tonne.”</i> Scissor Lift provided and used.	19/06/08
5.9.3(2)	Basic handling Equipment, Necessary slings, shackles provided <i>Requirement – “Slings and shackles (provided) as necessary.”</i> Verified by inspection and by actual usage during telescope integration, Jan-July 2008.	19/06/08
5.9.4(1)	Special Handling Equipment : <i>Requirement – “Top-end handling tool (provided)”</i> Verified by inspection and by actual usage during telescope integration, 2007.	19/06/08
5.9.4(2)	Special Handling Equipment : <i>Requirement – “Primary mirror handling tool (provided)”</i> (Verified by inspection and by actual usage during telescope integration, 2008)	05/08/08
5.9.4(3)	Special Handling Equipment : <i>Requirement – “M2 handling equipment (provided)”</i> (Verified by inspection and by actual usage during telescope integration, 2008)	05/08/08
8.5(1)	General Requirements, Nameplates and Product Marking : <i>Requirement – “As a general rule the main parts of VISTA</i>	n/a

Verification Plan AD01 Section	Description	Inspected (date)
	<p><i>subsystems and all exchangeable units (LRUs) shall be tagged with nameplates."</i></p> <p>No specified LRU's on VISTA.</p>	
8.5(2)	<p>General Requirements, Nameplates and Product Marking, Nameplate includes listed items</p> <p><i>Requirement – "The nameplates shall be visible after installation of the parts or LRUs. The nameplate shall contain the following information:</i></p> <ul style="list-style-type: none"> • <i>Part /Unit name</i> • <i>Drawing number including revision</i> • <i>Manufacturing month and year</i> • <i>Name of manufacturer</i> <p><i>Deviations from the above shall be subject to VPO agreement".</i></p> <p>No specified LRU's on VISTA.</p>	n/a

Inspector : Brian Stobie UKATC (signed)