

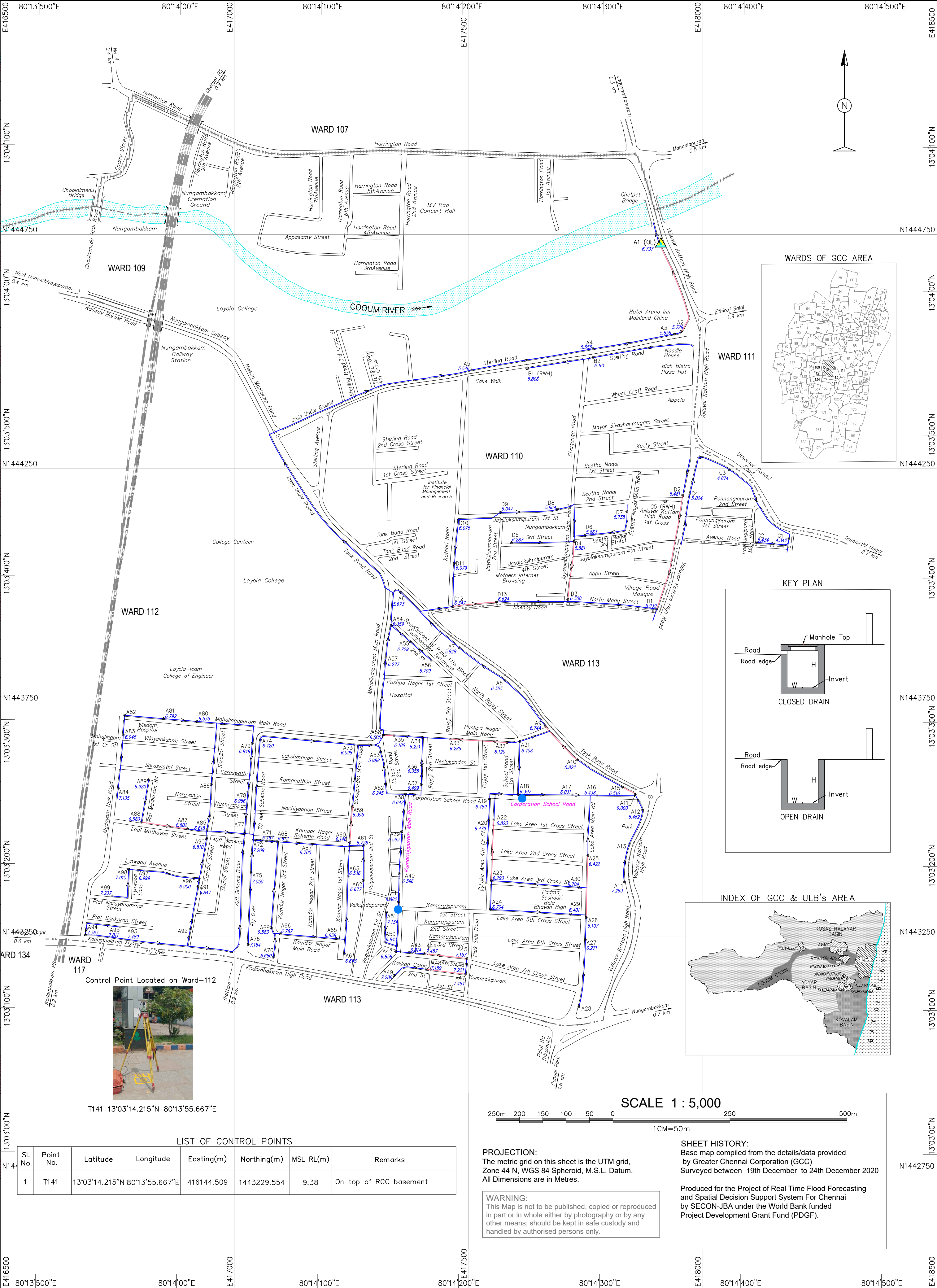
| LIST OF POINTS | | | | | | | |
|----------------|------------|--------------------------|--------------|----------------------|---------------|----------------------------|-----------|
| SI No. | MANHOLE ID | DRAIN Closed(C) /Open(O) | Drain Top(m) | MSL LEVEL Invert (m) | Road Edge (m) | DRAIN DIMENSIONS Width (m) | Depth (m) |
| 1 | A1 (OL) | C | 6.840 | 5.729 | 6.569 | 0.825 | 0.797 |
| 2 | A2 | C | 6.549 | 5.656 | 6.436 | 0.912 | 0.692 |
| 3 | A3 | C | 6.485 | 5.555 | 6.521 | 0.905 | 0.745 |
| 4 | A4 | C | 6.522 | 5.546 | 6.412 | 0.912 | 0.775 |
| 5 | A5 | C | 7.146 | 5.673 | 7.136 | 1.605 | 0.958 |
| 6 | A6 | C | 7.412 | 5.828 | 7.309 | 1.003 | 1.463 |
| 7 | A7 | C | 6.759 | 6.365 | 7.484 | 1.201 | 0.793 |
| 8 | A8 | C | 7.358 | 6.744 | 7.344 | 1.205 | 0.432 |
| 9 | A9 | C | 7.408 | 5.822 | 7.166 | 1.010 | 1.433 |
| 10 | A10 | C | 7.081 | 6.000 | 6.965 | 0.951 | 0.790 |
| 11 | A11 | C | 7.475 | 6.462 | 7.325 | 0.903 | 0.762 |
| 12 | A12 | C | 7.926 | — | 7.678 | — | — |
| 13 | A13 | C | 7.783 | 7.263 | 7.597 | 0.503 | 0.415 |
| 14 | A14 | C | 7.201 | 6.516 | 7.078 | 1.002 | 0.523 |
| 15 | A15 | C | 6.966 | 5.438 | 6.979 | 0.903 | 0.926 |
| 16 | A16 | C | 7.080 | 6.031 | 6.967 | 0.902 | 0.947 |
| 17 | A17 | C | 7.502 | 6.397 | 7.512 | 1.102 | 0.980 |
| 18 | A18 | C | 7.550 | 6.489 | 7.506 | 0.896 | 0.936 |
| 19 | A19 | C | 7.511 | 6.479 | 7.384 | 0.903 | 0.911 |
| 20 | A20 | C | 7.593 | — | 7.243 | — | — |
| 21 | A21 | C | 7.345 | 6.823 | 7.291 | 0.601 | 0.019 |
| 22 | A22 | C | 7.557 | 6.296 | 7.179 | 0.803 | 0.956 |
| 23 | A23 | C | 7.499 | 6.704 | 7.278 | 0.605 | 0.543 |
| 24 | A24 | C | 7.249 | 6.422 | 7.068 | 0.985 | 0.486 |
| 25 | A25 | C | 7.559 | 6.107 | 7.420 | 0.902 | 0.801 |
