

37

LANDSCAPE GARDENING

V1.0 - 10 May 2006

technical description



INTRODUCTION

WorldSkills, by a resolution of the Technical Committee and in accordance with the Constitution, the Standing Orders and the Competition Rules, has adopted the following minimum requirements for this skill for the WorldSkills Competition.

The Technical Description consists of the following:

- Section 1 – Technical/Competition Description (TD)
- Section 2 – Project Design Criteria (PD)
- Section 3 – Skill Management Procedures (SM)
- Section 4 – Workshop Setup (WS)
- Section 5 – Infrastructure List (IL)
- Section 6 – Appendices

Effective 10.05.06



Liam Corcoran (LC)
Chairman, Technical Committee
10.05.06

1. SECTION 1 - TECHNICAL/COMPETITION DESCRIPTION (TD)

1.1 Name and description of skill

- 1.1.1 The name of the skill is Landscape Gardening
- 1.1.2 The landscape gardening plan, construct and maintain:
- Private commercial and green spaces (e.g. Along roads, railways and waterways at airports)
 - Sports and leisure grounds, children's playgrounds plants and greenery inside and on the exterior of buildings (on roofs and facades)
 - Biospaces, projects for re-cultivation and natural regeneration
 - Water remediation works
 - Tree cultivation and rehabilitation, transplanting of large trees
 - Recycling of organic matter (composting)
- 1.1.3 Every expert and competitor must know this Technical Description.
- 1.1.4 In the event of any conflict within the Technical Descriptions, the English version will take precedence.
- 1.1.5 Words implying male gender shall automatically imply female gender also.

1.2 Scope of work at WorldSkills Competitions

- 1.2.1 There will be two competitors per team (of the same member country). The Test Project consists of only practical work.
- 1.2.2 The theoretical knowledge is limited to that necessary to carry out the practical work. Knowledge of standards, rules and general directions will not be examined.

1.3 Practical work

- 1.3.1 The landscape gardeners, in teams of 2, must be able to carry out, unaided and with expertise, the work necessary for the tests mentioned below and comply with regulations concerning safety and the protection of the environment with regard to the planning, construction and maintenance of a range of landscape works (refer paragraph 1.1.2)
- 1.3.2 The Test Project covers the layout of a small garden by preparing and using various materials, such as natural stones, concrete, wood and/or plastics; soil, lawn and plants arranged in a layout.
- 1.3.3 At least three and a maximum of four of the following components will be required in addition to Layout of green space (60% of total area):
- Pavement
 - Walls
 - Stairs
 - Wooden construction
 - Water feature

- 1.3.4 The appropriate technical skills are:
- Measuring, marking out, levelling and plumbing;
 - Cutting and placing stones and slabs (of natural or artificial stone), for steps, walls and pavements;
 - Cutting and assembling timber structures
 - Putting into place and laying out substrate, topsoil and mulch;
 - Establishment of lawn (rolls of turf);
 - Planting a variety of plant types. Trees, shrubs, perennials and annuals

1.4 Theoretical knowledge

- 1.4.1 Interpretation of drawing and sketches
- 1.4.2 Knowledge of landscape construction techniques
- 1.4.3 Knowledge of materials and their application
- 1.4.4 Knowledge of machinery, tools and equipment used in the landscape industry;
- 1.4.5 Knowledge of plants
- 1.4.6 Knowledge of environmental protection;
- 1.4.7 Knowledge of health, safety and security. (Delete)

1.5 Materials

- 1.5.1 Refer Section 4.

1.6 Workshop installations

- 1.6.1 Refer Section 4 and Section 5.

1.7 Test Project marking

- 1.7.1 All documentation used must be available in digital form.
- 1.7.2 There is to be a majority agreement (minimum = 50 % + 1) from experts on the accepted Competition marking scale.
- 1.7.3 Selection of appropriate project/s is based on paragraph 1.7.2. The expert team may make modifications to the proposed project.
- 1.7.4 All results may be displayed in the competition area as per previous competitions. This will be of the progressive marking for all sections of the competition and will display the current total aggregate result per country/team.

- 1.7.5 All marking will be objective in accordance with the marking scale.
- Only Form 6 will be required for the submission of marks.
 - Marking is to be entered after each section has been completed, and a program has been developed for computer calculation after time and task data has been entered.
 - A sample marking scale and instructions for juries from the previous Competition are to be attached to the Technical Description.

1.7.6 Experts are to complete a score sheet for each section completed, for each team.

1.7.7 Marks will vary according to the Marking Scale as defined for the competition, but will align to the following ranges within the skill groups as defined in Section 1.7.8 below.

1.7.8 Assessment criteria

Section	Item	Maximum Points
A	Measurement	10
B	Work process	10
C	Dimensions	10
D	Layout of green space	20
E	Horizontal construction*	20
F	Vertical construction ⁺	20
G	General impression	10

* Horizontal construction may include: paving paths, patios stepping stone, capping and stairs.

⁺ Vertical construction may include walls; water feature and timber construction the mark weighting must reflect the time of works and degree of difficulty for the assessment criteria.

1.7.9 Conversion from the 0 – 100 scale to the 400 - 600 scale will be performed by the WorldSkills Competition Information System (CIS).

