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(1) Number of pages 62

(2) Date of repair 28. 5. 87

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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. DEPARTMENT

G.O. No. / B.P. No. 416 W

Press. / Mis.

Dated 8 . 2 . 1883 ~~197~~ .

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416/1

IV. Trees which from height and general form run into high points and serve to break agreeably the sky line.

20. It will be clear that many, indeed all probably, of Class I would equally well suit for III. Similarly the trees in Class II would be employed for forming the outer fringes of III. Flowering and other shrubs are not included.

21. From observations made in the Botanical Gardens and elsewhere, and with the obliging assistance of Dr. Brandis and Mr. Steavenson, the following list of known plants suitable for falling into the above classification is put forward tentatively :—

CLASS I.—*Single Specimen Trees.*

Kigelia pinnata.	A splendid park tree ; should be freely used.
Schocareya cappa.	A fine, fast-growing tree.
Terminalia catappa (country almond).	Formal ; should grow well-retired from the sea.
Minusops Elengi.	Handsome, round-headed ; grows fairly in Madras.
„ indica.	Do. do. do.
Berrya ammonilla.	Very formal and not very high.
Brassaia actinophylla (Queensland umbrella tree).	
Pterocarpus indicus (Padouk).	Well-grown shapely tree.
Adansonia digitata (Baobab).	Grows freely in Madras and is well suited for separate display.
All the fig tribe—F. Indica religiosa, Elastica and Javanica.	The last named species, Javanica, a brilliant, small-leaved fig, is especially good.
Cassia Roxburghii (pink cassia).	Habit rather low and somewhat difficult to grow in good form, not overstrong in resisting wind, but beautiful when in really good form.
Cæsalpinia coriaria (Devi Devi).	Low and spreading, very hardy.
Bassia longifolia and latifolia ("Ippay" and "Mowa").	Both very good trees, but as the flowers have a disagreeable smell should be rather retired.
The Araucarias Bedwillii, Cookii, Cunninghami, and Excelsa.	All beautiful if they can be grown successfully, but it is thought will need to be in rather sheltered spots and not near the sea.
The Palms, particularly Caryota urens.	The sago palm is perhaps the best suited for single specimens. The talipot also very fine ; others of the species are more suitable for groups.
Filicium Decipiens.	Good ; has much the foliage of the grevellia robusta, but is better furnished.

CLASS II.—*Trees suited for small dense groups and clumps.*

Cerbera odallam.	Most valuable for its good form and as growing freely close to the sea.
Penestrophia angustifolia.	Good ; somewhat low in form and easily propagated.
Jonesia asoca.	Good foliage and form.
Gardenia gummifera.	Very good, but doubtful if they can be easily propagated.
Calonyction speciosum.	
Anacardium occidentale (Kashu-nut).	Rather straggling, but good in foliage and easily procured.
Calophyllum Inophyllum (Alexandrian laurel).	Good, dark foliage, but rather better suited for the centre of clumps than for the margins.
Diospyros enubryopteris	Good.

Class III.—*Trees suitable for forming the mass of clumps and dense planting generally of some height.*

Nephelium Litchi.	Rather low and spreading in habit, most valuable for its dark, dense foliage.
Dalbergia Sissoo.	Small, delicate foliage; a contrast to the above.
The varieties of Spathodia, (Campanulata, Rheedii and another.)	From its fine orange red flower and general form most valuable in groups, particularly the "Campanulata."
Guatteria longifolia.	Rather formal; grows freely and suited rather for the centre of clumps.
Cassia fistula.	Too well known to call for remark.
Strychnos potatorum.	Peculiar foliage, which would contrast well with any of the above.
Sterculia fœtida.	Good foliage, but should be kept at a distance from the unpleasant smell of its flower.
Terminalia belerica. Achras sapota. Atalantia monophylla. Gmelina arboria. Semecarpus anacardium. Odina Wodier. Eugenia Jambolana. Sapindus emarginatus. Mango and tamarind.	All good.
Pongamia glabra (The Indian beech).	An admirable tree with brilliant foliage, too well known to need description; easily procured in any quantity.
Cupania canescens.	Most valuable as growing freely close to the sea in sandy soil.
Pithecolobium Saman (The rain tree).	A wide-spreading, fast-growing tree, but not known as to ability to stand high wind, &c.
Ochrocarpus longifolius.	Dense, dark foliage; leaf not unlike that of the Ficus elastica.

Class IV.—*Trees with somewhat the character of poplars for the centre of clumps.*

Millingtonia hortensis (Bignonia suberosa. Cork tree.)	Should be used with caution, as not being overstrong and as losing its leaves.
Alstonia scholaris.	A fine pyramidal tree, common, it is understood, in Travancore and Burma.
Pterospermum Suberifolium.	Not so good as the above.

N.B.—This class is rather weakly represented, though no doubt such trees as the Guatteria longifolia, the casuarina and most of the palms can be brought in with advantage. The beautiful areca catechu, date, palmyra, and possibly also the fine oreodoxa regia, can be turned here to good account.

22. No special notice has been taken of shrubs or creepers, as these exist in such abundance and variety as not to call for remark. Excepting however in the immediate neighbourhood of the buildings, for the margins of ornamental sheets of water, and for other special purposes, their use should, it is thought, be restricted as not contributing nearly so well as fine well-grown trees to park scenery, while at the same time calling for an undue amount of care and expense in rearing, setting-out, and subsequent maintenance.

23. There has not been sufficient time to study in very minute detail the laying out of all portions of the proposed park, nor is such absolutely necessary at present, as in operations of the kind very much depends on the ability to seize on and

work out accidental beauties in effect from time to time as the work advances. The general principles, however, as above explained, if considered to be correct, should be rigidly adhered to.

24. The annexed plan of the grounds to be dealt with shows on a sufficiently large scale the application of the principles to at least a certain extent.

25. Very much of the work to be done will require the aid of the Engineer, particularly in all matters relating to the remodelling of old and laying out of new park drives, the formation of ornamental sheets of water, shaping of the ground for drainage, as also the formal laying out of the immediate surroundings of each of the public buildings.

26. In fact the only work not strictly of an engineering character will be the selection, planting out, and maintenance of the trees, and even in these respects professional knowledge will not come amiss.

27. To carry out a scheme of this character satisfactorily will no doubt require some years of labor, and it is thought that to ensure systematic working the duty had better develve "ex-officio" on the Executive Engineer as the responsible officer.

28. Where such an officer would require outside aid would be in the rearing of nursery plants, selection of those most suitable to their position, precautions to be observed in planting out, sheltering, &c.; and to provide for this it would appear very desirable that the aid of an experienced gardener should be always available.

29. The Secretary of the Botanical Gardens has informed the undersigned that no objection would, he believes, be raised on the part of the Society to the employment of the gardener specially engaged by them, for either four or six hours weekly in the manner above intimated, provided that the times were made subject to arrangements with the Secretary himself.

30. All that the Engineer in charge of the Park would require for the purpose in view would be the attendance of the gardener twice or thrice weekly, for a couple of hours in the morning, and for this service if the Government were prepared to pay a small fee of 80 or 100 * rupees per mensem, all the requirements would be met, and the Horticultural Society in being thus enabled to offer a somewhat better salary, than they would otherwise be in a position to do, would profit by the arrangement.

* To include gharry hire.

31. The mutual service would moreover not be confined to this arrangement, as the Secretary is also quite prepared to maintain, with due warning, a stock of all such young plants as may be required for planting out in the park, supplied at a price which would probably be less than that at which the Government could otherwise obtain them.

