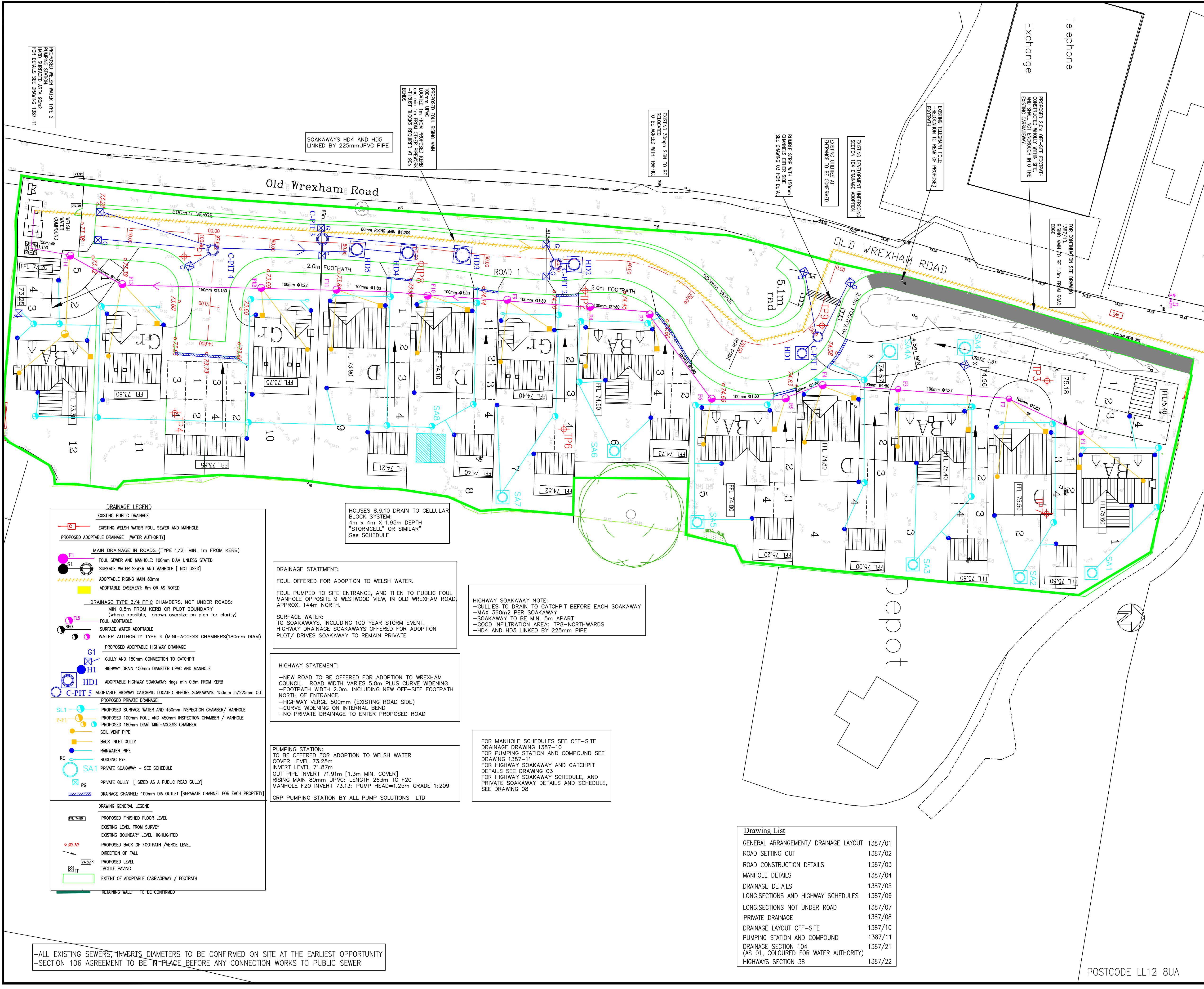




NOTES
Planning Layout information taken from ARCHITECTS Drawing Number PL1 JULY 2017 - Revision K BY CARTWRIGHT ARCHITECTURAL and PLANNING SERVICES
Survey information taken from PM SURVEYS Drawing Number PMS 17048-02, dated 18 APRIL 2017, to O.S. Datum