2. SECTION 2 - PROJECT DESIGN CRITERIA (PD)

2.1 General requirements

2.1.1 Overall, the Test Project must:

- Be modular
- Be in accordance with the current Technical Description
- Comply with WorldSkills requirements and numbering standard
- Be accompanied by a marking scale that will be finalised at the competition in accordance with Subsection 1.7.
- Be accompanied by proof of function/ proof of construction/ completion in the set time etc – as appropriate to this skill category. – For example, a photograph of a project done according to the Test Project within material, equipment, knowledge and time constraints.

2.2 Design requirements

2.2.1 The project must be tested to prove the required materials and time.

2.2.2 The test project should fill a space of 7m x 7m

2.3 Project development and implementation procedure

2.3.1 Experts, Technical Delegates, Jury Presidents, Shopmasters and other associated or invited people will use the WorldSkills Discussion Forums to communicate, collaborate and coordinate the development of the Test Project and the overall development of this skill category for the WorldSkills Competition. The address for the forum for this skill category is http://www.worldskills.org/members/forums/forum_37/index.php. The Chief Expert (or an expert nominated by the Chief Expert) will be moderator for this forum.

2.3.2 One day before the beginning of the competition all materials, equipment and tools are to be allocated to each work station. Experts will verify the quantity and quality of the allocated resources to ensure consistency.

2.3.3 Before discussion of the 30% change a sample of all materials must be provided, including the plants.

2.3.4 The competitors are to inspect all materials on the site before the competition commences and sign against the materials list.

3. SECTION 3 - SKILL MANAGEMENT PROCEDURES (SM)

3.1 Documents required

- 3.1.1 The Chief Expert will have available a current copy of all documents associated with this skill for the Competition.
- 3.1.2 The documents required are:
- Technical Description – Skill 37 Landscape Gardening
 - (WorldSkills) Competition Rules
 - Health and Safety documents
 - QAMS – all documents
 - Any other documents referred to in the documents listed above.
- 3.1.3 3.1.3 While it is understood that the Chief Expert will have a copy of these documents in his/her own language, there shall also be a complete set in the language identified as that taking precedence.
- 3.1.4 The Chief Expert is expected to have a sound knowledge of the requirements and procedures specified in the documentation.
- 3.1.5 The Jury President is expected to have a thorough knowledge and understanding of the requirements and procedures specified in the documentation.

3.2 Pre-Competition responsibilities

- 3.2.1 In the period between one WorldSkills Competition and the next, the elected Chief Expert is responsible to ensure that the requirements of Section 2 – Project Design Criteria are complied with.

3.3 Skill Management procedures for the Chief Experts prior to and during the Competition

- 3.3.1 The procedures specified below must be adhered to.
- 3.3.2 On arrival at the Competition site for the first time, the Chief Expert must:
- Welcome the experts and ensure introductions are made
 - Inform them of their duties and responsibilities in terms of the Competition Rules and Standing Orders
 - Ensure that the project is endorsed by all the experts and that a copy is signed by all the experts
- 3.3.3 The Chief Expert will then divide the experts into teams for the following activities:
- Verify that the material on site is appropriate and sufficient
 - Verify again that the quantities of material as specified on the material list is accurate
 - Develop a program for the competitors to complete the modules
 - Develop timetables for activities
 - Set up equipment
 - Confirm that the layout, work areas and equipment are in accordance with the workshop setup requirements

- Confirm that all machinery/equipment is in a safe working order
 - Confirm that all workstations/machinery/equipment are in accordance with the plan, and that they are numbered
 - Confirm that there is sufficient illumination
 - Confirm that there is sufficient space for the competitors to work efficiently
 - Confirm that the barriers are far enough removed from the competitors to ensure that there will be no interference, and if they are not, set up a roster among the experts to police the area during the Competition
 - If necessary, set up duty rosters for activities during the Competition – e.g. keeping watch during lunch, preventing access of unauthorised persons, etc
- 3.3.4 The Chief Expert will then divide the experts into teams for purpose of marking and setting up marking schedules in accordance with the requirements of Subsection 1.7.
- 3.3.5 Suggestions and comments for the revision and improvement of the Technical Description are to be provided to the Deputy Chief Expert in writing. The Deputy Chief Expert will reduce the information to a single typed document ready for discussion by all experts. Prior to leaving the Competition site, the Chief Expert, the Deputy Chief Expert and the Jury President will facilitate the discussion and revision of the Technical Description. Also refer paragraph 3.3.12.
- 3.3.6 At any time that a unanimous decision is not achieved within a reasonable time, the Chief Expert will put the matter under discussion to the vote. A majority will be 50% of the experts present plus one. This decision will be final. In the event that an expert is absent at the time that the vote takes place, he/she has the right to be informed of the decision but the matter will not be raised again or voted upon again. The exception to this majority rule will be in the case of approval of the changes to the Technical Description, where the majority of 80% is required.
- 3.3.7 In the event that an extension of time is requested for the Competition to exceed 22 hours, the matter must be discussed with the Jury President. All possible alternative solutions must be investigated before approval of an extension of time is requested, or will be approved.
- 3.3.8 Prior to the end of the Competition, the Jury President will facilitate the selection of the Chief Expert and Deputy Chief Expert for the next WorldSkills Competition.
- 3.3.9 Experts are eligible for selection as a Chief Expert if they:
- Can speak English, French or German
 - Have attended the WorldSkills Competition at least twice before (if less than 4 experts have been to the WorldSkills Competition before, this criteria may be relaxed at the discretion of the Jury President)
 - Demonstrate a high degree of expertise in the skill
 - Demonstrate leadership qualities.
 - Are competent using a computer and the Internet – specifically to facilitate the Discussion Forum for their skill category.
- 3.3.10 The process by which selection will take place is by secret ballot and is as follows:
- Each expert present will list their choice of three experts in order of preference
 - The Jury President will allocate a score of three (3) points to each experts first preference, two (2) points to the second preference and one (1) point to the third preference
 - The Jury President will then calculate total scores and announce the three highest scoring experts
 - The expert with the highest score will be appointed Chief Expert for the next WorldSkills Competition

