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SPECIFICATIONS

Pembroke Park

Wanaka

P E M B R O K E P A R K

W A N A K A

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1. GENERAL CONDITIONS

1. CONTRACT

The successful contractor will be required to abide by the specifications presented herein.

2. PLANS

Any discrepancy between plans or between plans and specifications must be referred to the landscape architect who shall decide which shall be followed. Failure to raise such points cannot be accepted as exoneration from liability.

3. LABOUR, PLANT, ETC.

The contractor shall supply all labour, tools, plant and equipment necessary for the effective execution of the works. The contractor is to make good and service lines damaged in the execution of the work.

4. EXPEDITION OF WORKS

A condition of contract shall be that the whole of the work involved as designated in the Area Detail and Construction Detail drawings shall be completed as soon as possible after March, 1974.

5. CONTROL OF LANDSCAPE WORKS

A competent foreman to work on the site for the duration of the operation must be appointed. The landscape architect shall undertake to instruct the foreman on the details of the drawings and landscape operations.

6. MATERIALS AND WORKMANSHIP

The whole of the materials, seeds, plants, etc., to be the best of their respective kinds, and equal to samples approved by the landscape architect after submission by the contractor.

7. EXCAVATIONS

Any artifacts discovered in the course of the work are to be placed in safe custody and reported immediately to the landscape architect.

8. VARIATIONS AND EXTRAS

No variation or extra will be allowed unless a written or verbal authority is given by the landscape architect. Verbal instructions are to be deemed as instructions for the proper execution of the work not involving extra charges.

9. CLEAR AND CART AWAY

Clear and cart away from the site all rubbish as it accumulates and at completion, leave the works in a clean and tidy condition

2. PREPARATORY OPERATIONS

2.1 SITE ENCLOSURE

Allow for providing temporary fencing if required to enclose any portion of the site during the carrying out of the work; alter and adapt from time to time and remove at completion.

2.2 EXISTING SERVICES

The location of all service runs, such as water supply, electricity, telephone, sewage, and stormwater should be ascertained before work is commenced. Where they will be affected by excavation, or where machines may be working nearby, they should be carefully sealed off, diverted or protected.

2.3 EXISTING VEGETATION

2.3.1 Protection

Precautions shall be taken to protect, in the course of work, all existing trees which are to be retained. No branches shall be lopped and no roots over 50 mm diameter shall be severed from growing trees, without express prior permission of the landscape architect.

No soil, spoil, constructional materials or rubbish shall be stored or topped within the spread of existing trees.

2.3.2 Remedial work

Accidental damage which occurs during the execution of the work shall be carefully repaired to the satisfaction of the landscape architect.

2.3.3 Vegetation to be cleared

All willow trees along the site foreshore are to be felled; the only other trees permitted to be felled shall be those in the path of the proposed road realignment. Felling shall be the complete removal of a tree, including the removal of the stump.

3. GROUNDWORKS

3.1 GRADING

Because the depth of topsoil over the site is minimal, separation

of topsoil and subsoil before regulating is not considered practicable.

All finished gradients are to be smooth flowing marrying with all existing levels, eliminating all abrupt angles and changes of levels.

Because retention of the micro-relief over much of the site is considered important, all grading operations must only be carried out in consultation with the landscape architect on site. Minor fillings and excavations are to be made as necessary to bring the grass and planting areas into running levels between paths and kerbs. The site shall be graded in accordance with the contour lines on the plan (Area Detail 7) Surplus material shall be removed from the site, but should fill be required, it is to be of approved quality and spread in layers not exceeding 150 mm consolidated. The grading shall be evenly carried out to 100 mm below finished level to all falls and gradients eliminating all depressions and mounds by using machinery suitable to the physical condition of the existing soil.

3.2 TOPSOIL AND TOPSOILING

Topsoil shall be clean and imported from an approved source obtained from top 150 mm of ground. It shall be fertile with a humus and fibre content and be of medium texture and approved by the landscape architect before use.

Only the area specified on the plan (Area Detail 7) shall be topsoiled, and as topsoiling proceeds all consolidated wheel tracks shall be forked over. Topsoil shall be incorporated to provide a minimum depth of 100 mm after firming, and final grading is to be carried out to ensure a true specified level and slope to avoid dishing or other depressions where water may collect.

The use of a heavy roller to roll out humps will not be permitted and any area that becomes unduly compacted during the grading operation shall be loosened by harrowing.

The level of the topsoil is to be at least 50 mm above all paved areas and kerbing to allow for shrinkage and/or settlement.

If possible, topsoiled areas should be cleaned by allowing them to lie fallow for a period of several months, preferably during winter. During this period growing weeds shall be eliminated by alternate cultivation and chemical control.

4. SEEDING OF GRASSED AREAS

4.1 PREPARATION

4.1.1 Non-topsoiled area

The surface shall be harrowed in autumn and the area cleaned by being left to lie fallow during winter. During this period growing weeds shall be eliminated by chemical control.

