

OR



THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD.
(A Government of Odisha Undertaking)

Letter No 8263 /OPHWC

Date. 11 / 7 / 2016

To

All Estimators
(T)Joint Managers of
all Divisions.

Sub: Provision for functional/utility elements during preparation of estimates for building works.

With reference to the above cited subject, it is imperative that due attention be provided for functional aspect of the building for the purpose of which it is being constructed. This obviously necessitates for inclusion of the essential elements as part of the building while framing the estimate. The utility aspects as per requirement should not be omitted.

(A)Residential Building :

- (1)Approach Road
- (2)Compound Wall, gate and passage.
- (3)Levelling of site and fixing of plinth level
- (4)Portico with verandah
- (5)Staircase
- (6)Door and Windows with grill
- (7)stair case with balustrade and hand rails
- (8)Flooring as per requirement
- (9)F.F and S.F as per the approved drawing
- (10)parapets with drainage outlets, rainwater pipes
- (11)headrooms for staircase
- (12)overhead tank with sintex or RCC

Contd...P/2...

- (13) Provision for water supply for external and internal along with P.H. works.
- (14) provision for electricity for external and internal
- (15) Drainage system for disposal of waste water with provision for septic tank, soakpit, chamber and open drain
- (16) Provision for skylight and ventilator
- (17) Chajjas, DPC, Lintels
- (18) Provision of site developments (if required) with detailed section measurements, photographs & graphical plotting.

(B) Non-Residential Building:

The following additional provisions as per requirement may be included.

- (1) Fire fighting measures
- (2) Provision for AC
- (3) Ceiling
- (3) Wall Panelling
- (4) vitrified flooring
- (5) Plinth protection measure
- (6) Aluminum framed Door/windows
- (7) Flag hoisting platform
- (8) Any other utility element as per requirement of the user.

(C) Guidelines for provision & execution of Earthworks

(attached separately) annexure

Memo No. 8264 /OPHWC

ok J
8-7-16
G.M(Tech.)-cum-S.E

Dt. 11/7 /2016

Copy to the Jt. Manager (Monitoring), OPHWC, Bhubaneswar for information/
Dy. Manager (Tech), OPHWC, Bhubaneswar for information/ Estimate Section of Head Office
for information & necessary action.

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8-7-16
G.M(Tech.)-cum-S.E

ANNEXURE
STANDARD GUIDELINES FOR EARTH WORK

01. A masonry pillar to serve as a bench will be erected at a suitable point in the area, which shall be clearly visible from a distant area.
02. GL shall be taken at 5 to 15 meters intervals in uniformed sloping ground and at closer intervals where local mounds pits or undulations are met with. GL shall be recorded in level books and signed all concerned along with Joint Manager.
03. License must be obtained from competent authority, where blasting is required during excavation.
04. In firm soils, sides of trenches shall be kept vertical upto 2m. depth from bottom. For greater depth, excavation profiles shall be widened by steps of 50 cm. on either side after every 2 meters from bottom. Excavation shall be done 1:4 slope.
05. There initial levels must be taken prior to commencement of any work and plotted suitably graphically by using available packages to calculate C.S. area of each section.
06. Final levels are to be plotted on the graph sheet to find identity of individual areas.
07. Volume of earth work must be calculated by any of the standard formula as below:-
Trapezoidal formula:- $V = d/2 \{O_1 + 2(O_2 + O_3 + O_4 + \dots) + O_n\}$, where O_1, O_2, \dots are C.S. area of individual sections.
Simpsons Rule :- $V = d/3 \{O_1 + 4(\text{even}) + 2(\text{odd}) + O_n\}$
Where, d= Spacing of cross sections.
08. Necessary provision must be made for shrinkage and swelling soils.
09. Before laying filling soil, from any borrow area, physical properties of borrow area soil like density, CBR, Moisture content, dry-density, shrinkage factors must be evaluated and compare with available standards for its suitability.
10. The demarcated area before filled in must be excavated to a minimum 150mm and cleared from any bushes, roots vegetations to provide good base/grip to the filled soil.
11. The filled soil must be laid in layers, each layer not exceeding 300mm. with breaking clods and proper consolidation.