- If the first choice cannot attend, then the second choice will be Chief Expert
- If the first and second choice cannot attend, then the third choice will attend
- If none of the choices can attend, then the jury president will appoint, or facilitate the appointment of a Chief Expert
- The names of the selected experts will be entered into the provided documentation and signed by the Jury President and returned to the WorldSkills Secretariat.

3.3.11 Changes to the method of Competition design or suggestions offered for the next Competition design process or tasks must be written down and signed by 80% of the experts and included in Subsection 2.3.

3.3.12 The Deputy Chief Expert's primary role is to ensure that the Technical Description is updated to reflect the technological advances of the skill category and include overall improvements for the preparation and running of the Competition. He/she will ensure that all changes to the Technical Description are entered, that all experts sign it, and that it is delivered to the WorldSkills Secretariat as a hard copy and digitally.

3.3.13 The Deputy Chief Expert also assists in the distribution and collection of the QAMS Audit Questionnaires and assists the Chief Expert where necessary.

3.4 Competition procedures

3.4.1 The project will be worked on over all four days of the Competition (project organised by tasks, sections or modules).

3.4.2 Each module/task/section will be completed on the assigned day so that progressive marking can take place. Progressive results are to be available each day via a PowerPoint presentation or similar.

3.4.3 Prior to the start of the Competition, each competitor will receive a detailed timetable reflecting the timing for completion of the project tasks or modules.

3.4.4 Competitors will have a minimum of 5 hours to become familiar with material, equipment and processes. Where processes are particularly difficult, a subject matter expert will be available to demonstrate the process and the competitors will be given the opportunity to practice.

3.4.5 The competitors will be given all Competition documents including the marking criteria 1 hour prior to the commencement of the Competition so that they may study the requirements.

3.4.6 At no time during the Competition may the expert from the same country of origin as the competitor be involved in any discussion without another expert present or without permission from the Chief Expert.

3.4.7 Experts and competitors who continually fail to abide by the Technical Description and Competition Rules may be temporarily or permanently removed from the Competition.

3.5 Competition safety requirements

3.5.1 Policies and procedures specified within the following documentation will be adhered to or followed at all times.

- Health and Safety Policy – General Requirements

- Health and Safety Policy – Skill Specific
- Procedure for Safety Training
- Safety Training Development Flowchart
- Host Country Health and Safety Requirements
- Medical Assistance Request Procedure
- Accident Report Form

- 3.5.2 After having received training and briefing, the Chief Expert will provide the experts, competitors and personnel for whom he has responsibility with the information and training required to ensure a safe Competition in accordance with the requirements of the documentation specified in paragraph 3.5.1 above, and taking into account any of the specified requirements identified in Subsection 3.6 below.
- 3.5.3 The Chief Expert will ensure that all experts, competitors and personnel for whom he has responsibility complete and sign the Confirmation of Receipt of Training Form (refer Appendices) on completion of the training session.
- 3.5.4 The Chief Expert will countersign these forms, and keep them secure until the end of the Competition at which time they will be returned to the Quality Auditor for the Competition.
- 3.5.5 The Chief Expert will additionally task the experts with the responsibility of ensuring that all experts, competitors, and other personnel comply with the safety requirements for the skill category and Competition site.
- 3.5.6 The Chief Expert will receive nominations and appoint a safety officer whose responsibility will be to carry out the tasks specified in the Safety Checklist (refer Appendices).
- 3.5.7 Work clothes must comply with relevant codes. If the host country has any specific codes that are to be in place during the Competition, then these must be made known to the competitors at least 6 months prior.
- 3.5.8 All machinery and/or equipment must comply with the safety requirements of the host country.
- 3.5.9 Competitors must keep their work area clear of obstacles and their floor area clean of any material, equipment or items likely to cause someone to trip, slip or fall.
- 3.5.10 Failure by the competitor to comply with safety directions or instructions may incur loss of marks for safety. Continuous unsafe practice may result in competitors being temporarily or permanently removed from the Competition.

3.6 Skill specific safety requirements

- 3.6.1 All competitors must use safety glasses when using any hand, power or machine tools or equipment likely to cause or create chips or fragments that may injure the eyes.
- 3.6.2 A first-aid kit must be available throughout the Competition.
- 3.6.3 Experts will use the appropriate personal safety equipment when inspecting, checking or working with a competitor's project.

3.6.4 Equipment and machinery must be demonstrated to all competitors by the supplier in the familiarization time.

3.7 Judging procedural requirements

3.7.1 The criteria for each assessment must be practical to be marked at the completion of the project or assessment points can be nominated to be assessed during the competition provided a clear timeframe is given by the Chief Expert in the familiarization period.

