



# VERNHAM DEAN

- NOTES**
- DO NOT SCALE FROM THIS DRAWING. REFER TO FIGURED DIMENSIONS ONLY.
  - ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- LEGEND**
- HIGH RISK - CHANCE OF FLOODING 1 IN 30 YEAR (ANNUAL PROBABILITY IS 3.3% CHANCE OF FLOODING)
  - MEDIUM RISK - CHANCE OF FLOODING BETWEEN 1 IN 100 AND 1 IN 30 YEAR (ANNUAL PROBABILITY IS BETWEEN 1% AND 3.3% CHANCE OF FLOODING)
  - LOW RISK - CHANCE OF FLOODING BETWEEN 1 IN 1000 AND 1 IN 100 YEAR (ANNUAL PROBABILITY IS BETWEEN 0.1% AND 1% CHANCE OF FLOODING)
  - EXISTING SOUTHERN WATER FOUL WATER SEWER AND MANHOLE
  - EXISTING HIGHWAY SURFACE WATER DRAIN
  - EXISTING CULVERT, DITCH AND GRIPS
  - PROPOSED EARTH BUND
  - PROPOSED CULVERT
  - PROPOSED HIGHWAY DRAIN
  - PROPOSED TEMPORARY FLOOD BARRIER
  - PROPOSED NEW CUT DITCH
  - 10m CONTOURS
  - T+P TANKING AND PUMPING
  - P HOUSE PUMPING
  - F HOUSE FLOODED
  - S SPRING (GROUNDWATER EMERGENCE)
  - STF SEPTIC TANK FLOODING
  - G PROPOSED GULLY
  - R# COST REFERENCE. REFER TO SCHEDULE OF COSTS.

**FLOOD EFFECTS**

- ROADS RUNNING FULL WIDTH AT VARYING DEPTH.
- MANY BUILDINGS AFFECTED BY RISING GROUNDWATER.
- SOME BUILDINGS LOCATED ON THE LINE OF EMERGING GROUNDWATER.
- NO CONTRIBUTING FLOW FROM RIVERS AND STREAMS.
- HIGHWAY DRAINS OVERWHELMED DUE TO OUTFALLS (SOAKAWAY) CEASING TO BE EFFECTIVE.

**SUMMARY**

- OVERWHELMINGLY A GROUNDWATER FLOODING ISSUE.
- POOR MAINTENANCE MAY HAVE CONTRIBUTED TO SOME SURFACE FLOWS BUT WOULD NOT HAVE PREVENTED GROUND WATER FLOODING EVEN IF CLEAR.
- PROPERTY LEVEL PROTECTION IS THE SOLUTION TO BUILDING FLOODING.
- INCREASING THE SPEED THAT FLOW CAN PASS THROUGH VERNHAM DEAN WILL REDUCE DEPTH OF STANDING WATER IN ROADS AND GARDENS.
- DRAINAGE UNDER NORMAL CONDITIONS IS VIA INFILTRATION.

**ACTIONS**

- MAINTAIN ALL SURFACE WATER DRAINAGE ON A REGULAR BASIS.
- REDUCE LEVELS AT REAR OF CAR PARK AND ADJACENT PLAYING FIELDS.
- IMPROVE FLOW ROUTE BETWEEN 'TANGLEWOOD' AND SPORTS GROUND CAR PARK

No.5 FOUL WATER IN THE BUILDING

MANHOLE SUMP TO BE INSTALLED HERE TO ASSIST PUMPING

R4 - FLOOD ROUTE IN THIS SECTION TO BE IMPROVED

R5 - REDUCE GROUND LEVELS TO ALLOW SCHOOL FLOWS TO CLEAR MORE QUICKLY

OFFICIAL SOURCE OF THE BOURNE RIVULET (RIVER SWIFT)

MANHOLE SUMP INSTALLED BY PARISH TO ALLOW PUMPING OF FLOOD WATER IN FUTURE SHOULD PROTECT No.5

R1 - 'TANGLEWOOD' IS DIRECTLY IN THE FLOOD ROUTE. PROPERTY LEVEL PROTECTION REQUIRED. PROBABLY SHOULD NOT HAVE BEEN BUILT HERE. REMOVE BOUNDARY FENCE TO IMPROVE OVER LAND FLOW

R2 - INSTALL CULVERT UNDER CAR PARK TO DRAIN DOWN SCHOOL FIELD MORE QUICKLY

R3 - REDUCE GENERAL LEVEL OF PLAYING FIELD TO ALLOW VERNHAM DEAN TO CLEAR FLOODWATER MORE QUICKLY. LAND SURVEY REQUIRED.

**HIGHWAY FLOODING**

- THE ROAD IS THE FLOOD ROUTE IN MANY CASES.
- ADEQUATE MAINTENANCE OF F DITCHES AND GRIPS REQUIRED TO MINIMISE THE LENGTH OF THE TIME THE ROADS ARE FLOODED.
- FLOODING WILL ALWAYS OCCUR ON THESE ROADS GIVEN SUFFICIENTLY HIGH AND PROLONGED RAINFALL.

R6 - NEW DITCHES AND GRIPS TO BE CUT BEHIND FIELD BOUNDARY TO DRAIN WATER OFF ROAD. DOWNSTREAM IMPROVEMENTS WOULD NEED TO BE IMPLEMENTED BEFORE THIS WORK WAS DONE TO PREVENT INCREASE IN DOWNSTREAM FLOOD RISK.

R7 - BLOCKED PIPE CROSSING TO BE CLEARED

R8 - RE-PROFILE ROAD OR PROVIDE GULLIES. POOR VISIBILITY AND HOLDING WATER ON INSIDE EDGE. SUBSTANTIAL DAMAGE TO HEDGE AND VERGE DUE TO WATER SPLASH DAMAGE

R9 - DITCHES AND GRIPS TO BE RE-CUT

R10 - IMPROVE FLOW ROUTE THROUGH THESE SECTIONS TO DRAINS DOWN FURTHER. ACCESS TO PRIVATE LAND REQUIRED

**DRAFT**

0 10 20 30 40 50 60 70 80 90 100 150  
SCALE @ A0 1:2500 METRES  
SCALE @ A2 1:5000

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ORDNANCE SURVEY 100019180

PARTS OF THIS DRAWING SHOULD BE IN COLOUR  
IF THIS NOTE IS NOT RED, PLEASE CONTACT  
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REV	AMENDMENTS	DATE	CAD	CHKD	APPR

CLIENT  
**HAMPSHIRE COUNTY COUNCIL  
ECONOMY, TRANSPORT AND ENVIRONMENT DEPARTMENT  
STRATEGIC TRANSPORT**

CONSULTANT  
**Hampshire  
County Council**  
STUART JARVIS BSc DipTP FCIHT MRTPI DIRECTOR OF ECONOMY, TRANSPORT & ENVIRONMENT

DESIGNER SF  
CAD MJL  
CHECKED J  
APPROVED J  
SCHEME  
**BOURNE VALLEY  
FLOOD MANAGEMENT**  
JOB No. B-204876.01  
SCALE A2  
DATE  
07.04.2016

DRAWING TITLE  
**GENERAL ARRANGEMENT  
SHEET 1 OF 4**  
DRAWING NUMBER  
**EC-RJ504876-101**

FOR CONTINUATION OF DRAWING EC-RJ504876-102