- ADOPTABLE DRAINAGE:**
- PIPE STRENGTH AND TYPE:
SEWERS FOR ADOPTION OF NOMINAL DIAMETER UP TO 900mm SHALL BE:
UPVC TO BS EN 1401-1 AND 12666-1 and SEWERS FOR ADOPTION 7th CI E2.21, E 2.22.
PIPES UP TO 500mm DIAMETER SHALL HAVE SHORT-TERM STIFFNESS NOT LESS THAN 8 kN/m² [SN8]
PIPES GREATER THAN 500mm DIAMETER SHALL HAVE SHORT-TERM STIFFNESS NOT LESS THAN 2 kN/m² [SN2]
OR
VITRIFIED CLAY FLEXIBLY JOINTED SPIGOT AND SOCKET IN ACCORDANCE WITH SEWERS FOR ADOPTION 7th CI E2.18 [UP TO 300mm DIAMETER]
DIAMETERS 375mm and OVER TO BE CLASS M CONCRETE TO BS5911 PART 100
 - MANHOLE AND CHAMBERS:
PPIC CHAMBERS TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7th CI E2.31 and PRECAST CONCRETE MANHOLES TO E2.32
ALSO TO BS EN 13598 PARTS 1 AND 2
 - BEDDING:
BEDDING SHALL BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7th CI E2.25, E5.2, E5.4
 - COVER:
MINIMUM COVER REQUIRED TO CROWN FOR ADOPTABLE DRAINAGE:
DOMESTIC GARDENS AND PATHS 0.35m
DRIVEWAYS, LIGHT PARKING AREAS 0.5m
PUBLIC OPEN SPACE 0.9m
ROADS 1.2m
COVER LESS THAN ABOVE WILL REQUIRE ADDITIONAL PROTECTION
 - MANHOLE COVERS:
ALL COVERS TO BE SO SEWERS FOR ADOPTION 7th CI 2.32 and BS EN 125, BS 7903.
CARRIAGEWAY / PARKING: CLASS D400 -HEAVY DUTY
FOOTWAY / LANDSCAPING: CLASS B125-MEDIUM DUTY
PRIVATE GARDEN: CLASS A15-LIGHT DUTY

ISING MAIN SPECIFICATION:
ISING MAIN TO BE 80mm DIAMETER UPVC, BLACK COLOUR, TO BE EN 13244.2 AND E2.33 SEWERS FOR ADOPTION
ALL BENDS TO BE LONG RADIUS
MINIMUM DEPTH TO CROWN TO BE 1.2m
HIGH / LOW POINTS TO BE AVOIDED: STRAIGHT RISE TO OUTFALL
NON-DEGRADABLE TAPES TO LAID 300mm ABOVE THE TOP OF THE PIPE
THRUST BLOCK AT BENDS SHALL BE GEN3 CONCRETE

CONTRACTOR TO ENSURE THAT THE UPVC PIPES MEET WELSH WATER ADOPTABLE STANDARDS.
EXAMPLES:
POLYPIPE RIGID DRAIN: DOES NOT COMPLY
POLYPIPE RIGI-SEWER DOES COMPLY
PIPES TO BE LAID IN 3m Lengths, OR 10 X DIAMETER

THE FOLLOWING ITEMS AWAIT CONFIRMATION:
EXACT LOCATIONS OF RWP AND SOIL PIPES

PENDING HIGHWAYS and WELSH WATER APPROVAL PRELIMINARY

E	SOAKAWAYS HD4A, HD5 ADDED	18:06:19	AK	AK
D	SOAKAWAYS REVISED	11:06:19	AK	AK
C	HIGHWAY COMMENTS / ROAD WIDTH TO 2m	01:05:19	AK	AK
B	COMPOUND REVISED	19:11:18	AK	AK
A	MORE INFORMATION ADDED	26:6:18	AK	AK
Rev	Description	Date	Drwn	Chkd