4.1.2 Top-soiled area

As in 3.2

4.2 FERTILIZING

As an initial measure to stimulate new growth the following fertilizer prescription shall be applied at least one month before seed sowing :

2500 kg. of lime per hectare, plus

100 kg. of superphosphate per hectare.

Depending on results achieved from the initial application subsequent fertilizer application may be necessary.

4.3 FINAL RAKING OR HARROWING

In preparation for sowing, the surface shall be lightly and uniformly firmed and reduced to a fine tilth up to 25 mm in depth by raking or harrowing with a spike and chain harrow. All stones more than 50 mm in any dimension shall be removed from the surface.

4.4 SEED

The seed mixture shall consist of :

1 part Certified Browntop

1 part Dryland Browntop

2 parts Crested Dogstail

3 parts Chewings Fescue

The germination capacity of each constituent of the mixture shall not be less than 80% and the purity of the mixture not less than 90%. Total weed content shall not be more than 0.5% and the total content of other crop seeds shall not be more than 1%.

4.5 SOWING

Spring sowing is preferred after a period of winter consolidation. Sowing shall be carried out during suitable calm weather conditions at a rate of 150 kg/hectare with an efficient broadcast machine. The operation shall be carried out in equal sowings in transverse directions.

After sowing, the ground shall be rolled and cross-rolled with a light-weight roller.

4.6 MAINTENANCE

Maintenance shall consist of watering, weeding, cutting, and re-seeding as necessary to establish a uniform and healthy stand of specified grasses and shall continue until acceptance by the landscape architect.

Three weeks following germination a commercial flat weed selective herbicide containing no more than 10% acid equivalent MCPA and no more than 20% acid equivalent MCPP as the active ingredients shall be sprayed over the sown areas at the manufacturer's recommended rates.

5. TREE PLANTING

5.1 ORIGIN

Trees shall be true to name and where possible seedlings shall have been raised in a latitude close to that of Wanaka.

5.2 PLANTING STOCK

Trees should be sturdy transplants about 250 mm tall with a balanced root and shoot development, that is, with abundant fibrous roots and not too long a shoot.

5.3 CONDITION AND PACKAGING

Plants shall be substantially free from pest, disease, discoloration and deformity, and shall be materially undamaged. Precautions must be taken to avoid damage after lifting, e.g. by exposure to drying wind, sun or frost, by subjection to waterlogging or by unsuitable storage conditions. Packaging shall be such as to avoid heating and drying out.

5.4 PLANTING

5.4.1 Positioning

No tree pits shall be dug until final tree positions have been pegged out for approval by the landscape architect.

5.4.2 Time of planting

Conifers shall be planted in spring and hardwoods in the late autumn. Planting should be stopped during periods of frost or very cold winds.

5.4.3 Planting method

An excavation of the plant holes the bases shall be loosened to a depth of 100 mm. A mound shall be formed in the centre of the hole to support the roots or ball of the plant. The container shall be removed with a minimum of root disturbance and the plant shall be so set in the ground that after

settlement the plant shall stand at the same depth as it was in the container. The plant hole shall be backfilled with soil and shall be carefully tamped into place in a manner to avoid injury to the roots.

5.5 STAKING

All tree specimens, other than conifers, shall be supported on their north sides with stakes which shall be inserted before trees are placed in their holes. Stakes shall be of treated pine and shall have a minimum clear height of 1250 mm above the ground. Stakes of no less than 50 mm square shall be used and trees shall be tied to them with rubber or plastic ties.

5.6 FERTILIZERS

A complete palletised fertilizer, such as "Nitrophoska", "Mag Amp" with K" or "KP Diamp with K" shall be dressed about all plantings; dressings shall not exceed manufacturer's recommended rates.

5.7 WATERING

All plantings shall be well watered immediately after planting (particularly when planting takes place in the spring), and shall be kept well watered during the following growing season.

5.8 SOIL SETTLEMENT AND FROST LIFTING

Where soil settlement occurs topsoil shall be forked over and built up to the natural grade.
All plants should be refirmed into the ground, if lifted by frost.

5.9 MAINTENANCE

Maintenance shall include watering, weeding, cultivating, control of insects, fungus and other diseases by means of spraying with an approved insecticide or fungicide, pruning adjustment and repair of staking provisions and other horticultural operations necessary for the proper growth of the plants.

5.10 BLANKING

The replacement of losses shall be carried out one year after planting.

6. ENCLOSURE

6.1 TRAFFIC BARRIERS

6.1.1 Alignment

The barriers shall follow the undulations of the ground and

the actual line of the barriers to be decided by the landscape architect on site.

6.1.2 Excavation

Excavations for posts shall be 300 mm by 300 mm by 600 mm deep.