3.7.2 Tolerances on each criterion must reflect industry standards.

3.8 Honesty and transparency

3.8.1 The competitors that attend the WorldSkills Competition have the right to expect fair and honest treatment during the Competition in terms of the following:

- Instructions that are clear and unambiguous
- Marking schedules that provide no advantage to an opposing competitor
- All necessary equipment and material specified within the skill documentation that are required to complete the Competition
- The assistance necessary from judges and officials to ensure that he is able to complete the project. (The assistance deemed necessary will be provided equally and at the same time to all competitors present)
- No undue interference by officials or spectators that may hinder them in the completion of their project
-

3.8.2 Every competitor has the right to expect and demand that no opposing competitors will receive undue or unfair assistance or intervention that may provide that opposing competitor with an unfair advantage.

3.8.3 All officials and judges present on the Competition site are expected to ensure that paragraphs 3.8.1 and 3.8.2 above are complied with and maintained.

3.8.4 It is the responsibility of the Chief Expert or his Deputy to ensure that all competitors, interpreters, officials and judges comply with and maintain the integrity of the Competition, and additionally ensure that all necessary steps are taken to ensure that:

- Translations and any interpretation to a particular competitor does not advantage that competitor
- Outside influences do not unduly improve or decrease competitors' abilities to provide a worthy performance.

3.8.5 A briefing will be provided to all experts and competitors on the requirements for integrity during the Competition.

3.8.6 Additionally, the Chief Expert is expected to identify these and any other factors that may exist on the Competition site that may result in the contravention of paragraphs 3.8.1 and 3.8.2 above, and reduce them to a checklist for continuous reference.

3.8.7 In the event that any competitor, judge, official, observer or competitor compatriot is found to be attempting to gain or provide assistance in any form that may result in an unfair advantage, the Chief Expert is to immediately refer the matter to the Jury President.

- 3.8.8 The Chief Expert will receive nominations and appoint a Security Officer whose responsibility it will be to ensure that these requirements are carried out.
- 3.8.9 It will be explained to all experts and competitors that nothing is to come in or out of the site unless specified by the Chief Expert as being allowed after being briefed on this topic.
- 3.8.10 Security checks will be carried out each day on experts and competitors (by experts and competitors) upon entry and exit to the site.

3.9 Information policy

- 3.9.1 During the competition a modified project plan without measurements is to be made available to the public.

4. WS – WORKSHOP SETUP

4.1 Materials

4.1.1 Materials and auxiliary materials

- Bricks, slabs, stairs and steps, pavement stones (natural or artificial), wood, metal, plastic and polymers
- Gravel, sand/ stone chips
- Binding agents such as cement or dry concrete/ dry mortar/ synthetic adhesives
- Soil substrates such as stakes, wire, string, etc.
- Synthetic materials (Geo textile, membrane)

4.1.2 The host country is to prepare the plan (design), material and infrastructure list. This plan as well as the specifications dimensions and samples of material is to be made available to all experts in 3 official languages 3 months before the next competition.

4.1.3 If the host country is unable to supply a plan (design) by nine months before the Competition they must notify the WorldSkills Secretariat. WorldSkills will delegate another member of skill category 37, Landscape Gardening, to provide a plan (design)

4.1.4 If the host country is unable to supply a sample and specification of materials 3 months prior to the competition the expert panel may refuse to use these materials. The host country will need to supply a substitute for the excluded material. This will apply if a majority of experts believe the material gives a country an unfair or appreciable advantage.

4.2 Workshop installations

4.2.1 Each team will have a workstation of at least 11 m x 11m (test project needs approx. 7 m x 7 m), as well as sufficient space for material preparation and storage and a resting place. Space must for material preparation, storing and resting must correspond to the proportional space available to one team. The site perimeter is to measure 7.1 x 7.1. The workstation can be outdoors, as long as it is protected against the rain and sun.

- The floor must be even and allow any required transport by building machines (small excavator, forklift truck).
- At any time during the competition access to the workstation must be ensured for transportation of the necessary material.
- The organizer must ensure separate male and female toilet to be available in or adjacent to the competition site.

4.2.2 The general layout of the workshop venue will be as below, with sufficient space for the booth and for the competitors working area as defined in Subsection 4.2.6 below. Where possible there should be no obstruction of the competition area from structures e.g. keep buildings to the corners. Please note that this is an example of the layout, and is not definitive. The minimum area requirements will be available.

4.2.3 In the event that the workstation is outside, a cabin or similar will be required for the use of experts (15 people)

4.2.4 Water and electricity supply must be available at each work site.

- 4.2.5 Machines and equipment such as forklift truck, small loader, will be required one per 5 teams. The same Brick/masonry saw, vibrating plate, compactor, masonry drills etc. must be available for each work station (depending on the test project).
1 levelling device (for judging)
- 4.2.6 Each team's workplace shall have sufficient space to provide the 7 m x 7 m work area, as well as store material, plant and equipment – (11 m x 11 m)
- 4.2.7 The following tools and equipment will be made available to each team of competitors:
- 1 wheelbarrow
 - 2 shovels
 - 2 spades
 - 1 Straight Edge
 - 10 wooden pegs
 - 10 metal pegs
 - Broom
 - Nails
 - Hose and fittings
 - Metal rake
 - Levelling rake