32. If Government generally approve of the above proposals a small preliminary assignment might be made from the Reserve of the current year in this department, and an estimate framed for giving effect to the most needful portions of the scheme in 1883-84.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

28th December 1882.

No. 57.

Order—dated 8th February 1883, No. 416 W., Public Works.

His Excellency the Governor in Council generally approves of the scheme put forward by the Chief Engineer, for the gradual and systematic improvement in laying out and planting the Chepauk grounds, and those attached to Government House, Madras.

2. While sanctioning the removal of the casuarina avenue leading from Chepauk direct to Government House, His Excellency considers that none of the lately planted specimen trees at the north end of the avenue should be removed, till the operation of

transplanting them to suitable positions can be safely carried out. He also considers that it will not be desirable at present to make the proposed park drive, from the Chepauk entrance gate through the date tope to the Cooum river, or to alter the lately made road past the Revenue Board stables, till the large rectangular pond in its neighbourhood has been remodelled.

3. Ill-grown, mis-shapen trees need not in all cases be removed, till at least the new specimens, planted with a view to take their place, give promise of strong healthy growth, when the former should be removed. This restriction, however, will not prevent the removal of all irregular uncared for vegetation, which only serves to give a jungly appearance to the grounds, or, again, such as impedes the several views which it is desirable to have worked out.

4. In addition to the other works enumerated in the memorandum, it is, in His Excellency's opinion, very desirable that a ride should be formed along the west side of the South Beach road, extending from the Napier bridge past the Senate House, Revenue Board Offices, &c., to the north end of the Presidency College compound. With this object the plot of ground enclosed with a hedge opposite the Marine Villa will in all probability have to be reduced in size and that in front of the University removed altogether.

5. The iron railings which are now much decayed may also everywhere have to be removed, and be replaced eventually by a more suitable description of fence.

6. As suggested by the Chief Engineer, the operations will be carried out by the Executive Engineer, Presidency Division, who for this purpose will from time to time submit estimates for the work, and be assigned such small sums as can be conveniently spared from the Reserve of the Provincial Public Works Budget.

7. His Excellency the Governor in Council has, moreover, no objection generally to the proposals put forward in reference to securing the professional assistance of the gardener in charge of the Botanical Gardens, and authorizes the Chief Engineer to place himself in correspondence with the Secretary to the Gardens in view to a definite arrangement being entered into with this object.

8. This Order supersedes G.O., 30th November 1882, No. 1431 (Public).

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

o the Superintending Engineer, Fifth Circle.
" Private Secretary to His Excellency the Governor.
" Board of Revenue.
" Public Department.
" Chief Engineer, Public Works Department.
To W. S. Whiteside, Esq., Acting 2nd Member, Board of Revenue,
in charge Chepauk Park.

Exd. C. Howarth.
Spare Copies.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1883) Madras.
PUBLIC WORKS.

Dated February, 8th.

Recd. *Encl.*

G.O., 8th Feb. 1883, No. 416 W.

FEBRUARY.
Nos. 56-57.

Chepauk Grounds.

Scheme for the gradual improvement in laying out and planting the — and those attached to Government House, Madras.

For approval

416/7

th January 1883, No. W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No.

Memorandum by the Chief Engineer, Public Works Department.

A detailed plan for the improvement and planting of the grounds around the public buildings at Chepauk appears first to have been submitted by the Honorable (now Sir) William Robinson, and orders were passed on the scheme (which at the time had been partly worked out) in G.O., 31st August 1871, No. 1349, Public Department.

2. After this the work was carried on for some years, though not apparently very vigorously, owing to want of funds, till the late famine, when the decision of Government to cut the Junction Canal close to the west of the Chepauk buildings introduced an element into the scheme not previously contemplated.

3. Since that time tree planting has progressed, some roads have been laid out, and other alterations have been made, but not as portions of any general plan of operations. Among these works may be mentioned the planting of avenues from the main entrance of the park to the bridge opposite the Revenue Board Office, and along the Junction Canal, of groups of trees round the Senate House, the diversion of the road leading past Government House along the right bank of the Cooum river and round by the Revenue Board stables.

4. Quite lately, moreover, the Municipality have constructed a society promenade immediately south of the Napier bridge, and the Public Works Department are engaged in extending the work as far down the South Beach as the Presidency College. The latter are further engaged in improving the grounds immediately to the east of the Senate House in putting new and ornamental balustrades to the Government House bridge, and propose shortly in giving very urgently required additional accommodation to the Public Works offices to improve ~~the~~ their general appearance ~~of the building~~ in such a manner as to ~~make it in some measure~~ harmonize in some measure with the neighbouring public buildings.

5. Looking to all these detached efforts at improvement, the time for dealing with the Chepauk grounds on a well-defined plan does not appear inopportune, ~~and~~ especially ~~as~~ by this means alone ~~it is thought that~~ the very small sum which the Government has necessarily at disposal yearly for work of the kind from Provincial Funds can be economically turned to account.

6. The scope and general principles to be observed in a scheme of the proposed character may now be briefly stated.

7. As regards the extent of the ground to be dealt with, there would appear to be no reason why the contemplated improvements should not embrace the whole of the Government grounds extending from the Presidency College through Chepauk and the greater portion of Government House Park to the Mount Road.

8. The main object being to create a park for general recreation, and not merely for meeting the requirements of traffic, which is amply provided for by the roads along the outskirts, the effort must be to afford, as far as possible, unimpeded views.

[illegible]

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While therefore in this connection it would be allowable, and on other accounts most desirable, that there should be a densely-wooded fringe along the outskirts of the park, particularly along its western border where it is closely hemmed in by the native town, the moment the park is entered the spectator should have open views on all sides; all that is best worth seeing of the public buildings should, as viewed from selected points, be seen framed and set off to the best advantage by appropriate foliage, &c.

9. In this respect, therefore, it may at once be said that avenues of trees, however appropriate on a traffic road, are here, as impeding both light and air, and as directly interfering with extended views, out of place. Long stretching vistas should be made out not by rows of trees formally planted, but by a succession of skilfully placed clumps, with here and there a fine specimen tree or a group of shrubs so thrown in as to add to, rather than detract from, the feeling of extent.

10. The materials out of which the views have to be constructed being for the most part trees, shrubs and grass, these should all be the best of their kind, and be so maintained as to convey the impression of design and ~~ease~~ of being laid out with cultivated taste.

11. It would follow from this that after selecting the best points of view for the several buildings, and groups of foliage now best worth preserving, that all trees, &c., which interfere with these should be removed.

12. This remark especially applies to the avenues which have been planted, and which if allowed to grow to maturity will effectually interfere with the objects as above explained. In the same manner all ill-grown or mis-shapen trees and shrubs should at once be cut out, and unpromising young plants replaced by healthy specimens; the first can never be other than disfigur~~[illegible]~~ements to the park, and the second can never repay the trouble and expense of rearing.

13. Excepting in the immediate vicinity of public buildings, all formal straight-lined roads and gardening in the usual acceptation should be carefully avoided/ as being both inappropriate and expensive. 7/

14. For affording access to the selected points of view, park drives should be so laid out that, while leading with sufficient directness from point to point, their lines should present to the eye ever-varying curves set out with scrupulous exactitude, such careful treatment being an essential element of pleasure. While as above observed rigidly straight lines are wholly out of place, crookedly aligned, ill-formed and badly maintained roads are infinitely worse.

15. In the matter of ponds, of which there are several in the grounds to be dealt with, while square or rectangular outlines for such are inappropriate, any ~~irregular~~ δ curvilinear forms will answer as a rule, provided in the first place that the banks are evenly sloped off and turfed, and in the second that the water level is well maintained, and both it and the borders kept clear of weeds and sedge. The use of suitable planting on the margins and of selected aquatic plants for the water can, it is needless to say, be employed to the greatest advantage, provided ~~they are~~ that such be carefully attended to and limited in extent to what is needed for the production of picturesque effect.