6.1.3 Posts

Posts shall be 200 mm diameter by 1200 mm long, split pressure treated pinus logs, 600 mm in ground, spaced 1800 mm apart.

6.1.4 Filling

Post holes shall be filled with soil well rammed in 150 mm layers to ground level.

6.1.5 Rails

Rails shall be 200 mm diameter by 5.5 metres long, split pressure treated pinus logs, attached 50 mm below top of posts with two countersunk 600 mm galvanised bolts.

6.2 BOLLARDS

6.2.1 Positioning

Bollards shall be used to replace post and rail traffic barriers in car parking areas when trees are of sufficient size to withstand damage by vehicles. The positioning of the bollards to be decided by the landscape architect on site.

6.2.2 Excavation

Excavations for bollards shall be 300 mm by 300 mm by 450 mm deep.

6.2.3 Bollards

Bollards shall be 200 mm diameter by 800 mm long, pressure treated pinus logs with bark intact, 450 mm in ground. Top of bollards shall be shaped, with an axe, to shed water.

6.2.4 Filling

Bollard holes shall be filled with soil well rammed in 150 mm layers to ground level.

7. HARD GROUND FINISHES

7.1 MOWING MARGIN

7.1.1 Alignment

Mowing margin shall demarcate sand of the lake beach and the grassed area. The mowing margin shall be horizontal and follow an even curve.

7.1.2 Margin

Margin shall be 200 mm diameter pressure treated pinus logs 3000 mm to 4500 mm long placed end to end. Logs shall be depressed into ground so that upper surface of logs is flush with grassed area.

7.1.3 Fixing

Logs shall be fixed in position with 12.5 mm diameter mild steel spikes to be driven 750 mm into ground at 1200 mm spacings.

7.2 KERBS

Kerbs will be laid before the base and surfacing of roads and car parks and shall be of the same design as kerbing already existing in Brownston Street.

Kerbing shall comply with standard County Council specifications except that the landscape architect shall be consulted regarding the selection of an appropriate colour for the kerbing.

7.3 GRASS VERGE AND SWALE

7.3.1 Junction of grass and hard surface

Where no kerb or channel is stipulated road pavement shall be extended 300 mm beyond its intended edge. A minimum of 25 mm of soil shall cover this pavement extension and be sown in grass.

7.3.2 Swale

Swales shall be associated with grass verges of sealed roads only, and shall take the form of a 1500 mm wide compacted earth depression having a maximum centre line depth of 75 mm.

7.4 FLEXIBLE SURFACES

7.4.1 Tar-sealing

For roads and car parks requiring sealing, the preparation of the base and laying of the surface dressing shall comply with standard County Council specifications.

7.4.2 Unsealed gravel

For loop roads, informal car parking areas and pathways, preparation of the base, and laying and consolidation of the surface dressing shall comply with standard County Council specifications. The maximum width of loop roads shall be 4000 mm and that of pathways 1200 mm.

7.5 RIGID PAVING

The landscape architect shall consult with the structural architect(s) on the design of rigid paving to surround the community centre and tearoom/restaurant complex, and specifications for rigid paving shall accompany the appropriate building specifications.

8. SITE FURNITURE

8.1 WALKING TRACK LIGHTING

Lamp pole top fitting to be of a design similar to that shown on sheet 8 of drawings (Construction Details).

Pole top fitting to contain two lamps, each maximum 100W. Fitting and pole to be of galvanized steel and have a total height above ground of 2100 mm.

Outside finish to be black; lamp chamber - white enamel; glass-opal ply.

8.2 LITTER BINS

Receptacles for litter shall be 530 mm x 40 mm plain-end concrete pipes each 1000 mm long and set upright 300 mm in ground, and contain a removable galvanized inner wire basket. Location and colour of individual receptacles to be decided by the landscape architect on site.

8.3 PICNIC TABLES

Picnic tables shall be constructed of pressure treated pine to the dimensions shown on sheet 8 of drawings (Construction Details). Overall length: 1830 mm

Table height: 760 mm

Seat height: 460 mm

All edges shall be chamfered and all joints shall be bolted with round headed galvanized bolts. Nuts shall be counter-sunk and nail holes filled with mastic.

Positioning and colour of picnic tables to be decided by the landscape architect on site.

8.4 OUTDOOR SEATS

Seats shall be constructed of pressure treated pine to the dimensions shown on sheet 8 of drawings (Construction Details).

Back rails shall be set at 95° to seat and seats shall be set at 5° to horizontal. Front edge of seat shall be 410 mm above ground. All edges shall be chamfered and all joints shall be bolted with round headed galvanized bolts. Nuts shall be counter-sunk. Upright supports shall be 1700 mm centre to centre and be embedded in concrete a minimum of 1000 mm in ground. Support holes to be filled with soil well rammed in 150 mm layers.

Positioning and colour of outdoor seats to be decided by the landscape architect on site.