

Approved
 18/06/2014
 Gen. Manager
 (Plg. & Arch.)
 M/s. JNC Construction Pvt. Ltd.

NOTE:-
 250 Ø SEWER LINE 1:190
 150 Ø SEWER LINE 1:100
 100 Ø SEWER LINE 1:150

AREA CALCULATIONS:-

TOTAL PLOT AREA = 20015.90 SQ.M.
 NUMBER OF DWELLING UNITS = 934.
 TOTAL POPULATIONS = 4203

SEWERAGE:-

TOTAL POPULATION = 4203 no.
 AVG. DISCHARGE @ 135 LIT/HEAD/DAY
 = 4203X135 = 5,67,405 LIT.
 PEAK DISCHARGE = 3X5,67,405 = 17,02,215 LIT.
 SUBSOIL FILTRATION = 45X4203 = 1,89,135 LIT.
 TOTAL = 18,91,350 LIT.
 = 4.74 x 10⁻³ m³/sec.

CAPACITY OF 250 MM Ø SEWER :-

$$S = 1:190, m = \frac{2\sqrt{d}^2}{8\sqrt{xd}} = d/4 = \frac{0.25}{4}, n = 0.015$$

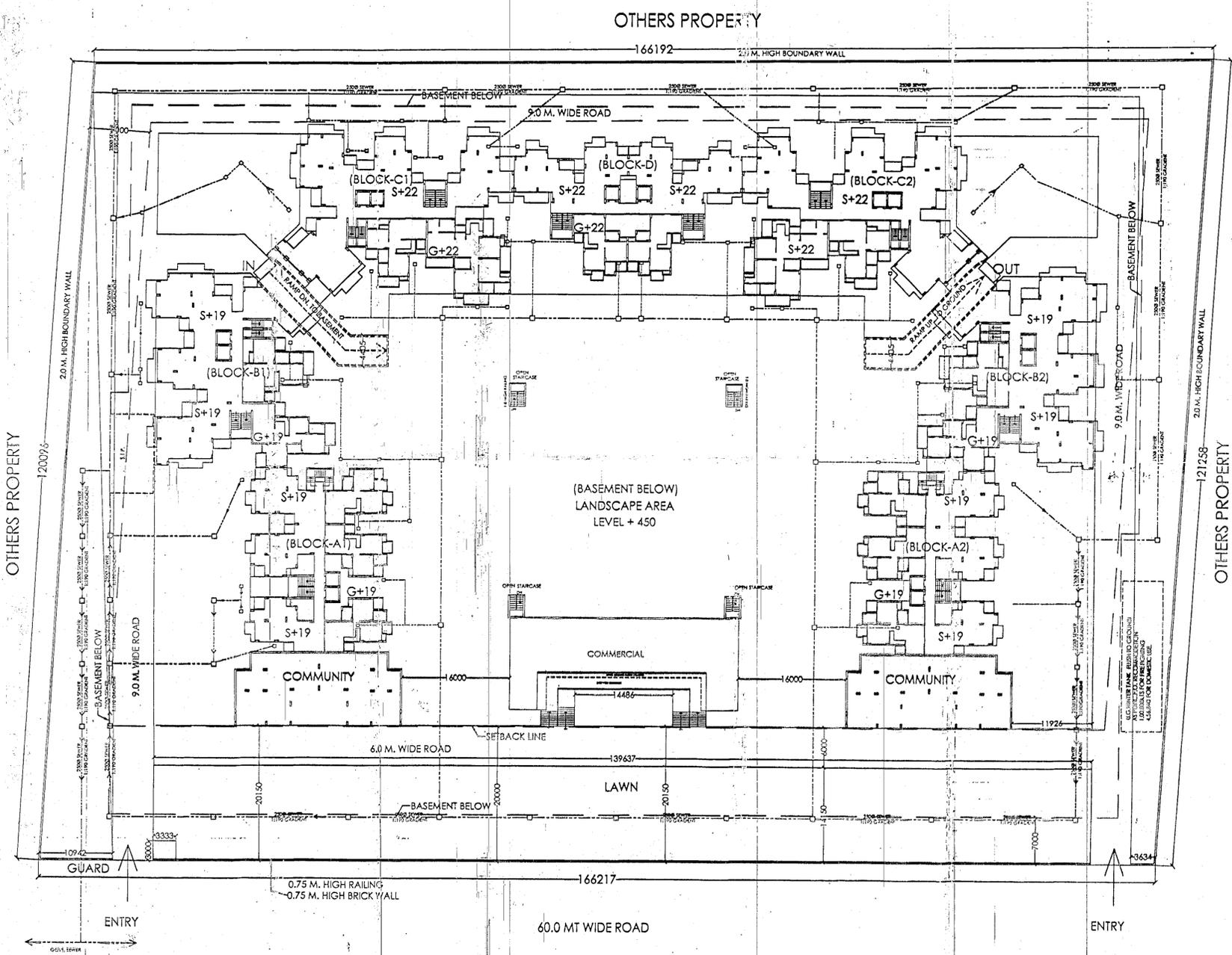
$$v = 1/n \times m^{2/3} \times 5^{1/2} = \frac{1}{0.015} \times (0.0625)^{2/3} \times \frac{1}{190}$$

$$= 0.76 \text{ m/sec}$$

$$c = av = \frac{\pi d^2}{8} \times 0.76 = \frac{\pi \times 0.25^2}{4} \times 0.76$$

$$= 0.0188 \text{ cu.m/sec.} > 0.00474 \text{ cu.m/sec.}$$

250 mm Ø SEWER PIPE IS O.K.



PROJECT:-
 GROUP HOUSING FOR
 M/S JNC CONSTRUCTION PVT. LTD.
 PLOT NO.-1C, SECTOR-16 C AT GREATER NOIDA. (U.P.)

SIGNING AUTHORITY
 M. N. ANDLEY
 B. ARCH. F.I.I.A. F.I.V.
 ARCHITECT CA/75/1841

ARCHITECT'S SIGN
 M. N. ANDLEY
 B. ARCH. F.I.I.A. F.I.V.
 ARCHITECT CA/75/1841

SUBMISSION DRAWING
 DRG. TITLE:-
 SERVICE PLAN (SHOWING SEWER LINE)
 SCALE: 1:400
 DRG. NO.: 18
 DATE: 18/05/2014

NORTH
 ARCHITECTS:-
 M. N. ANDLEY B. ARCH. F.I.I.A. F.I.V.
 ANDLEY ASSOCIATES PVT. LTD.
 ARCHITECTS ENGINEERS PLANNERS
 39 HOUSING SOCIETY N.D.S.E.-I NEW DELHI - 110049