16. Where the present ground is low, ill-drained, and sedgy, fresh ponds will in all probability have to be introduced as the best, and indeed only effective~~,~~ δ. means for curing the existing defects.

17. The Junction Canal, though very formal, may be greatly improved by planting along it at intervals thick clumps of trees which might come down to but not interfere with the tow-path; such objects, moreover, as wells, stables, privies, and all out-offices, should be completely screened out by foliage.

18. In the selection of trees and shrubs for the positions they are severally to occupy, it is almost needless to say that the greatest care will be called for in deciding on the kinds best suited for the exposed positions close to the sea, and then in all the varying gradations from these to others which will need retired and sheltered spots for attaining healthy development.

19. The following classification of trees for the purposes of a park may be found convenient:—

I. Trees suitable for display as single specimens in open grass glades.

II. Trees suitable for the formation of rather low and dense clumps, not mere shrubberies.

III. Trees suitable for larger and higher clumps.
IV. Trees which from height and general form run into high points and serve to break agreeably the sky line.

20. It will be clear that many, indeed all probably, of Class I would equally well suit for III. Similarly the trees in Class II would be employed for forming the outer fringes of III. Flowering and other shrubs are not included.

21. From observations made in the Botanical Gardens and elsewhere, and with the obliging assistance of Dr. Brandis and Mr. Steavenson, the following list of known plants suitable for falling into the above classification is put forward tentatively:—

CLASS I.—*Single Specimen Trees.*

Kigelia pinnata.	A splendid park tree; should be freely used.
Sohocarpus cappa.	A fine, fast-growing tree.
Terminalia catappa (country almond).	Formal; should grow well retired from the sea.
Mimusops Elengi.	Handsome, round-headed; grows fairly in Madras.
„ indica.	Do. do. do.
Berrya ammonilla.	
Brassaia actinophylla (Queensland umbrella tree).	Very formal and not very high.
Pterocarpus indicus (Padouk).	Well-grown shapely tree.
Adansonia digitata (Baobab).	Grows freely in Madras and is well suited for separate display.
All the fig tribe—F. Indica religiosa, Elastica and Javanica.	The last named species, Javanica, a brilliant, small-leaved fig, is especially good.
Cassia Roxburghii (pink cassia).	Habit rather low and somewhat difficult to grow in good form, not overstrong in resisting wind, but beautiful when in really good form.
Cæsalpinia coriaria (Divi Divi).	Low and spreading, very hardy.
Bassia longifolia and latifolia (Ippay).	Both very good trees, but as the flowers have a disagreeable smell should be rather retired.
The Araucarias Bidwillii, Cookii, Cunninghami, and Excelsa.	All beautiful if they can be grown successfully, but it is thought will need to be in rather sheltered spots and not near the sea.
The Palms, particularly Caryota urens.	The sago palm is perhaps the best suited for single specimens. The talipot also very fine; others of the species are more suitable for groups.
Filicium Decipiens.	Good; has much the foliage of the grevellia robusta, but is better furnished.

CLASS II.—*Trees suited for small dense groups and clumps.*

Cerbera odallam.	Most valuable for its good form and a growing freely close to the sea.
Penestropia angustifolia.	Good; somewhat low in form and easily propagated.
Jonesia asoca.	Good foliage and form.
Gardenia gummifera.	Very good, but doubtful if they can be easily propagated.
Calonyction speciosum.	
Anacardium occidentale (Kashu-nut).	Rather straggling, but good in foliag and easily procured.
Calophyllum Inophyllum (Alexandrian laurel).	Good, dark foliage, but rather bette suited for the centre of clumps than fo the outside.
Diospyros embryopteris.	Good.

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Class III.—*Trees suitable for forming the mass of clumps and dense planting generally of ~~sufficient~~ Some height.*

Nephelium Litchi.	Rather low and spreading in habit, ~~one~~ most valuable for its dark, dense foliage.
Dalbergia Sissoo.	Small, delicate foliage; a contrast to the above.
The varieties of Spathodia, (Campanulata, Rheedii, and another.)	From its fine orange red flower and general form most valuable in groups, particularly the "Campanulata."
Guatteria longifolia.	Rather formal; grows freely and suited rather for the centre of clumps.
Cassia fistula.	Too well known to call for remark.
Strychnos ~~Nux-vomica~~ potatorum	Peculiar foliage, which would contrast well with any of the above.
Sterculia fœtida.	Good foliage, but should be kept at a distance from the unpleasant smell of its flower.
Terminalia bellerica. Achras sapota. Atalantia monophylla. Gimelina arboria. Semecarpus anacardium. Odina Wodier. Eugenia Jambolana. Sapindus emarginatus. Mango and tamarind.	All good.
Pongamia glabra (The Indian beech).	An admirable tree with brilliant foliage, too well known to need description; easily procured in any quantity.
Cuparea canescens.	Most valuable as growing freely close to the sea in sandy soil.
Pithecolobium Saman ~~[illegible]~~ (The rain tree).	A ~~splendid~~ wide-spreading, fast-growing tree, but not known as to ability to stand high wind, &c.
Ochrocarpus longifolius.	Dense, dark foliage; leaf not unlike that of the Ficus elastica.

Class IV.—*Trees with somewhat the character of poplars for the centre of clumps.*

Mil~~lingtonia~~ hortensis (Bignonia suberosa, Cork tree.)	Should be used with caution, as not being overstrong and on losing its leaves.
Alstonia scholaris, ~~Pterospermum suberifolium~~	A fine pyramidal tree, common, it is understood, in [redacted] Travancore, and Burma.
Pterospermum Suberifolium	Not so good as the above

N.B.—This class is rather weakly represented, though no doubt such trees as the Guatteria longifolia, the casuarina and most of the palms can be brought in with advantage. The beautiful areca catechu, date, palmyra, and possibly also the fine oreodoxa regia, can no doubt be turned here to good account.

22. No special notice has been taken of shrubs or creepers, as these exist in such abundance and variety as not to call for remark. Excepting however in the immediate neighbourhood of the buildings, for the margins of ornamental sheets of water, and for other special purposes, their use should, it is thought, be restricted as not contributing nearly so well as fine well-grown trees to park scenery, while at the same time calling for an undue amount of care and expense in rearing, setting-out, and subsequent maintenance.

23. There has not been sufficient time to study in very minute detail the laying out of all portions of the proposed park, nor is such absolutely necessary at present, as in operations of the kind very much depends on the ability to seize on and work out accidental beauties in effect from time to time as the work advances. The general principles, however, as above explained, if considered to be correct, should be rigidly adhered to.

24. The annexed plan of the grounds to be dealt with shows on a sufficiently large scale the application of the principles to at least a certain portion ~~[illegible]~~.

25. Very much of the work to be done will require the aid of the Engineer, particularly in all matters relating to the remodelling of old and laying out of new park drives, the formation of ornamental sheets of water, shaping of the ground for drainage, as also the formal laying out of the immediate surroundings of each of the public buildings.

26. In fact the only work not strictly of an engineering character will be the selection, planting out, and maintenance of the trees, and even in these respects professional knowledge will not come amiss.

27. To carry out a scheme ~~work~~ of this character satisfactorily will no doubt require Some ~~many~~ years of labor, and it is thought that to ensure systematic working the duty had better devolve "ex-officio" on the Executive Engineer as the responsible officer.