| 26 | A26 | C | 7.662 | 6.271 | 7.458 | 0.895 | 0.788 |
| 27 | A27 | C | 8.316 | — | 8.001 | — | — |
| 28 | A28 | C | 7.533 | 6.401 | 7.304 | 0.503 | 0.727 |
| 29 | A29 | C | 7.231 | 6.709 | 7.112 | 0.603 | 0.130 |
| 30 | A30 | C | 7.245 | 6.458 | 6.928 | 1.202 | 0.636 |
| 31 | A31 | C | 7.121 | 6.120 | 7.060 | 0.610 | 0.699 |
| 32 | A32 | C | 7.244 | 6.285 | 7.158 | 0.702 | 0.578 |
| 33 | A33 | C | 7.230 | 6.231 | 7.055 | 0.755 | 0.698 |
| 34 | A34 | C | 7.182 | 6.186 | 7.130 | 0.683 | 0.745 |
| 35 | A35 | C | 7.442 | 6.355 | 7.272 | 0.601 | 0.634 |
| 36 | A36 | C | 7.330 | 6.499 | 7.142 | 0.620 | 0.426 |
| 37 | A37 | C | 7.396 | 6.642 | 7.231 | 0.754 | 0.547 |
| 38 | A38 | C | 7.524 | 6.593 | 7.426 | 0.609 | 0.705 |
| 39 | A39 | C | 7.300 | 6.596 | 7.282 | 0.607 | 0.499 |
| 40 | A40 | C | 7.594 | 6.882 | 7.391 | 0.603 | 0.578 |
| 41 | A41 | C | 7.632 | 6.856 | 7.417 | 0.651 | 0.655 |
| 42 | A42 | C | 7.628 | 6.814 | 7.524 | 0.605 | 0.691 |
| 43 | A43 | C | 7.798 | 7.457 | 7.650 | 0.651 | 0.061 |
| 44 | A44 | C | 7.842 | 7.157 | 7.684 | 0.503 | 0.583 |
| 45 | A45 | C | 7.732 | 7.221 | 7.592 | 0.632 | 0.328 |
| 46 | A46 | C | 7.704 | 7.494 | 7.568 | 0.702 | 0.059 |
| 47 | A47 | C | 7.720 | 7.159 | 7.720 | 0.653 | 0.438 |
| 48 | A48 | C | 7.883 | 7.288 | 7.559 | 0.651 | 0.443 |
| 49 | A49 | C | 7.801 | 6.943 | 7.658 | 0.503 | 0.737 |
| 50 | A50 | C | 7.793 | 7.134 | 7.631 | 0.353 | 0.537 |
| 51 | A51 | C | 7.530 | 6.245 | 7.183 | 0.653 | 0.860 |
| 52 | A52 | C | 7.216 | 5.988 | 7.256 | 0.601 | 0.940 |
| 53 | A53 | C | 7.806 | 6.359 | 7.619 | 0.815 | 0.932 |
| 54 | A54 | C | 7.508 | 6.729 | 7.315 | 0.581 | 0.458 |
| 55 | A55 | C | 7.230 | 6.709 | 7.320 | 0.601 | 0.069 |
| 56 | A56 | C | 8.064 | 6.277 | 7.776 | 0.653 | 1.504 |