If required by the project

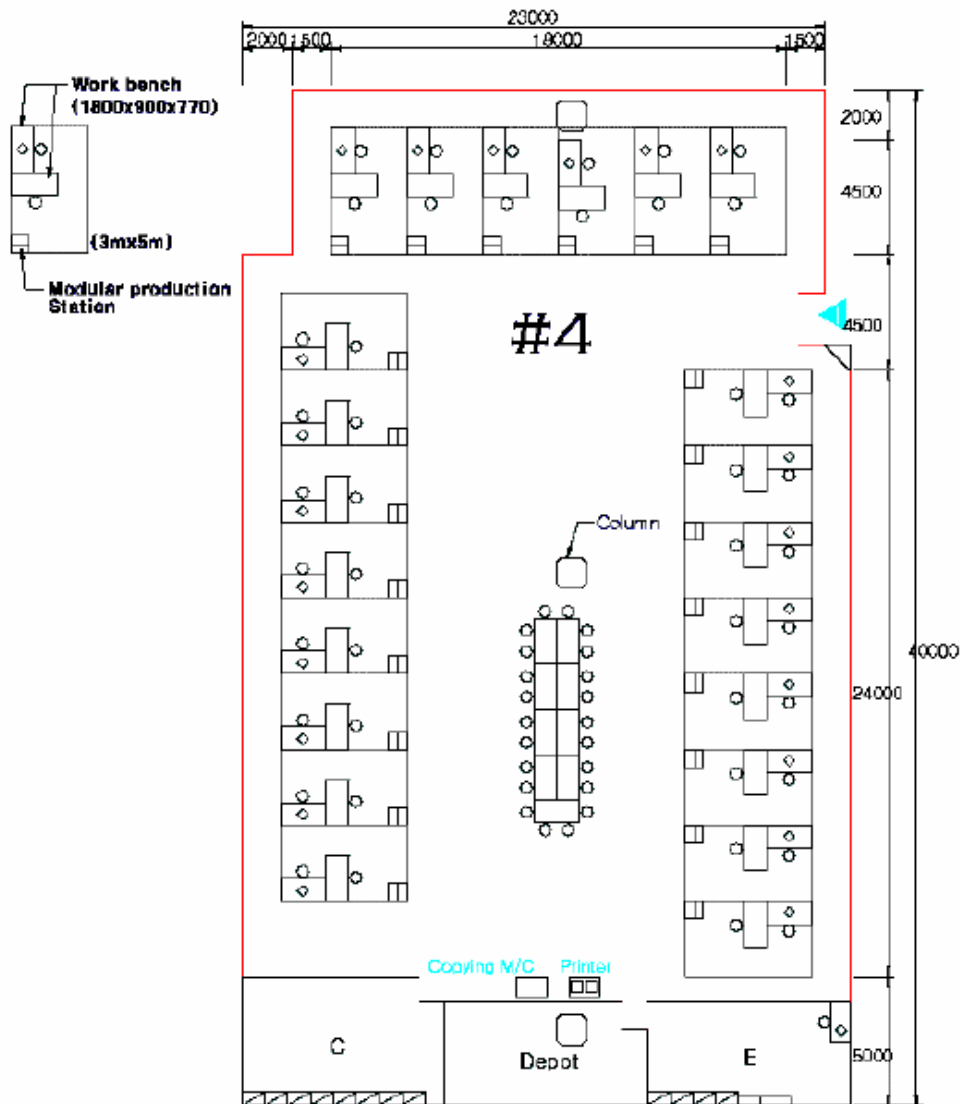
- 4.2.8 The team must bring all additional equipment this may include:
- Levelling instruments (e.g. auto level, laser level)
 - Double metre, tape measure
 - Pencil / greasy chalk
 - Alignment string
 - Plumb line
 - Lump hammer
 - Trowel
 - Mason's hammer
 - Square
 - Spirit level
 - Point tools
 - Bolster
 - Jointer
 - Carpenters saw
 - Wood chisels
 - Mallet
 - Spade
 - Pruning shears
 - Pruning saw
 - Personal protection material (glasses, ear protection, gloves, safety boots, knee protection, long sleeve shirts and dust mask etc.)

This list is not intended to be exhaustive, additional equipment may be included as the teams deem necessary.

