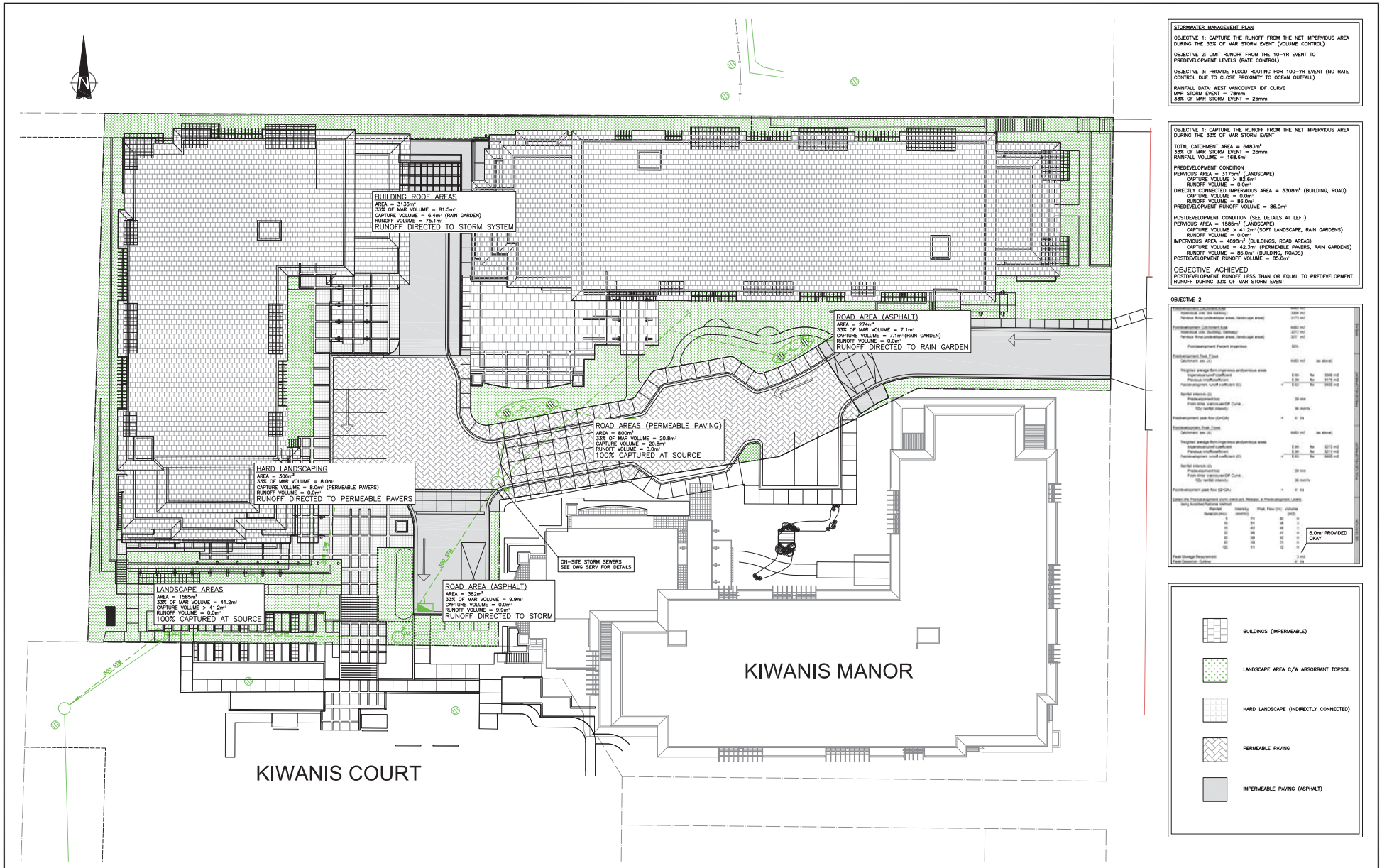

STORMWATER MANAGEMENT PLAN

OBJECTIVE 1: CAPTURE THE RUNOFF FROM THE NET IMPERVIOUS AREA DURING THE 33% OF MAR STORM EVENT (VOLUME CONTROL)

OBJECTIVE 2: LIMIT RUNOFF FROM THE 10-YR EVENT TO PREDEVELOPMENT LEVELS (RATE CONTROL)

OBJECTIVE 3: PROVIDE FLOOD ROUTING FOR 100-YR EVENT (NO RATE CONTROL DUE TO CLOSE PROXIMITY TO OCEAN OUTFALL)

RAINFALL DATA: WEST VANCOUVER IDF CURVE
MAR STORM EVENT = 78mm
33% OF MAR STORM EVENT = 26mm

OBJECTIVE 1: CAPTURE THE RUNOFF FROM THE NET IMPERVIOUS AREA DURING THE 33% OF MAR STORM EVENT

TOTAL CATCHMENT AREA = 6483m²
33% OF MAR STORM EVENT = 26mm
RAINFALL VOLUME = 168.6m³

PREDEVELOPMENT CONDITION
PERVIOUS AREA = 3175m² (LANDSCAPE)
CAPTURE VOLUME > 82.6m³
RUNOFF VOLUME = 0.0m³
DIRECTLY CONNECTED IMPERVIOUS AREA = 3308m² (BUILDING, ROAD)
CAPTURE VOLUME = 0.0m³
RUNOFF VOLUME = 86.0m³
PREDEVELOPMENT RUNOFF VOLUME = 86.0m³

POSTDEVELOPMENT CONDITION (SEE DETAILS AT LEFT)
PERVIOUS AREA = 1585m² (LANDSCAPE)
CAPTURE VOLUME > 41.2m³ (SOFT LANDSCAPE, RAIN GARDENS)
RUNOFF VOLUME = 0.0m³
IMPERVIOUS AREA = 4898m² (BUILDINGS, ROAD AREAS)
CAPTURE VOLUME = 42.3m³ (PERMEABLE PAVERS, RAIN GARDENS)
RUNOFF VOLUME = 85.0m³ (BUILDING, ROADS)
POSTDEVELOPMENT RUNOFF VOLUME = 85.0m³

OBJECTIVE ACHIEVED
POSTDEVELOPMENT RUNOFF LESS THAN OR EQUAL TO PREDEVELOPMENT RUNOFF DURING 33% OF MAR STORM EVENT

OBJECTIVE 2

BUILDINGS (IMPERMEABLE)

LANDSCAPE AREA C/W ABSORBANT TOPSOIL

HARD LANDSCAPE (INDIRECTLY CONNECTED)

PERMEABLE PAVING

IMPERMEABLE PAVING (ASPHALT)

no.	date	revision	chk'd	no.	date	revision	chk'd
3	JUL.07.11	REISSUED FOR DRC	DKD				
2	MAR.18.11	RESUBMISSION FOR DESIGN REVIEW	DKD				
1	FEB.14.11	ISSUED FOR PRELIMINARY SUBMISSION	DKD				

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approved

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