28. Where such an officer would require outside aid would be in the rearing of nursery plants, selection of those most suitable to their position, precautions to be observed in planting out, sheltering, &c.; and to provide for this it would appear very desirable that the aid of an experienced gardener should be always available.

29. The Secretary of the Botanical Gardens has informed the undersigned that no objection would, he believes ~~thinks~~, be raised on the part of the Society to the employment of the gardener specially engaged by them, for either four or six hours weekly in the manner above intimated, provided that the times were made subject to arrangements with the Secretary himself.

30. All that the Engineer in charge of the Park would require for the purpose in view would be the attendance of the gardener twice or thrice weekly, for a couple of hours in the morning, and for this service if the Government were prepared to pay ~~[illegible]~~ a small fee of 80 or 100* rupees per mensem, all the requirements would be met, and the Horticultural Society in being thus enabled to offer a somewhat better salary/ than they would otherwise be in a position to do/ would profit by the arrangement.

31. The mutual service would moreover not be confined to this arrangement, as the Secretary is also quite prepared to maintain, with due warning, a stock of all such young plants as may be required for planting out in the park, supplied at a price which would probably ~~certainly~~ be less than that at which the Government could otherwise obtain them.

32. If Government generally approve of the above proposals a small preliminary assignment might be made from the Reserve of the current year in this department, and an estimate framed for giving effect to the most needful portions of the scheme in 1883-84.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

23th December 1882.

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* To include gharry hire.

No. .

ORDER—dated th January 1883, No. Public Works.

His Excellency the Governor in Council generally approves of the scheme ~~[illegible]~~ put forward by the Chief Engineer/ for the gradual and systematic improvement in laying out and planting the Chepauk grounds/ and those attached to Government House, Madras.

2. While sanctioning the removal of the casuarina avenue leading from Chepauk direct to Government House, His Excellency considers that none of the lately planted specimen trees at the north end of the avenue should be removed/ till the operation of transplanting them to suitable positions can be safely carried out. He also considers

that it will not be desirable at present to make the proposed park drive from the Chepauk entrance gate through the date tope to the Cooum river or to alter the lately made road past the Revenue Board stables till the large rectangular pond in its neighbourhood has been remodelled.

3. Ill-grown, mis-shapen trees need not in all cases be removed, till at least the new specimens, planted with a view to take their place, give promise of strong healthy growth when the former should be removed. This restriction, however, will not prevent the removal of all irregular uncared for vegetation, which only serves to give a jungly appearance to the grounds, or, again, such as impedes the several views which it is desirable to have worked out.

4. In addition to the other works enumerated in the memorandum, it is, in His Excellency's opinion, very desirable that a ride should be formed along the west side of the South Beach road, extending from the Napier bridge past the Senate House, Revenue Board Offices, &c., to the north end of the Presidency College compound. With this object the plot of ground enclosed with a hedge opposite the Marine Villa will in all probability have to be reduced in size and that in front of the University removed altogether.

5. The iron railings which are now much decayed may also everywhere have to be removed and be replaced eventually by a more suitable description of fence.

6. As suggested by the Chief Engineer, the operations will be carried out by the Executive Engineer, Presidency Division, who for this purpose will from time to time submit estimates for the work, and be assigned such small sums as can be conveniently spared from the Reserve of the Provincial Public Works Budget.

7. His Excellency the Governor in Council has, moreover, no objection generally to the proposals put forward in reference to securing the professional assistance of the gardener in charge of the Botanical Gardens, and authorizes the Chief Engineer to place himself in correspondence with the Secretary to the Gardens in view to a definite arrangement being entered into with this object.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, Fifth Circle.
„ Private Secretary to His Excellency the Governor.
„ Board of Revenue.
„ Public Department.
„ Chief Engineer, Public Works Department.

8. This order supersedes GO 30 November 1882 No 1487 (Public)

Second 'proof' returned from [illegible]

R H Sankey

1/2/83

416W

Proof for approval
2d Feby/83

February 416W 416/10

8 TH ~~JANUARY~~ 1883, NO. W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 56

Memorandum by the Chief Engineer, Public Works Department.

A detailed plan for the improvement and planting of the grounds around the public buildings at Chepauk appears first to have been submitted by the Honorable (now Sir) William Robinson, and orders were passed on the scheme (which at the time had been partly worked out) in G.O., 31st August 1871, No. 1349, Public Department.

2. After this the work was carried on for some years, though not apparently very vigorously, owing to want of funds, till the late famine, when the decision of Government to cut the Junction Canal close to the west of the Chepauk buildings introduced an element into the scheme not previously contemplated.

3. Since that time tree planting has progressed, some roads have been laid out, and other alterations have been made, but not as portions of any general plan of operations. Among these works may be mentioned the planting of avenues from the main entrance of the park to the bridge opposite the Revenue Board Office, and along the Junction Canal, of groups of trees round the Senate House, the diversion of the road leading past Government House along the right bank of the Cooum river and round by the Revenue Board stables.

4. Quite lately, moreover, the Municipality have constructed a society promenade immediately south of the Napier bridge, and the Public Works Department are engaged in extending the work as far down the South Beach as the Presidency College. The latter are further engaged in improving the grounds immediately to the east of the Senate House in putting new and ornamental balustrades to the Government House bridge, and propose shortly, in giving very urgently required additional accommodation to the Public Works offices, to improve their general appearance in such a manner as to harmonize in some measure with the neighbouring public buildings.

5. Looking to all these detached efforts at improvement, the time for dealing with the Chepauk grounds on a well-defined plan does not appear inopportune, especially as by this means alone, the very small sum which the Government has necessarily at disposal yearly for work of the kind from Provincial Funds can be economically turned to account.

6. The scope and general principles to be observed in a scheme of the proposed character may now be briefly stated.

7. As regards the extent of the ground to be dealt with, there would appear to be no reason why the contemplated improvements should not embrace the whole of the Government grounds extending from the Presidency College, through Chepauk and the greater portion of Government House Park to the Mount Road.

8. The main object being to create a park for general recreation, and not merely for meeting the requirements of traffic, which is amply provided for by the roads along the outskirts, the effort must be to afford, as far as possible, unimpeded views.

While therefore in this connection it would be allowable, and on other accounts most desirable, that there should be a densely-wooded fringe along the outskirts of the park, particularly along its western border where it is closely hemmed in by the native town, the moment the park is entered the spectator should have open views on all sides; all that is best worth seeing of the public buildings should, as viewed from selected points, be seen framed and set off to the best advantage by appropriate foliage, &c.

9. In this respect, therefore, it may at once be said that avenues of trees, however appropriate on a traffic road, are here, as impeding both light and air, and as directly interfering with extended views, out of place. Long stretching vistas should be made out not by rows of trees formally planted, but by a succession of skilfully placed clumps, with here and there a fine specimen tree or a group of shrubs so thrown in as to add to, rather than detract from, the feeling of extent.

10. The materials out of which the views have to be constructed being for the most part trees, shrubs and grass, these should all be the best of their kind, and be so maintained as to convey the impression of design, and of being laid out with cultivated taste.

11. It would follow from this that after selecting the best points of view for the several buildings, and groups of foliage now best worth preserving, [illegible] all trees, &c., which interfere with these should be removed.

12. This remark especially applies to the avenues which have been planted, and which if allowed to grow to maturity will effectually interfere with the objects as above explained. In the same manner all ill-grown or mis-shapen trees and shrubs should at once be cut out, and unpromising young plants replaced by healthy specimens; the first can never be other than disfigurements to the park, and the second ~~can never~~ will not repay the trouble and expense of rearing.

13. Excepting in the immediate vicinity of public buildings, all formal straight-lined roads and gardening in the usual acceptation should be carefully avoided, as being both inappropriate and expensive.