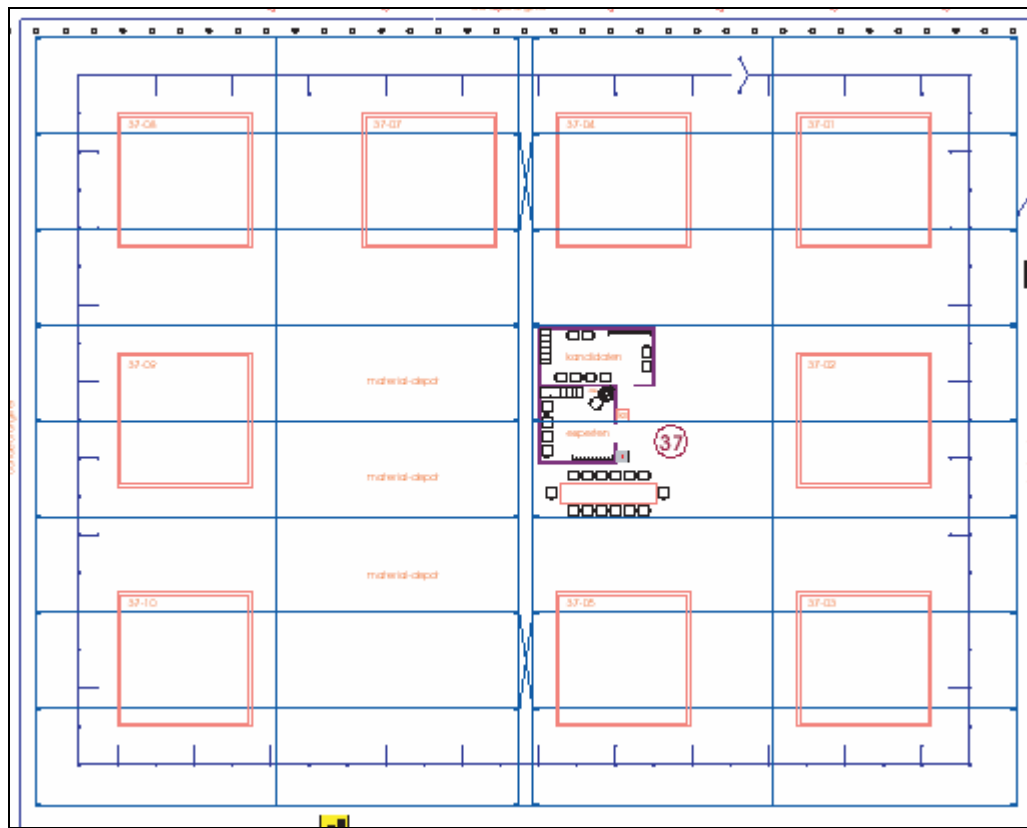
4.3 Sample layout

4.3.1 See image below

Please note that this is an example of the layout, and is not definitive.



Layout in St Gallen 2003.



5. INFRASTRUCTURE LIST 37

Landscape Gardening Jardinier / paysagist Landschaftsgärtner /-in
 Description (EN) Description (FR) Beschrieb (DE) OC CH
 Qty
 Tech
 Desc
 FI
 Qty
 OC FI
 Qty
 Type
 Type
 Typ
 Measures mm
 Mesures mm
 Masse mm
 Partner Comments
 General installations Installations générales Allgemeine Einrichtung Partner
 Tables Tables Tische 6
 Chairs Sièges Stühle 14 grün
 Set office material Jeu matériel de l'office Büromaterial-Set 1
 Phone Telephone Telefon 0
 Computer Ordinateur Computer 1
 Printer b / w Imprimante b / n Drucker s/w 1
 Working table bureau Schreibtisch 1 1600 x 800
 Chair Siège Stuhl 1 grün
 Photocopier Photocopieuse Fotokopierer Halle 9.1.2
 File shredder Aktenvernichter Halle 9.1.2
 Flipchart / Writer Flipchart / Stylo-feutre Flipchart / Schreiber 1
 First Aid Kit Caisse de premier secours Erste Hilfe Koffer 1
 Fire extinguisher Extincteur Feuerlöscher 1
 Box Competitors Caisse pour candidats Garderoben Kandidaten 2x12 300 x 500 x 380
 Box Experts Caisse pour experts Garderoben Experten 2x8 300 x 500 x 380
 Cloakroom Vestiaire Garderobe 1
 Cupboard lockable Armoire fermer à clé Schrank abschliessbar 1 C 12
 Clock Pendule Wanduhr 1
 Refrigerator Réfrigérateur Kühlschrank 1 150 l
 Coffee machine Cafetière électrique Kaffeemaschine 1
 Cleaning Set Set de ménage Reinigungsmaterial-Set 1
 Washroom Lavabos Waschgelegenheit X
 Floor asphalt Plancher asphalt Bodenbelag Asphalt X
 Installation of workstations
 Installation des postes de travail
 Einrichtung Arbeitsplätze pro Team
 Workstation Surface utile Arbeitsfläche 1 11000 x 11000
 Floor even, level, sol plan, horizontal, Boden ebenflächig,
 capable of pouvant supporter des waagrecht, belastbar
 bearing loads, with unloading charges, en sus emplacement dazu Umschlag- und
 and storage area de transfert et de stockage Lagerplatz

Connections: Raccordements : Anschlüsse

Electricity électrique Elektrizität 230 V

- 3 sockets - 3 prises - 3er-Steckerleiste 1 10 A träge

Water Eau Wasser

Water hose with stop valve flexible à eau avec Wasserschlauch mit 1
 robinet d'arrêt Absperrventil

Wooden frame, horizontal, Encadrements de bois,
 horizontaux

Holzrahmen waagrecht 1

squared timber bois équarri Kanthölzer 160 / 250

inside dimensions dimensions internes Innenmasse 6700 x 6700

height hauteur Höhe 300

Wheelbarrow brouette Schubkarre 1

Shovels pelle Schaufeln 2

Spades bêche Spaten 2

Alignment pole tige à racler Richtstange 1

Tracing pegs piquet en bois Absteckpflöcke 10

Tracing irons piquet métallique Absteckeisen 10

Mortar trough auge à mortier Mörteltrog 1

Broom balai en paille de riz Reisbesen 1

Stone cutter fraiseuse sur table (voie Tischsteinfräse (Nassfräse) 1
 for wet cutting, with diamond disk humide) avec lame mit Diamantblatt
 diamantée Anschluss:

Plate vibrator Vibrateur à plaques Plattenvibrator 1

Anschluss:

No angle grinders and cutting L'utilisation de meuleuses Winkelschleifer und
 disks may be used! d'angle et de meules de Trennscheiben dürfen nicht
 tronçonnage est prohibée. verwendet werden!

Workshop installations Equipement d'atelier Werkstatteinrichtung

Compact loader Chargeur compact Kompaktlader 1

Forklift roller (for pallets) Transpalette Palett-Rolli 1

Materials Consommables Verbrauchsmaterialien pro

Team

List of materials and plants, samples, technical details, dimensions and pictures to be supplied with plans 3
 months prior to competition.