| 57 | A57 | C | 7.330 | 6.585 | 7.287 | 0.852 | 0.339 |
| 58 | A58 | C | 7.160 | 6.395 | 7.235 | 0.609 | 0.478 |
| 59 | A59 | C | 7.202 | 6.146 | 7.199 | 0.907 | 0.549 |
| 60 | A60 | C | 7.462 | 6.726 | 7.357 | 0.592 | 0.583 |
| 61 | A61 | C | 7.498 | 6.677 | 7.473 | 0.603 | 0.699 |
| 62 | A62 | C | 7.609 | 6.536 | 7.434 | 1.051 | 0.771 |
| 63 | A63 | C | 7.398 | 6.643 | 7.300 | 1.101 | 0.460 |
| 64 | A64 | C | 7.610 | 6.638 | 7.200 | 0.551 | 0.369 |
| 65 | A65 | C | 7.668 | 6.787 | 7.640 | 0.553 | 0.599 |
| 66 | A66 | C | 7.443 | 6.700 | 7.381 | 1.103 | 0.142 |
| 67 | A67 | C | 7.499 | 6.612 | 7.424 | 1.302 | 0.566 |
| 68 | A68 | C | 7.765 | 6.583 | 7.711 | 0.902 | 0.787 |
| 69 | A69 | C | 7.773 | 6.680 | 7.781 | 0.905 | 0.842 |
| 70 | A70 | C | 7.542 | 6.467 | 7.468 | 0.803 | 0.323 |
| 71 | A71 | C | 7.656 | 7.209 | 7.501 | 0.943 | 0.044 |
| 72 | A72 | C | 7.584 | 6.098 | 7.481 | 0.907 | 0.982 |
| 73 | A73 | C | 7.735 | 6.420 | 7.694 | 0.953 | 0.682 |
| 74 | A74 | C | 7.906 | 7.050 | 7.662 | 0.951 | 0.364 |
| 75 | A75 | C | 8.218 | 7.184 | 7.967 | 0.958 | 0.549 |
| 76 | A76 | C | 7.362 | — | 7.255 | — | — |
| 77 | A77 | C | 7.642 | 6.956 | 7.500 | 1.053 | 0.281 |
| 78 | A78 | C | 7.746 | 6.849 | 7.648 | 1.005 | 0.499 |
| 79 | A79 | C | 7.464 | 6.535 | 7.361 | 0.706 | 0.674 |
| 80 | A80 | C | 7.360 | 6.792 | 7.293 | 0.705 | 0.315 |
| 81 | A81 | C | 7.553 | — | 7.595 | — | — |
| 82 | A82 | C | 7.609 | 6.945 | 7.555 | 0.781 | 0.512 |
| 83 | A83 | C | 7.727 | 7.135 | 7.533 | 0.653 | 0.391 |
| 84 | A84 | C | 7.649 | 6.618 | 7.493 | 0.650 | 0.475 |
| 85 | A85 | C | 7.703 | — | 7.593 | — | — |
| 86 | A86 | C | 7.521 | 6.802 | 7.487 | 0.565 | 0.517 |
| 87 | A87 | C | 7.635 | 6.580 | 7.583 | 0.654 | 0.749 |