14. For affording access to the selected points of view, park drives should be so laid out that, while leading with sufficient directness from point to point, their lines should present to the eye ever-varying curves set out with scrupulous exactitude, such careful treatment being an essential element of pleasure. While as above observed rigidly straight lines are wholly out of place, crookedly aligned, ill-formed and badly maintained roads are infinitely worse.

15. In the matter of ponds, of which there are several in the grounds to be dealt with, while square or rectangular outlines for such are inappropriate, any curvilinear forms will answer as a rule, provided in the first place that the banks are evenly sloped off and turfed, and in the second that the water level is well maintained, and both it and the borders kept clear of weeds and sedge. The use of suitable planting on the margins and of selected aquatic plants for the water can, it is needless to say, be employed to the greatest advantage, provided that such be carefully attended to and limited in extent to what is needed for the production of picturesque effect.

16. Where the present ground is low, ill-drained, and sedgy, fresh ponds will in all probability have to be introduced as the best, and indeed only effective means for curing the existing defects.

17. The Junction Canal, though very formal, may be greatly improved by planting along it at intervals thick clumps of trees, which might come down to but not interfere with the tow-path; such objects, moreover, as wells, stables, privies, and all out-offices, should be completely screened out by foliage.

18. In the selection of trees and shrubs for the positions they are severally to occupy, it is almost needless to say that the greatest care will be called for in deciding on the kinds best suited for the exposed positions close to the sea, and then in all the varying gradations from these to others, which will need retired and sheltered spots for attaining healthy development.

19. The following classification of trees for the purposes of a park may be found convenient:—

I. Trees suitable for display as single specimens in open grass glades.
II. Trees suitable for the formation of rather low and dense clumps, not mere shrubberies.

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III. Trees suitable for larger and higher clumps.

IV. Trees which from height and general form run into high points and serve to break agreeably the sky line.

20. It will be clear that many, indeed all probably, of Class I would equally well suit for III. Similarly the trees in Class II would be employed for forming the outer fringes of III. Flowering and other shrubs are not included.

21. From observations made in the Botanical Gardens and elsewhere, and with the obliging assistance of Dr. Brandis and Mr. Steavenson, the following list of known plants suitable for falling into the above classification is put forward tentatively :—

CLASS I.—*Single Specimen Trees.*

Kigelia pinnata.	A splendid park tree ; should be freely used.
Schocareya cappa.	A fine, fast-growing tree.
Terminalia catappa (country almond).	Formal ; should grow well-retired from the sea.
Mimusops Elengi.	Handsome, round-headed ; grows fairly in Madras.
,, indica.	Do. do. do.
Berrya ammonilla.	Very formal and not very high.
Brassaia actinophylla (Queensland umbrella tree).	
Pterocarpus indicus (Padouk).	Well-grown shapely tree.
Adansonia digitata (Baobab).	Grows freely in Madras and is well suited for separate display.
All the fig tribe—F. Indica religiosa, Elastica and Javanica.	The last named species, Javanica, a brilliant, small-leaved fig, is especially good.
Cassia Roxburghii (pink cassia).	Habit rather low and somewhat difficult to grow in good form, not overstrong in resisting wind, but beautiful when in really good form.
Cæsalpinia coriaria (Devi Devi).	Low and spreading, very hardy.
Bassia longifolia and latifolia ("Ippay" and "Mowa").	Both very good trees, but as the flowers have a disagreeable smell should be rather retired.
The Araucarias Bedwillii, Cookii, Cunninghami, and Excelsa.	All beautiful if they can be grown successfully, but it is thought will need to be in rather sheltered spots and not near the sea.
The Palms, particularly Caryota urens.	The sago palm is perhaps the best suited for single specimens. The talipot also very fine ; others of the species are more suitable for groups.
Filicium Decipiens.	Good ; has much the foliage of the grevellia robusta, but is better furnished.

CLASS II.—*Trees suited for small dense groups and clumps.*

Cerbera odallam.	Most valuable for its good form and as growing freely close to the sea.
Penestrophia angustifolia.	Good ; somewhat low in form and easily propagated.
Jonesia asoca.	Good foliage and form.
Gardenia gummifera. Calonyction speciosum.	Very good, but doubtful if they can be easily propagated.
Anacardium occidentale (Kashu-nut).	Rather straggling, but good in foliage and easily procured.
Calophyllum Inophyllum (Alexandrian laurel).	Good, dark foliage, but rather better suited for the centre of clumps than for the margins.
Diospyros enubryopteris.	Good.

CLASS III.—*Trees suitable for forming the mass of clumps and dense planting generally of some height.*

Nephelium Litchi.	Rather low and spreading in habit, most valuable for its dark, dense foliage.
Dalbergia Sissoo.	Small, delicate foliage; a contrast to the above.
The varieties of Spathodia, (Campanulata, Rheedii, and another.)	From its fine orange red flower and general form most valuable in groups, particularly the "Campanulata."
Guatteria longifolia.	Rather formal; grows freely and suited rather for the centre of clumps.
Cassia fistula.	Too well known to call for remark.
Strychnos potatoram.	Peculiar foliage, which would contrast well with any of the above.
Sterculia fœtida.	Good foliage, but should be kept at a distance from the unpleasant smell of its flower.
Terminalia bellerica. Achras sapota. Atalanta monophylla. Gimelina arboria. Semecarpus anacardium. Odina Wodier. Eugenia Jambolana. Sapindus emarginatus. Mango and tamarind.	All good.
Pongamia glabra (The Indian beech).	An admirable tree with brilliant foliage, too well known to need description; easily procured in any quantity.
Cupania canescens.	Most valuable as growing freely close to the sea in sandy soil.
Pithecolobium Saman (The rain tree).	A [redacted] wide-spreading, fast-growing tree, but not known as to ability to stand high wind, &c.
Ochrocarpus longifolius.	Dense, dark foliage; leaf not unlike that of the Ficus elastica.

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CLASS IV.—*Trees with somewhat the character of poplars for the centre of clumps.*

Millingtonia hortensis (Bignonia suberosa. Cork tree.)	Should be used with caution, ~~as~~ not being overstrong and ~~as~~ losing its leaves.
Alstonia scholaris.	A fine pyramidal tree, common, it is understood, in Travancore, and Burma.
Pterospermum Suberifolium.	Not so good as the above.

as/

N.B.—This class is rather weakly represented, though no doubt such trees as the Guatteria longifolia, the casuarina and most of the palms can be brought in with advantage. The beautiful areca catechu, date, palmyra, and possibly also the fine oreodoxa regia, can [redacted] be turned here to good account.

22. No special notice has been taken of shrubs or creepers, as these exist in such abundance and variety as not to call for remark. Excepting however in the immediate neighbourhood of the buildings, for the margins of ornamental sheets of water, and for other special purposes, their use should, it is thought, be restricted as not contributing nearly so well as fine well-grown trees to park scenery, while at the same time calling for an undue amount of care and expense in rearing, setting-out, and subsequent maintenance.

23. There has not been sufficient time to study in very minute detail the laying out of all portions of the proposed park, nor is such absolutely necessary at present, as in operations of the kind very much depends on the ability to seize on and work out accidental beauties in effect from time to time as the work advances. The general principles, however, as above explained, if considered to be correct, should be rigidly adhered to.

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416/14

24. The annexed plan of the grounds to be dealt with shows on a sufficiently large scale the application of the principles to at least a certain ~~portion~~ extent

25. Very much of the work to be done will require the aid of the Engineer, particularly in all matters relating to the remodelling of old and laying out of new park drives, the formation of ornamental sheets of water, shaping of the ground for drainage, as also the formal laying out of the immediate surroundings of each of the public buildings.

