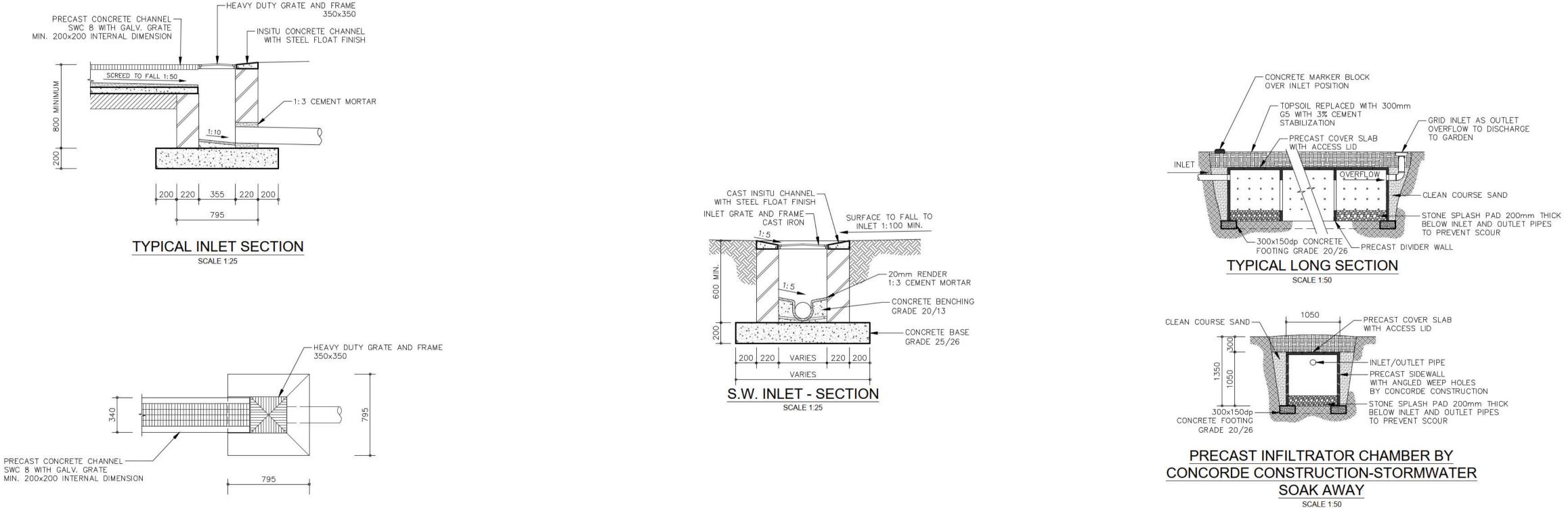
PRE DEVELOPMENT POST DEVELOPMENT Site Area (m²) 3064 Site Area (m²) 3064 LEGEND 1016 Roofed Area (m²) 0 Roofed Area (m²) 33 SF- SURFACE FLOW 1144 Road Area (m²) Road/Paved Area (m²) GL-350x350 WIDE OVERFLOW TO Landscaped (m²) Landscaped (m²) SOAK AWAY B GRATED INLET Unchanged Landscape 3064 Unchanged Landscape S.W MHz JOJO-60% OF 10000L JOJO TANK TO 3064 HEAVY DUTY PROVIDE 6m3 OF STORAGE VOLUME 350x350 18000x1000x1000dp -8000x1000x1000dp SOAK AWAY A 2160 m² Total hardened area: SOAK AWAY C (HARDENED AREA: 720m²/40=18m²) Total Volume provided by JOJO Tanks at 60% Capacity: 6,0 m³ (HARDENED AREA: $320m^2/40=8m^2$) 4 NO of Required JOJO Tanks: 10000 L 300mmø uPVC 95.4 S.W. PIPE 53,40 m³ PROVIDE 54 m³ Total soakaway volume (1m³ of storage per 40m² of hardened surfaces) HEAVY DUTY 350x350 SITE CO-ORDINATES 29°34' LONGITUDE 31°07' 250mmø uPVC S.W. PIPE 200mmø uPV¢ S.W. PIPE mø uPVC S.W. PIPE 160mmø uPVC~ SHEET 10 / 11 ONLINE-COPY **BUILDING APPLICATION** ETHEKWINI MUNICIPALITY APPROVED in terms Section 7 of the National Buildin Regulations and Building Standards Act No. 103/197 BLOCK A 18 Aug 2023 110mm SUBSOIL NR22060007 S.W SUMP~ LOCAL AUTHORITY DRAIN This plan is approved on the basis of the information shown herein. Attention is drawn to the attached documentation & that this approval HEAVY DUTY HEAVY DUTY SURFACE DISCHARGE 350x350 **APPLICATION NUMBER** 350×350 shall lapse ONE year after the above approval date, unless the erection of the building in terms of NBR Act 103/1977 is commenced ONTO PAVED SURFACE -110mm SUBSOIL DRAIN S.W. PIPE HEAVY DUTY HEAVY DUTY 350x350 350x350 S.W. PIPE THE CONTRACTOR IS TO ENSURE THAT DRAINAGE ELEMENTS ARE NOT DAMAGED DURING INSTALLATION OR BACKFILLING BEHIND THE STRUCTURE AND THE USE OF S.W. PIPE -S.W SUMP S.W. PIPE S.W. PIPE TEMPORARY PROTECTIVE BOARDS RAISED PROGRESSIVELY HEAVY DUTY -300mmø uPV0 HIGH DENSITY POLYETHYLENE DIMPLED DRAINAGE SHEET --160mmø uPVC WITH THE BACKFILL IS RECOMMENDED 350×350 S.W. PIPE VOLUME BETWEEN DIMPLES TO BE 5.5 Litres/m2 MIN. S.W. PIPE SURFACE DISCHARGE-DIMPLES FACING BIDUM AND CUPS FACING WALL ONTO PAVED SURFACE BLOCK /C S.W SUMP TORCH ON WATERPROOFING A4 BIDUM LAID AGAINST DIMPLED DRAINAGE SHEET-HEAVY DUTY TO SPECIALIST DETAIL AND INSTALLATION 4350x350 SHEETS TO OVERLAP EACH OVER BY 200mm MIN. WITH 300mm MIN. OVERLAP AT SUBSOIL DRAIN GRATED INLET OVERFLOW TO SOAK AWAY A - RETAINING WALL LS.W SUMP BIN ROOM SUBSOIL DRAIN WITH 19mm CRUSHED STONE -HEAVY DUTY 14000x2000x1000dp-WRAPPED IN A4 BIDUM WITH 300mm MIN. OVERLAP 350x350 SOAK AWAY B BLOCK D (HARDENED AREA: 1120m²/40=28m²) LS.W SUMP HEAVY DUTY — FOUNDATION GRANULAR BACKFILL WITH MAX. SIZE OF 37.5mm 350x350 S.W. PIPE COMPACT TO 93% MOD. AASHTO DENSITY AT OMC IN MAX. 150mm LAYERS S.W. PIPE −250mmø uPVC 110mm DIA. PERFORATED DRAINAGE PIPE -S.W. PIPE HEAVY DUTY LAID TO 2% FALL AND CONNECT INTO S.W. SYSTEM 350x350 └250mmø uPV S.W SUMP S.W. PIPE HEAVY DUTY LS.W MH 350x350 STORMWATER MANAGEMENT PLAN HEAVY DUTY 350x350 TYPICAL SECTION OF SUBSOIL DRAIN