Teichfolie 25.5

m²

Holz

- Latten 18 m 30/150

- Latten 4 m 30/50

6. SECTION 6 – APPENDICES

APPENDIX 1

Expert signature for Technical Description

Country Expert name Expert signature

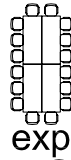
Note: This drawing is not to scale. Please contact WorldSkills Secretariat for original AutoCAD file.

SKILLS 2005

Skill 37
1:200
8.5.2005

skill
info

storage area

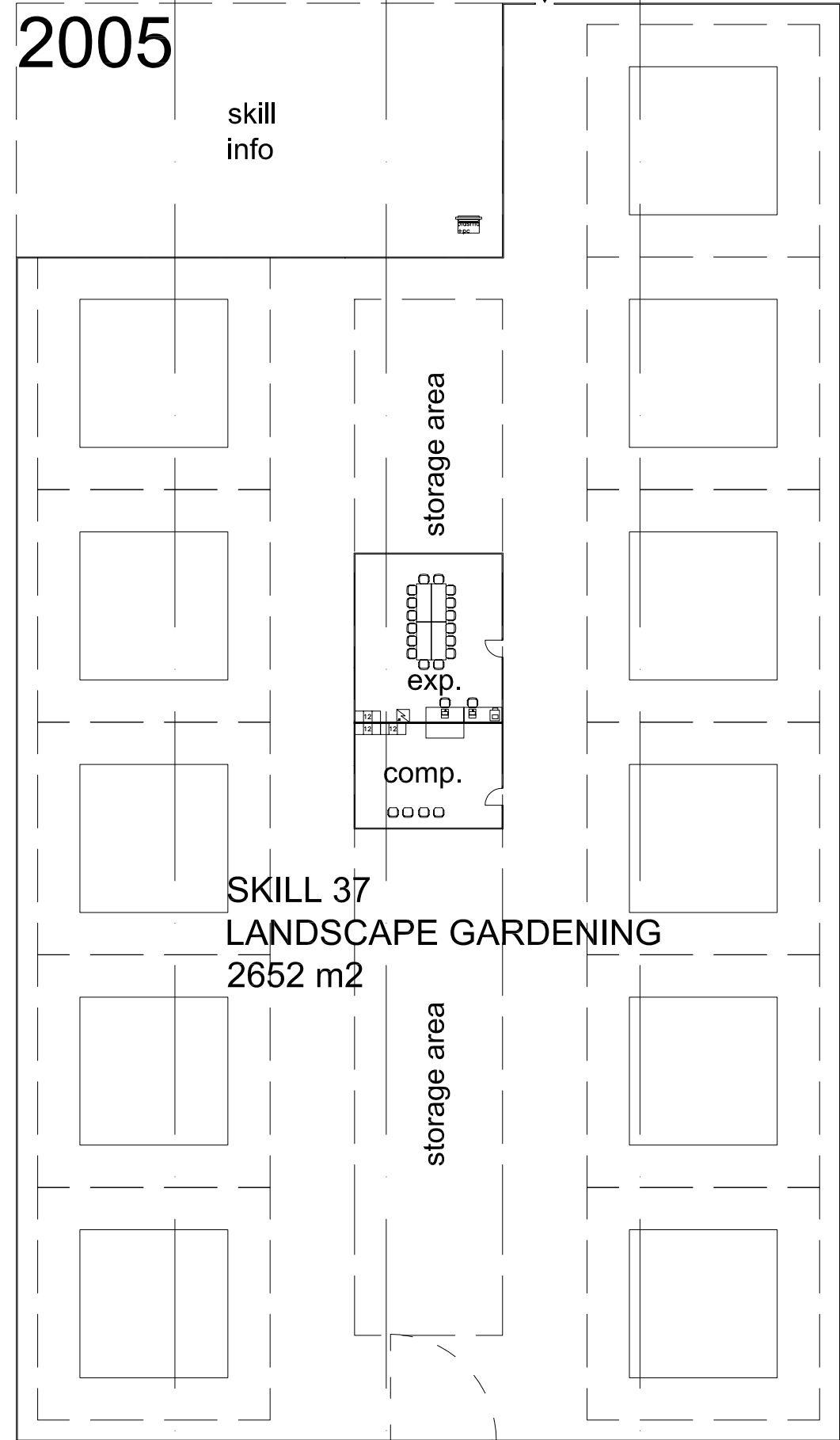


comp.