26. In fact the only work not strictly of an engineering character will be the selection, planting out, and maintenance of the trees, and even in these respects professional knowledge will not come amiss.

27. To carry out a scheme of this character satisfactorily will no doubt require some years of labor, and it is thought that to ensure systematic working the duty had better devolve "ex-officio" on the Executive Engineer as the responsible officer.

28. Where such an officer would require outside aid would be in the rearing of nursery plants, selection of those most suitable to their position, precautions to be observed in planting out, sheltering, &c.; and to provide for this it would appear very desirable that the aid of an experienced gardener should be always available.

29. The Secretary of the Botanical Gardens has informed the undersigned that no objection would, he believes, be raised on the part of the Society to the employment of the gardener specially engaged by them, for either four or six hours weekly in the manner above intimated, provided that the times were made subject to arrangements with the Secretary himself.

30. All that the Engineer in charge of the Park would require for the purpose in view would be the attendance of the gardener twice or thrice weekly, for a couple of hours in the morning, and for this service if the Government were prepared to pay a small fee of 80 or 100* rupees per mensem, all the requirements would be met, and the Horticultural Society in being thus enabled to offer a somewhat better salary, than they would otherwise be in a position to do, would profit by the arrangement.

* To include gharry hire.

31. The mutual service would moreover not be confined to this arrangement, as the Secretary is also quite prepared to maintain, with due warning, a stock of all such young plants as may be required for planting out in the park, supplied at a price which would probably be less than that at which the Government could otherwise obtain them.

32. If Government generally approve of the above proposals a small preliminary assignment might be made from the Reserve of the current year in this department, and an estimate framed for giving effect to the most needful portions of the scheme in 1883-84.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

28th December 1882.

No. 57.

ORDER—dated 8th ~~January~~ Feby 1883, No. 416W Public Works.

His Excellency the Governor in Council generally approves of the scheme put forward by the Chief Engineer, for the gradual and systematic improvement in laying out and planting the Chepauk grounds, and those attached to Government House, Madras.

2. While sanctioning the removal of the casuarina avenue leading from Chepauk direct to Government House, His Excellency considers that none of the lately planted specimen trees at the north end of the avenue should be removed, till the operation of transplanting them to suitable positions can be safely carried out. He also considers

that it will not be desirable at present to make the proposed park drive, from the Chepauk entrance gate through the date tope to the Cooum river, or to alter the lately made road past the Revenue Board stables, till the large rectangular pond in its neighbourhood has been remodelled.

3. Ill-grown, mis-shapen trees need not in all cases be removed, till at least the new specimens, planted with a view to take their place, give promise of strong healthy growth, when the former should be removed. This restriction, however, will not prevent the removal of all irregular uncared for vegetation, which only serves to give a jungly appearance to the grounds, or, again, such as impedes the several views which it is desirable to have worked out.

4. In addition to the other works enumerated in the memorandum, it is, in His Excellency's opinion, very desirable that a ride should be formed along the west side of the South Beach road, extending from the Napier bridge past the Senate House, Revenue Board Offices, &c., to the north end of the Presidency College compound. With this object the plot of ground enclosed with a hedge opposite the Marine Villa will in all probability have to be reduced in size and that in front of the University removed altogether.

5. The iron railings which are now much decayed may also everywhere have to be removed and be replaced eventually by a more suitable description of fence.

6. As suggested by the Chief Engineer, the operations will be carried out by the Executive Engineer, Presidency Division, who for this purpose will from time to time submit estimates for the work, and be assigned such small sums as can be conveniently spared from the Reserve of the Provincial Public Works Budget.

7. His Excellency the Governor in Council has, moreover, no objection generally to the proposals put forward in reference to securing the professional assistance of the gardener in charge of the Botanical Gardens, and authorizes the Chief Engineer to place himself in correspondence with the Secretary to the Gardens in view to a definite arrangement being entered into with this object.

8. This Order supersedes G.O., 30th November 1882, No. 1487 (Public).

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, Fifth Circle.
„ Private Secretary to His Excellency the Governor.
„ Board of Revenue.
„ Public Department.
„ Chief Engineer, Public Works Department.
„ W S Whiteside Esqr
Ag 2nd Member Bd of Rev
in ch. Chepauk Park

5/2/83

Pro: 8.2.83. Vo 416 W.

416 W / 15A

Please communicate Copy of above to Gov: Architect & for information.

W

14.11.83

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planting was progress
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Bo: 8.2.83. P. 416 W.

416/154

Please communicate Copy of above to Govt. Architect for information.

JJ

14-11 83

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I agree generally; but think that the road behind the Revenue Board Stables which it is proposed to draw through part of Government House grounds would be no improvement & no convenience. The arrangements made by Mr Adam for the passing of the public through these grounds should I think stand generally as he left them.

The Casuarina avenue was a mistake & should go. I am afraid that

416/16

For orders

A detailed plan for the improvement & planting of the grounds around the Public buildings at Chepauk appears first to have been submitted by the Honorable (now Sir) William Robinson and orders were passed on the scheme (which at the time had been partly worked out) in G.O. 31st August 1871, No 1349 Public Dept.

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4. Quite lately moreover the Municipality have constructed a lovely promenade immediately South of the Napier Bridge and the P.W. Department are engaged in extending the work as far down the Surf Beach as the Presidency College. The latter are further engaged in improving the grounds immediately to the east of the Senate House in putting new and ornamental balustrades to the Government House Bridge, and propose shortly in giving very urgently required additional accommodation to the P.W. Offices to improve the general appearance of the building in such a manner as to make it in some measure harmonize with the neighbouring public buildings.

5. Looking to all these detached efforts at improvement the time for dealing with the Chepauk Grounds on a well defined plan does not appear inopportune, and especially as by this means alone it is thought that the very small sum which the Government has necessarily at disposal yearly for work of this kind from Provincial funds can be economically turned to account.

6. The scope and general

The straight avenue leading from Govt House to the gate in the Cenotaph avenue was all very fine but its actual execution involved the sacrifice of some very good trees. Some errors which must be corrected have been made in planting in things unsuitable for avenue trees. I have already directed that they should be removed at the first convenient season.

MGD
Jan 20/83

principles to be observed in a scheme of the proposed character may now be briefly stated

7. As regards the extent of the ground to be dealt with there would appear to be no reason why the contemplated improvements should not embrace the whole of the Government land extending from the Presidency College through Chepauk and the greater portion of Government House park to the Mount Road.

8 The main object being to create a Park for general recreation, and not merely for meeting the requirements of traffic, which is amply provided for by the roads along the outskirts the effort must be to afford as far as possible unimpeded views. While therefore in this connection it would be allowable and on other accounts most desirable that there should be a densely wooded fringe along

the outskirts of the Park, particularly along its western border where it is closely hemmed in by the native town, the moment the Park is entered the spectator should have open views on all sides; all that is best worth seeing of the public buildings should, as viewed from selected points, be seen framed and set off to the best advantage by appropriate foliage, &c

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for the most part trees
shrubs and grass, these
should all be the best
of their kind, and be
so maintained as to
convey the impression
of design and care with
cultivated taste

11 It would follow from
this that after selecting
the best points of view
for the several buildings,
and groups of foliage
now best worth preserv-
-ing, that all trees &
which interfere with
these should be removed

12. This remark especially
applies to the avenues
which have been planted
and which if allowed
to grow to maturity

Most certainly
[illegible]

Of course they
will stay [illegible]
[illegible] & allowed
to mature naturally [illegible]

Provided they are not
the only specimens of their
kind in the Park, in
which case they should
stay whether perfect or
not [illegible] should [illegible]
[illegible] have grown up
[illegible]

My observations [illegible]
[illegible]

He speaks the artist
the [illegible] not the Gardener
[illegible]

will effectually interfere
with the objects as above
explained. In the same
manner all ill grown
or misshapen trees and
shrubs should at once
be cut out, and unpro-
-mising young plants re-
-placed by healthy specimens;
the first can never be
other than disfigurements
to the Park, and the second
can never repay the trouble
& expense of rearing

13. Excepting in the imme-
-diate vicinity of public
buildings all formal
straight lined roads
and gardening in the
usual acceptation should
be carefully avoided as
being both inappropriate and expensive.

