KEY:

PRIVATE DRAINAGE

- 150Ø, 1:80 — -SURFACE WATER DRAIN.
- S1 — -SURFACE WATER CHAMBER.
- SB1 — -SYPHONIC BREAK CHAMBER.
- R — -RAIN WATER DOWN PIPE.
- SDP — -SYPHONIC RAIN WATER DOWN PIPE.
- RE — -RODDING EYE.
- YG — -YARD GULLY, 100Ø OUTLET.
- RG — -ROAD GULLY, 150Ø OUTLET.
- SU — -CHANNEL DRAIN AND SUMP/GULLY UNIT.
- SPS — -SURFACE WATER PUMPING STATION.
- HB — -PUMPED SURFACE WATER RISING MAIN.
- -HYDRO-BRAKE FLOW CONTROL MANHOLE.
- -BELOW GROUND GEOLIGHT SURFACE WATER ATTENUATION STORAGE SYSTEM BY SDS (TEL: 01934 751 303).
- PI VENT T — -CLASS 1 BY-PASS SEPARATOR BY SPEL PRODUCTS (TEL: 01743 445 200) OR EQUIVALENT.
- 150Ø, 1:80 — -FOUL WATER DRAIN.
- F1 — -FOUL WATER CHAMBER.
- SS — -STUB STACK.
- AAV — -AIR ADMITTANCE VALVE (DURGO).
- SVP — -SOIL AND VENT PIPE.
- BIG — -TRAPPED BACK INLET GULLY, 100Ø OUTLET.
- FG — -TRAPPED FOUL GULLY, 100Ø OUTLET.
- SG — -RODDABLE, TRAPPED SHOWER GULLY, 100Ø OUTLET.
- TDG — -TUNDISH GULLY, 100Ø OUTLET.
- STG — -SEALED TOP GULLY, 100Ø OUTLET.
- OTG — -OPEN TOP GULLY, 100Ø OUTLET.
- 100Ø, 1:60 — -CONDENSATE DRAIN.
- Cd1 — -CONDENSATE DRAINAGE CHAMBER.
- AF — -CONDENSATE DRAINAGE ANTI-FLOOD CHAMBER (1500Ø)
- COG — -CONDENSATE OVERFLOW GULLY.
- CP — -CONDENSATE DRAIN POINT.
- Cd RE FAI — -CONDENSATE RODDING EYE WITH EXTERNALLY LOCATED FRESH AIR INLET (FAI).
- -CONDENSATE TRAP AND ANTI-FLOOD VALVE.

GENERAL

- -EXISTING LEVEL.
- x (50.00) -EXISTING LEVEL INTERPOLATED.
- x 50.00 -PROPOSED LEVEL.
- 1:50 -PROPOSED FALL.

FOOD PREP / CAFE / KITCHEN DRAINAGE

ANY AREA THAT HAS THE POTENTIAL TO ALLOW FATS AND GREASE INTO THE BELOW GROUND DRAINAGE SYSTEM TO BE SUITABLY TREATED AND DEALT WITH AT SOURCE TO PREVENT FATS AND GREASES FROM ENTERING SUBPENDED / BELOW GROUND DRAINAGE SYSTEM MANAGEMENT SYSTEM DESIGNED AND DETAILED BY M&E CONSULTANT.

EXISTING MANHOLE ASSUMED TO BE SOUTHERN WATER FOUL SEWER MANHOLE REF. 0603. CL=1.61 IL=-1.38

PROPOSED NEW CONNECTION SUBJECT TO AGREEMENT WITH AND APPROVAL FROM SEWER AUTHORITY.

BUS STOP

225Ø PUBLIC FOUL SEWER

EXISTING MANHOLE ASSUMED TO BE SOUTHERN WATER FOUL SEWER MANHOLE REF. 1701. CL=2.20 IL=+0.80

NEW MANHOLE TO SERVE DEVELOPMENT. MAXIMUM ALLOWABLE DISCHARGE RATE = 15l/s ALL RUN-OFF SUBJECT TO VEHICULAR TRAFFIC MUST PASS THROUGH SUITABLY SIZED CLASS 1 BY-PASS SEPARATOR DESIGNED AND DETAILED BY OFF SITE DEVELOPER. IL=0.894 AOD

PROPOSED FOUL & SURFACE WATER CONNECTIONS

EXISTING MANHOLE ASSUMED TO BE SOUTHERN WATER FOUL SEWER MANHOLE REF.: 1802. CL=2.08 IL=-0.55

PROPOSED NEW CONNECTIONS SUBJECT TO AGREEMENT WITH AND APPROVAL FROM SEWER AUTHORITY.