CHANNEL INLET

ISSUED FOR SUBMISSION PURPOSES ONLY

MAINTENANCE:

CALCULATION OF SOAKAWAY VOLUME

- Silt Removal from culverts to be done on a regular basis to maintain optimum pipe
- Silt Removal from Attenuation Dams to be done on a regular basis to maintain storage capacity for Attenuation of Flood Peaks.
- Development to take place outside of the environmental buffer zones as per Environmental Recommendations (See EMP).

FUTURE MAINTENANCE:

- The engineer should be notified if there are any additions to the existing hardened area and attenuation points.
- Re-analyse if any a major changes occur in the channel cross section or/and additional controls (crossing) introduced into the system.
- Re-analyse flood lines if any further development occurs within the catchement.

DRAINAGE NOTES:

- All stormwater from roofs to discharge directly onto surfaces which drain to
- stormwater inlet manholes. All stormwater pipes to be class 51 u.o.n.
- Stormwater pipes laid beneath driveway to be class 34. All pipes to be laid at minimum fall of 1:80.
- All platforms to be shaped to fall to stormwater inlets, minimum fall 1:100. Platforms to be shaped such that overland flow overtops onto road.

PROJECT TITLE :

63 Plane Street

Waterways

Tongaat

DATE

STORMWATER MANAGEMENT PLAN

21 JUNE 2023



REVISION D