14. For affording access to
~~the~~ selected points of
view park drives ~~roads~~ should
be so laid out ~~that~~
while leading with suffi-
-cient directness from
point to point, their
lines should present
to the eye ever varying
curves set out with

scrupulous exactitude,
such careful ~~treatment~~
being an essential element
of pleasure - While as
above observed rigidly
straight lines are wholly
out of place crookedly
alligned, ill formed
and badly maintained
roads are infinitely
worse

15 In the matter of ponds,
of which there are several
in the grounds to be dealt
with, while square or
rectangular outlines be
such are inappropriate
any irregular curvilinear
forms will answer as a
rule provided in the
first place that the
banks are evenly sloped
up and turfed and in
the second that the
water level is well main-
tained, and both it and
the borders kept clear
of weeds & sedge - The
use of suitable planting
on the margins & of selected
aquatic plants for the
[illegible]

and this is what is
being done
Sol

x To which an artificial island
or two will be added.
Sol

Very good
MW

to may be employed
to the greatest advan-
tage provided ~~they are~~ they should be
carefully attended to
and limited in extent
to what is needed for the
production of x picturesque
effect

16 Where the present ground
is low, ill drained, and
sedgy, fresh ponds will
in all probability have
to be introduced as the
best and indeed only
effective means for curing
the ~~present~~ existing defects

17. The Junction canal
though very formal may
be greatly improved by
planting along it at
intervals thick clumps
of trees which might
come down to but not
interfere with the tow
paths; such objects
moreover as walls, stables
privies and all outoffices
should be completely
screened out by foliage

18. In the selection of
trees and shrubs for the

positions they are usually to occupy it is almost needless to say that the greatest care will be ~~needed~~ called for in deciding on the kinds best suited for the exposed positions close to the sea and then in all the varying gradations from these to others which will need retired sheltered spots for attaining healthy development

19 The following classification of trees for the purposes of a Park may be found convenient

I Trees suitable for display as single specimens in open grass glades

II ditto for the formation of rather low and dense clumps not unlike Shrubberies

III ditto for larger and higher clumps

IV ditto which from height and general form seem best suited, and serve to

break agreeably the sky line

20. It will be clear that many indeed all probably of Class I would equally well suit for III. Flowering and other shrubs are not included

Similarly the trees in Class II would be employed for forming the outer fringes of III

21 From observations made in the Botanical Gardens and elsewhere, and with the obliging assistance of Dr. Brandis & Mr. Stevenson, the following list of known plants suitable for falling into ~~the~~ above classification is put forward tentatively

Class I Single Specimen trees

Kigelia pinnata	A splendid park tree should be freely used
Sclerocarya Caffra	A fine fast growing tree
Terminalia Catappa (Country almond)	Formal should grow well retired from the sea
Mimusops Elengi " Indica	Handsome round headed grows fairly in Madras
Berrya Ammonilla	do
Brassaia actinophylla (Queensland umbrella tree)	very formal and not very high
Pterocarpus Indicus (Padouk)	Well grown stately tree

Adansonia digitata (Baobab)	grows freely in Madras and is well suited for separate display
All the fig tribe F. Indica religiosa, Elastica & Javanica	The last-named species Javanica a brilliant small leaved fig is especially good
Cassia Roxburghii (pink cassia)	Habit rather low & somewhat difficult to grow in good form not over strong in resisting wind but beautiful when in really good form
Caesalpinia coriaria (divi divi)	Low and spreading, very hardy
Bassia longifolia and latifolia (Ippay)	Both very good trees but as the flowers have a disagreeable smell should be rather retired
The Araucarias Bidwillii Cookii, Cunninghamii, & Excelsa, if they will grow	All beautiful if they can be grown successfully but it ~~is thought~~ will need to be in rather sheltered spots and not near the sea
The Palms particularly Caryota urens	The sago Palm is perhaps the best suited for single specimens Get The talipot also very fine. Others of the species are more suited for groups
Filicium decipiens	good: has much the foliage of the [illegible] [illegible] but is better [illegible]

most appropriate for Bangalore & not Javanica

Class II Trees suited for small dense groups and clumps

Cerbera Odallam	most valuable for its good form and as growing freely close to the sea
Penestrophia Angustifolia	good standard, low in form and easily propagated
Jonesia Asoca ~~Jonesia (Asoca)~~	good foliage & form
Gardenia Gummifera Calonyction Speciosum	very good but doubtful if they can be easily propagated

Anacardium occidentale (Kashew nut)	Rather straggling but good in foliage and easily procured
Calophyllum Inophyllum (Alexandrian Laurel)	Good dark foliage but rather better suited for the centre of clumps than for the outside
Diospyros Embryopteris	Good

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Class III. Trees suitable for forming the mass of clumps & dense planting generally of sufficient height

Nephelium Litchi	Rather low and spreading in habit but most valuable for its dark dense foliage
Dalbergia Sissoo	Small delicate foliage a contrast to the above
The varieties of Spathodea, Campanulata, Rheedii, and another	From its fine orange red flowers and general form most valuable in groups particularly the Campanulata
Guatteria longifolia	rather formal grows freely and suited rather for the centre of clumps
Cassia fistula	Too well known to call for remark
Suggest Strychnos potatorum Strychnos nux vomica too dangerous [illegible]	Peculiar foliage which would contrast well with any of the above
Sterculia foetida	Good foliage but should be kept at a distance from the unpleasant smell of its flowers
Terminalia belerica Achras Sapota Atalantia Monophylla Gmelina arborea Semecarpus Anacardium	All good

By all means [illegible]

Odina Wodier Eugenia Jambolana Sapindus Emarginatus Mango & Tamarind	ditto
Pongamia Glabra (the Indian beech)	An admirable tree with brilliant foliage too well known to need description
Cuperea canescens	easily procured in any quantity most valuable as growing freely close to the sea in sandy soil
Albizzia procera (the [illegible] (tree))	A splendid wide spreading fast growing tree but not known as to ability to stand with [illegible] &
Ochrocarpus longifolius	dense dark foliage, leaf not unlike that of the Ficus elastica

Class IV Trees with somewhat the character of poplars for the centre of Clumps

Millingtonia hortensis (Bignonia suberosa?) cork tree	Should be used with caution as not being over strong and as losing its leaves Has a bad hold of the ground but clean
Alstonia Scholaris Pterospermum suberifolium	A fine pyramidal tree common it is understood in ~~Tinnevelly~~ Travancore and Burma

By all means keep [illegible] necessary not for Coffins

I sh'd think so

N.B. This Class is rather weakly represented, though no doubt such trees as the Guatteria Longifolia, ~~the~~ Casuarina and most of the palms can be brought in with advantage. The beautiful Areca catechu, date, Palmyra and fairly also the fine Oreodoxa regia can no doubt be turned here to good account.