Ex. 1602 CL:2.06 IL -0.55

1200Ø OUTLET SUMP — IL=0.66 (2250Ø)

1200Ø INLET / OUTLET SUMP CHAMBER — IL=0.65 (2250Ø); IL=0.63 (3750Ø)

RAINWATER HARVESTING TANK (RHU) DESIGNED AND DETAILED BY M&E CONSULTANT. NOTE: INLET AND OUTLET PIPES INSTALLED LEVEL.

ACO Q-MAX 225 (IL=1.46) — ACO Q-MAX 550 (IL=0.85) — ACO Q-MAX 350 (IL=1.115) — ACO Q-MAX 350 (IL=1.25) — ACO Q-MAX 225 (IL VARIES) — ACO Q-MAX 350 (IL=1.165) — ACO Q-MAX 225 (IL=1.29)

1200Ø INLET / OUTLET SUMP CHAMBER — IL=1.10 (4500Ø); IL=1.00 (4500Ø); IL=0.52 (3750Ø); IL=0.50 (6000Ø); IL=1.04 (3750Ø); IL=1.14 (3750Ø); IL=1.225 (3750Ø); IL=1 (3750Ø)

1200Ø OUTLET CHAMBER — IL=1.00 (4500Ø); IL=0.49 (6000Ø); IL(OUT)=0.39 (6000Ø)

CLASS 1 BYPASS SEPARATOR, REF. NSB 30 330/C1/S/C/D 600/600 BY SPEL PRODUCTS. AREA DRAINED APPROX. 15000m² (1.50HA) IL(IN)=0.49 (6000Ø) IL(OUT)=0.39 (6000Ø)

BELOW GROUND SURFACE WATER ATTENUATION SYSTEM (LENGTH 32m, WIDTH (60m WIDE + 1.5m WIDE GRAVEL TRENCH), THICKNESS 0.5m (SINGLE LAYER) SDS GEOLIGHT UNITS (SDS UNITS PROVIDING 912m³ OF USABLE STORAGE)) UNITS TO BE FULLY WRAPPED AND SEALED TO PREVENT WATER INGRESS / EGRESS. TANK TO BE FULLY VENTED. SOFFIT LEVEL OF TANK = 0.65m AOD BASE LEVEL OF TANK =0.39m AOD

SANDWICH CABINET CONDENSATE POINT ASSUMED TO BE PUMPED USING INTEGRAL PUMP SYSTEM

PETROL FILLING STATION (PFS) PFS DESIGN, INCLUDING, EXTERNAL LEVELS AND BELOW GROUND FOUL AND SURFACE WATER DRAINAGE BY MARTINDALES.

PFS CANOPY / KIOSK ROOF SURFACE WATER OUTFALL MANHOLE. DRAINED AREA ASSESSED AS 520m². IL=0.98m AOD

VACUUM | AIR/WATER

JET WASH

ONE WAY — NO ENTRY — STORE — FUEL — EXIT

CLASS 1 BY-PASS SEPARATOR REF. NSB 8 209/C1/SC/A 300/300 BY SPEL PRODUCTS. AREA DRAINED APPROX. 37000m². IL(IN) = -0.44 (300Ø) IL(OUT) = -0.54 (300Ø)

MANHOLE WITH INTERNAL FLAP VALVE TO PREVENT WATER BACKING UP ONTO SITE.

HIGH LEVEL OVERFLOW PIPE TO DISCHARGE TO ALDINGBOURNE RITE IN THE EVENT OF PUMP FAILURE.

ACCESS AND SERVICE YARD TO BE USED FOR COMPENSATORY STORAGE FOR LOSS OF FLOOD PLAIN SUBJECT TO AGREEMENT OF ENVIRONMENT AGENCY.

NEW SURFACE WATER PUMP STATION DESIGNED AND DETAILED BY SPECIALIST. LOCATION OF CONTROL PANEL / KIOSK AND ALARM SYSTEM TO BE ADVISED BY CLIENT. CL=1.21 IL= -0.57 CLASS D400 ACCESS COVER CHAMBER DIAMETER = 3m 225Ø OVERFLOW IL = -0.57 MAXIMUM DISCHARGE RATE = 30l/s.