| 88 | A88 | C | 7.748 | 6.920 | 7.598 | 0.653 | 0.476 |
| 89 | A89 | C | 7.668 | 6.810 | 7.590 | 0.659 | 0.593 |
| 90 | A90 | C | 7.761 | 6.847 | 7.577 | 0.655 | 0.678 |
| 91 | A91 | C | 8.757 | — | 7.744 | — | — |
| 92 | A92 | C | 8.231 | 7.489 | 8.061 | 1.056 | 0.614 |
| 93 | A93 | C | 8.318 | 7.363 | 8.219 | 0.615 | 0.760 |
| 94 | A94 | C | 8.356 | 7.811 | 8.054 | 0.605 | 0.359 |
| 95 | A95 | C | 7.765 | 6.900 | 7.631 | 0.632 | 0.613 |
| 96 | A96 | C | 7.944 | 6.999 | 7.863 | 0.653 | 0.684 |
| 97 | A97 | C | 7.987 | 7.015 | 7.967 | 0.615 | 0.747 |
| 98 | A98 | C | 8.131 | 7.237 | 8.006 | 0.593 | 0.689 |
| 99 | A99 | C | 6.471 | 5.806 | 6.359 | 0.601 | 0.476 |
| 100 | B1 | C | 6.568 | 6.161 | 6.380 | 0.621 | 0.206 |
| 101 | B2 | C | 5.492 | 4.342 | 5.275 | 0.721 | 0.965 |
| 102 | C1 | C | 5.993 | 5.434 | 5.947 | 0.701 | 0.374 |
| 103 | C2 | C | 5.862 | 4.874 | 5.638 | 0.700 | 0.808 |
| 104 | C3 | C | 5.904 | 5.024 | 5.703 | 0.911 | 0.695 |
| 105 | C4 | C | 6.098 | — | 6.065 | — | — |
| 106 | C5 | C | 6.700 | 5.939 | 6.546 | 0.921 | 0.257 |
| 107 | D1 | C | 5.947 | 5.481 | 5.729 | 0.852 | 0.265 |
| 108 | D2 | C | 7.185 | 6.300 | 7.167 | 0.725 | 0.380 |
| 109 | D3 | C | 6.770 | 5.881 | 6.517 | 0.658 | 0.568 |
| 110 | D4 | C | 7.194 | 6.227 | 6.804 | 0.702 | 0.616 |
| 111 | D5 | C | 6.517 | 5.863 | 6.395 | 0.715 | 0.403 |
| 112 | D6 | C | 6.433 | 5.738 | 6.109 | 0.751 | 0.540 |
| 113 | D7 | C | 6.816 | 5.664 | 6.685 | 0.721 | 0.631 |
| 114 | D8 | C | 6.904 | 6.047 | 6.788 | 0.601 | 0.456 |
| 115 | D9 | C | 7.199 | 6.075 | 6.930 | 0.585 | 0.619 |
| 116 | D10 | C | 7.068 | 6.079 | 7.024 | 0.701 | 0.584 |
| 117 | D11 | C | 7.410 | 6.347 | 7.181 | 0.751 | 0.053 |
| 118 | D12 | C | 7.217 | 6.624 | 7.052 | 0.893 | 0.421 |
| 119 | D13 | C | | | | | |