SKILL 37
LANDSCAPE GARDENING
2652 m2

storage area



SKILL D
ROAD CONSTRUCTION
100 m2

storage



5. INFRASTRUCTURE LIST
37
Landscape Gardening
Jardinier / paysagist
Landschaftsgärtner /-in

Description (EN)	Description (FR)	Beschrieb (DE)	TD Qty	OC JP Qty	Type Type Typ	Measures mm Mesures mm Masse mm	Partner	Comments
General installations	Installations générales	Allgemeine Einrichtung					Partner	
Tables	Tables	Tische	6					
Chairs	Sièges	Stühle	14		grün			
Set office material	Jeu matériel de l'office	Büromaterial-Set	1					
Phone	Telephone	Telefon	0					
Computer	Ordinateur	Computer	1					
Printer b / w	Imprimante b / n	Drucker s/w	1					
Working table	bureau	Schreibtisch	1			1600 x 800		
Chair	Siège	Stuhl	1		grün			
Photocopier	Photocopieuse	Fotokopierer Halle 9.1.2						
File shredder		Aktenvernichter Halle 9.1.2						
Flipchart / Writer	Flipchart / Stylo-feutre	Flipchart / Schreiber	1					
First Aid Kit	Caisse de premier secours	Erste Hilfe Koffer	1					
Fire extinguisher	Extincteur	Feuerlöscher	1					
Box Competitors	Caisse pour candidats	Garderoben Kandidaten	2x12			300 x 500 x 380		
Box Experts	Caisse pour experts	Garderoben Experten	2x8			300 x 500 x 380		
Cloakroom	Vestiaire	Garderobe	1					
Cupboard lockable	Armoire fermer à clé	Schrank abschliessbar	1		C 12			
Clock	Pendule	Wanduhr	1					
Refrigerator	Réfrigérateur	Kühlschrank	1			150 l		
Coffee machine	Cafetière électrique	Kaffeemaschine	1					

Cleaning Set	Set de ménage	Reinigungsmaterial-Set	1		
Washroom	Lavabos	Waschgelegenheit	X		
Floor asphalt	Plancher asphalt	Bodenbelag Asphalt	X		
Installation of workstations	Installation des postes de travail	Einrichtung Arbeitsplätze pro Team			
Workstation	Surface utile	Arbeitsfläche	1		11000 x 11000
Floor even, level, capable of bearing loads, with unloading and storage area	sol plan, horizontal, pouvant supporter des charges, en sus emplacement de transfert et de stockage	Boden ebenflächig, waagrecht, belastbar dazu Umschlag- und Lagerplatz			
Connections: Electricity - 3 sockets	Raccordements : électrique - 3 prises	Anschlüsse Elektrizität - 3er-Steckerleiste	1		230 V 10 A träge
Water Water hose with stop valve	Eau flexible à eau avec robinet d'arrêt	Wasser Wasserschlauch mit Absperrventil	1		
Wooden frame, horizontal, squared timber inside dimensions height	Encadrements de bois, horizontaux bois équarri dimensions internes hauteur	Holzrahmen waagrecht Kanthölzer Innenmasse Höhe	1		160 / 250 6700 x 6700 300
Wheelbarrow	brouette	Schubkarre	1		
Shovels	pelle	Schaufeln	2		
Spades	bêche	Spaten	2		
Alignment pole	tige à racler	Richtstange	1		
Tracing pegs	piquet en bois	Absteckpflocke	10		
Tracing irons	piquet métallique	Absteckeisen	10		
Mortar trough	auge à mortier	Mörteltrog	1		
Broom	balai en paille de riz	Reisbesen	1		

Stone cutter for wet cutting, with diamond disk	fraiseuse sur table (voie humide) avec lame diamantée	Tischsteinfräse (Nassfräse) mit Diamantblatt Anschluss:	1		
Plate vibrator	Vibrateur à plaques	Plattenvibrator Anschluss:	1		
No angle grinders and cutting disks may be used!	L'utilisation de meuleuses d'angle et de meules de tronçonnage est prohibée.	Winkelschleifer und Trennscheiben dürfen nicht verwendet werden!			
Workshop installations	Equipement d'atelier	Werkstatteinrichtung			
Compact loader	Chargeur compact	Kompaktlader	1		
Forklift roller (for pallets)	Transpalette	Palett-Rolli	1		
Materials	Consommables	Verbrauchsmaterialien pro Team			
Stones	Pierres	Steine			
		Natursteine Sandstein:			
		Blockstufen	3 St		600x420x120
		Abdeckplatten formwild	3 m ²		d mm 60
		Mauersteine	3.5 m ²		
		Natursteine Granit:			
		Randsteine	12 m		8/11
		Pflastersteine	5 m ²		6/8
		Betonsteine:			
		Winkelplatten normal	12 St		h 400 500
		Winkelplatten Eck	2 St		h 400 500
		Betonplatten	3 St		500/1000
		Betonrohre	4 St		d 150 400
Aggregates	Matériaux de remplissage	Fullmaterial			
		Recyclingkies	10 m ³		0/40
		Pflästerersand	1 m ³		0/8

		Sand	1 m ³	0/4
		Betonkies	1 m ³	0/30
		Bollensteine	1 m ³	80/120
		Brechsand	0,25 m ³	0/3
		Kies	0,5 m ³	8/16
		Metall		
		U-Eisen mit Bohrlöcher	4 St	40/40/40/1800
		Flacheisen mit Bohrlöcher	2 St	40/5/3000
		Holzschrauben	100 St	d 4 18
		Senkkopfschrauben	6 St	M4 18
		Klemmleisten ALU	10 m	d 3
		Dübel zu Holzschrauben	100 St	
Binding agents cement, dry concrete,	Liants ciment, liant prêt à l'emploi,	Bindemittel		
		Trockenbeton	4 S	25 kg
		Trockenmörtel	2 S	25 kg
Various soil substrates	Divers substrats à base de terre	Erdsstrate		
		Gartenhumus	5 m ³	
Plants, selection	Chois de plantes	Pflanzen Rasen		
		Auswahl Baumschulpflanzen		
		Sommerflor		
		Rollrasen	14 m ²	
		Abdichtung		
		Teichfolie	25,5 m ²	
		Holz		
		- Latten	18 m	30/150
		- Latten	4 m	30/50