RISING MAIN TO DISCHARGE INTO NEW MANHOLE. IL=0.60

NEW MANHOLE BUILT OVER LINE OF EXISTING 450mm DIAMETER SURFACE WATER DRAIN. IL AT POINT OF NEW MANHOLE GIVEN BY SITE AS 0.25 m AOD. DIAMETER OF DRAIN CONFIRMED BY SITE.

EXISTING 450mm DIAMETER DRAIN

RAINWATER DOWN PIPE NOTE

ALL RAINWATER DOWN PIPES (RWP'S) (SYPHONIC AND GRAVITY) ARE INDICATIVE ONLY. FINAL CONFIRMATION OF LOCATIONS, DRAINED AREAS, FLOW RATES AND SIZES TO BE CONFIRMED BY SPECIALIST.

RISK ASSESSMENT

RESIDUAL RISKS IDENTIFIED.

1. ????????

CONTRACTOR'S GENERAL RISK ITEMS

(LIST IS NOT EXHAUSTIVE BUT INCLUDES COMMONLY RAISED ISSUES)

1. LOCATION OF ALL BURIED SERVICES.
2. EXISTING DRAINAGE:
   i) GASES, CONFINED SPACES, DISEASES.
   ii) MAINTAIN FLOW IN DRAINS DURING WORKS.
3. MANUAL LIFTING OF HEAVY OBJECTS; MANHOLE COVERS, DRAINAGE PIPES, CONCRETE RINGS, KERBS, etc.
4. EXCAVATION FOR DRAINAGE TRENCHES AND MANHOLES.
5. SECURITY:
   KEEP SITE SECURE FROM MEMBERS OF THE PUBLIC. MAINTAIN PUBLIC SAFETY WHEN ACCESSING SITE.

PRELIMINARY ISSUE

NOTES

1. DO NOT SCALE THIS DRAWING.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEER'S AND ARCHITECT'S DRAWINGS AND SPECIFICATIONS.
3. BASE DRAWING INFORMATION IS TAKEN FROM THE FOLLOWING:
   a. SHAW COLEGATE , 14107_TOPO , , REV A
   b. CHQ PARNERSHIP LTD , DRAWING TITLE PROPOSED SITE PLAN, CHQ-12-9691-400.
   b. CHQ PARNERSHIP LTD , PROPOSED STORE PLAN , 2296G01-SP, REV-
4. PUBLIC SEWER INFORMATION, AND STATUTORY SERVICE INFORMATION IF SHOWN IS BASED ON INFORMATION PROVIDED BY OR INTERPOLATED FROM PUBLIC SEWER AUTHORITY AND SERVICE PROVIDERS RECORDS. ALL INFORMATION RELATING TO SEWERS AND SERVICES TO BE VERIFIED ON SITE BY CONTRACTOR AND ENGINEER INFORMED IF INFORMATION DIFFERS FROM THAT SHOWN.
5. INVERT LEVELS OF EXISTING DRAINAGE AT PROPOSED OUTFALL TO BE VERIFIED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION OF ANY DRAINAGE.

Mark	Date	By	Chkd.	Revision notes
F	18/05/12			DISTRIBUTION PIPE THROUGH ATTENUATION TANK AMENDED TO TWIN 450Ø.
E	14/05/12			STORE PLAN UPDATED. FLOW RESTRICTION REMOVED FROM MANHOLE S1A.
D	08/05/12			CAR PARK DRAINAGE AMENDED.
C	02/05/12			SURFACE WATER DRAINAGE AMENDED.
B	23/04/12		NMH	STORE AND SITE PLAN UPDATED, DRAINAGE LAYOUT AMENDED TO SUIT.
-	12/04/12	DC		PRELIMINARY ISSUE.
-	23/03/12	DC		PRELIMINARY ISSUE.

Job Title: SAINSBURY'S BOGNOR REGIS.

Drawing Title: ENGINEERING LAYOUT. SHEET 1 OF 2.

Client: SAINSBURY'S SUPERMARKETS LTD .

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Scales	1:250		at A0
Dm.	Chkd.	Appd.	Date MAR'12

Job No. 28506 | Drawing No. 00400 | Rev. F

ARUN DISTRICT COUNCIL BE/A12/DOC