LEGEND

Drain Outlet

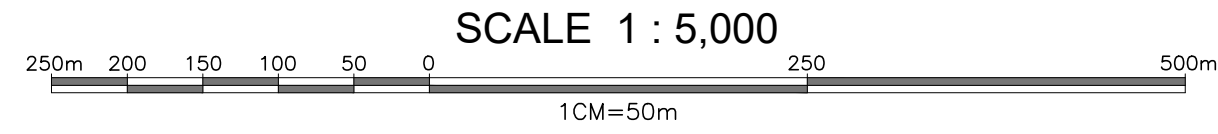
Drain With Reverse Gradient

Manhole's Inside not Accessible



| LIST OF CONTROL POINTS | | | | | | |
|------------------------|-----------|----------------|----------------|------------|-------------|-----------|
| SI. No. | Point No. | Latitude | Longitude | Easting(m) | Northing(m) | MSL RL(m) |
| 1 | T141 | 13°03'14.215"N | 80°13'55.667"E | 416144.509 | 1443229.554 | 9.38 |

| Remarks |
|------------------------|
| On top of RCC basement |



PROJECTION: The metric grid on this sheet is the UTM grid, Zone 44 N, WGS 84 Spheroid, M.S.L. Datum. All Dimensions are in Metres.

WARNING: This Map is not to be published, copied or reproduced in part or in whole either by photography or by any other means; should be kept in safe custody and handled by authorised persons only.

SHEET HISTORY: Base map compiled from the details/data provided by Greater Chennai Corporation (GCC) Surveyed between 19th December to 24th December 2020

Produced for the Project of Real Time Flood Forecasting and Spatial Decision Support System For Chennai by SECON-JBA under the World Bank funded Project Development Grant Fund (PDGF).

Roads: main; others; mud. Cart track.

Temple. Chhatri. Shrine. Mosque. Idgah. Tomb. Church.

Railways: broad gauge with station; bridge; metro.

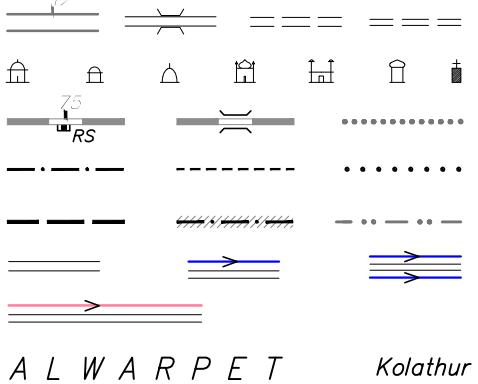
Boundary: state; district; taluk.

Boundary: CMA; zone; ward.

Roads: without drain; with onside drain; with both side drain.

Road with reverse gradient drain.

Spaced names: locality; village.



Drains: stormwater; feeder with flow direction. Invert level.

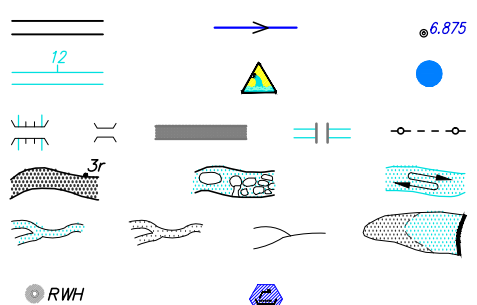
Canal. Outlet. Inundated area by previous flood..

Bridge with piers. Culvert. Flyover. Subway. Sewage line.

River: dry with water channel; with island & rocks. Tidal river.

Streams: perennial; non perennial; Single line: defined. Tank.

Rain water Harvesting. Stormwater pumping station.



| | | | |
|---------------------|---|-----------------------------|--------|
| CLIENT | GREATER CHENNAI CORPORATION (GCC) REPRESENTING COMMISSIONERATE OF REVENUE ADMINISTRATION AND DISASTER MANAGEMENT | | |
| FUNDED BY | PROJECT DEVELOPMENT GRANT FUND (PDGF) (Managed by Tamil Nadu Urban Infrastructure Financial Services Limited) | | |
| PROJECT | PLANNING, SETTING UP AND OPERATIONALIZING REAL TIME FLOOD FORECASTING SPATIAL DECISION SUPPORT SYSTEM FOR CHENNAI | | |
| TITLE | BASE MAP - STORM WATER DRAIN WARD No. 110, ZONE IX - TEYNAMPET NAGAR | | |
| PROJECT CONSULTANTS | SECON - JBA Consulting (India) (U.K.) JV | | |
| SHEET No. 25 OF 114 | SCALE 1:5000 | DRAWING No. CFM/SWD/WARD-25 | REV. 0 |