22. No special notice has been taken of shrubs or creepers or [illegible]

in such abundance and variety as not ~~to~~ call for ~~notice~~ remark. Excepting however in the immediate neighbourhood of the buildings, for the margins of ~~ponds~~ ornamental sheets of water, and for other special purposes their use should it is thought be restricted as ~~being plants which~~ not contributing ~~[illegible]~~ nearly so well as fine well grown trees to park scenery while at the same time calling for an undue amount of care & expense in raising, setting-out, and subsequent maintenance.

23. There has not been sufficient time to study in very minute detail the laying out of all portions of the proposed park, nor is such absolutely necessary at present as in an operation of the kind very much depends on the ability to seize and work out accidental beauties in effect from time to time as the work advances.

Odina Wodier

The General principles however as above explained if considered to be correct should be rigidly adhered to

24 The annual plan of the grounds to be dealt with shewn on a sufficiently large scale the application of the principles adverted to

25 Very much of the work to be done will require the aid of the Engineer particularly in all matters relating to the remodelling of old and laying out of new park drives, the ornamental sheets of water, formation of possible shelving of the ground the drainage, as also the formal laying out of the immediate surroundings of each of the Public buildings

26 In fact the only work not ~~strictly~~ of an Engineering character will be the selection, planting out, and maintenance of the trees, and in

The rock on which we have hitherto split is want of continuity and the absence of artistic design — The latter Col: Sankey is now engaged on & I am sure it could not be in better hands but to ensure its being given effect to hereafter I would adopt the suggestion in para 27 and put the work in charge of the Executive Engineer H.V.

in these respects professional knowledge will not come amiss

27 To carry out a work scheme of this character satisfactorily will no doubt require many years of labor and it is thought ~~that~~ to insure systematic working the duty had better devolve "ex officio" on the Executive Engineer as the responsible Officer

28. Where such an Officer would require outside aid would be in the rearing of nursery plants, selection of those most suitable to the position, precautions to be observed in planting out; sheltering &c and to provide for ~~this~~ it would appear very desirable ~~that~~ the aid of an experienced Gardener should be always available

29. The Secretary of the Botanical Gardens having informed the undersigned

that no objection would
he thinks be raised on
the part of the Society
to the employment of
the Gardener specially
engaged by them, for either
four or six hours weekly
in the manner above
intimated, provided
that the times were
made subject to arrangement
with the Secretary himself

30 All that the Engineer
in charge of the Park would
require for the purpose in
view would be the atten-
-dance of the Gardener
twice or thrice weekly,
for a couple of hours in
the morning, and for
this service if the Government
were prepared to pay
the man a small fee of
50 or* 100 Rs per mensem
all the requirements would
be met, and the Horticul-
-tural Society in being thus
enabled to offer a somewhat
better salary than they
would otherwise be in
a position to do, would

* To include Pharmacy vine

This proposal has
entire support

I entirely approve the
a confidential note
which accompanies
this. I have suggested
a slight addition to
the program in E and
if it has the support of my
Hon'ble Colleagues steps
will be taken to give effect
to it. H.S.

29/12/82

profit by the arrangement

31 The mutual service
would moreover not be
confined to this arrange-
ment, as the Secretary is
also quite prepared to
maintain, with due war-
-ning, a stock of all such
young plants as may be
required for planting out
in the Park, ~~and which~~
~~would be~~ supplied at
a price which would cer-
-tainly be less than that
at which the Government
could otherwise obtain
them

32 If Government generally
approve of the above
proposals a small
preliminary assignment
might be made from the
Reserve of the current year
in this department, and
an Estimate framed for
giving effect to the most
useful portions of the
scheme in 1883-84

28/12/82

Colonel Sankey's proposals for the improvement and planting of the grounds around the public buildings at Chepauk commend themselves to me. Some sort of recreation ground near the sea is much required. I would not reserve any portion of the ground, as suggested by the Hon. Mr. Sullivan for Europeans, or rather "for English ladies and gentlemen". The Eden Gardens in Calcutta are open to all alike — and I have never heard of any inconvenience from this arrangement. There is no kind of subscription or fee for admission, nor is there any reservation of particular parts, or of seats for any section of the community. By some sort of tacit agreement natives usually sit on one side of the Gardens, and ladies and gentlemen on another. But there are no rules on the subject, and, if the gardens are to be a success, I would recommend that they should be absolutely free to all comers. — People will very soon find out where they are not wanted, and each section will make their own arrangements.

J.R.

14.1.83

We must not I think introduce any new distinctions between Europeans & Natives. Though if the rules as to the Eden Gardens which are under the eyes both of the Supreme & the Bengal Govts ~~Garden~~ were such as Mr Sullivan supposes them to be I should not object at all to the proposals made by my hon' Colleague. It is to be hoped that the Natives

preservation of the garden
will fall into good
way. MSW
Jan 19/83

No 416

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

416/27

Under date the 8th Feby/83

Read the following

Memorandum by the Chief Engineer P. W. D. d/ 28 Decr/82

S 11

Yes. I think this will do
Jan 26/83

His Excellency the Governor in Council generally approves of the scheme put forward by the Chief Engineer for the gradual and systematic improvement in laying out and planting the Chepâk grounds and those attached to Government House, Madras.

2. While sanctioning the removal of the Casuarina avenue leading from Chepâk direct to

Government House,

His Excellency considers that none of the lately planted specimen trees at the north end of the avenue should be removed till the operations of transplanting them to suitable positions can be safely carried out. He also considers that it will not be desirable at present to make the proposed park drive from the Chepāk entrance gate through the date tope to the Cooum river or to alter the lately made road past the Revenue Board stables till the large rectangular pond in its neighbourhood has been remodelled.

3. Ill grown mis-shapen trees need not in all cases be removed, till at least, the new specimens planted with a view to take their place, give promise of strong healthy growth when the former should be removed. This restriction, however, will not prevent the removal of all irregular uncared for vegetation which only serves to give a jungly appearance to the grounds,

or again such as impedes the several views which it is desirable to have worked out.

4. In addition to the other works enumerated in the Memorandum, it is, in His Excellency's opinion, very desirable that a ride should be formed along the west side of the South beach road, extending from the Napier bridge past the Senate house, Revenue Board Offices &c. to the north end of the Presidency College Compound. With this object the plot of ground enclosed with a hedge opposite the Marine Villa will in all probability have to be reduced in size and that in front of the University removed altogether.

5. The iron railings which are now much decayed may also everywhere have to be removed and be replaced eventually by a more suitable description of fence

6. As suggested by the Chief Engineer the operations will be carried out by the Executive

GO 103 d/ 12.4.73 ✓ ✓
No 13 d/ 4.6.73 ✓
GO 140 d/ 24/10/1873 ✓ ✓
" 157 d/ 23/7/73 ✓ ✓
" 24 d/ 3.9.72 ✓
" 158 d/ 22.5.72 ✓ ✓
" 33 d/ 6.5.72 ✓ ✓
" 269 d/ 29.4.72 ✓ ✓
" 180 A d/ 30.10.71 ✓ ✓
" 142 d/ 15.9.71 ✓
BA " 921 W d/ 10.4.80 ✓ ✓
" 1187 W d/ 18.5.80 ✓ ✓
BA " 563 W d/ 6.3.80 ✓
BA " 766 W d/ 23.3.80 ✓ ✓
BA " 1736 W d/ 20.7.80 ✓ ✓
BA " 2170 W d/ 15.7.80 ✓ ✓
" 1519 W d/ 17.6.81 ✓
30 " 1705 W d/ 7.9.82
BA " 2349 W d/ 29.9.82

~~File [illegible] 6511 [illegible]~~

Special

Hon. H. E. Sullivan
the Rt. Honble the Governor

Draft for approval

Appd

To
The Chief Secretary
to Govt. for counter
initials

Copied Ret. 29/1

R 29.1.83