KANE DESIGN
Civil Engineering Design
15 Winchester Way
Gresford
Wrexham
LL12 8HH

Client
M & M DEVELOPMENTS LTD

Project
PROPOSED DEVELOPMENT at FORMER CARAVAN SITE, OLD WREXHAM ROAD, GRESFORD, WREXHAM

GENERAL ARRANGEMENT AND DRAINAGE LAYOUT

DRAWING NUMBER	SCALE	1:250	@ A1
1387/01	DATE	01:05:18	REVISION
	DRAWN	AK	E
	CHECKED	A.K	

DRAINAGE LEGEND

EXISTING PUBLIC DRAINAGE
EXISTING WELSH WATER FOUL SEWER AND MANHOLE
PROPOSED ADOPTABLE DRAINAGE (WATER AUTHORITY)

MAIN DRAINAGE IN ROADS (TYPE 1/2: MIN. 1m FROM KERB)

FOUL SEWER AND MANHOLE: 100mm DIA UNLESS STATED
SURFACE WATER SEWER AND MANHOLE [NOT USED]
ADOPTABLE RISING MAIN 80mm
ADOPTABLE EASEMENT: 6m OR AS NOTED

DRAINAGE TYPE 3/4 PPIC CHAMBERS, NOT UNDER ROADS:
MIN 0.5m FROM KERB OR PLOT BOUNDARY
(where possible, shown oversize on plan for clarity)

FOUL ADOPTABLE
SURFACE WATER ADOPTABLE
WATER AUTHORITY TYPE 4 (MINI-ACCESS CHAMBERS(180mm DIA))

PROPOSED ADOPTABLE HIGHWAY DRAINAGE
GULLY AND 150mm CONNECTION TO CATCHPIT
HIGHWAY DRAIN 150mm DIAMETER UPVC AND MANHOLE

ADOPTABLE HIGHWAY SOAKAWAY: rings min 0.5m FROM KERB
ADOPTABLE HIGHWAY CATCHPIT: LOCATED BEFORE SOAKAWAYS: 150mm in/225mm OUT

PROPOSED PRIVATE DRAINAGE:
PROPOSED SURFACE WATER AND 450mm INSPECTION CHAMBER / MANHOLE
PROPOSED 100mm FOUL AND 450mm INSPECTION CHAMBER / MANHOLE
PROPOSED 180mm DIA. MINI-ACCESS CHAMBER
SOIL VENT PIPE
BACK INLET GULLY
RAINWATER PIPE
RODDING EYE
PRIVATE SOAKAWAY - SEE SCHEDULE
PRIVATE GULLY [SIZED AS A PUBLIC ROAD GULLY]
DRAINAGE CHANNEL: 100mm DIA OUTLET [SEPARATE CHANNEL FOR EACH PROPERTY]

DRAINAGE GENERAL LEGEND
PROPOSED FINISHED FLOOR LEVEL
EXISTING LEVEL FROM SURVEY
EXISTING BOUNDARY LEVEL HIGHLIGHTED
PROPOSED BACK OF FOOTPATH / VERGE LEVEL
DIRECTION OF FALL
PROPOSED LEVEL
TACTILE PAVING
EXTENT OF ADOPTABLE CARRIAGEWAY / FOOTPATH
RETAINING WALL: TO BE CONFIRMED

DRAINAGE STATEMENT:
FOUL OFFERED FOR ADOPTION TO WELSH WATER.
FOUL PUMPED TO SITE ENTRANCE, AND THEN TO PUBLIC FOUL MANHOLE OPPOSITE 9 WESTWOOD VIEW, IN OLD WREXHAM ROAD, APPROX. 144m NORTH.
SURFACE WATER:
TO SOAKAWAYS, INCLUDING 100 YEAR STORM EVENT.
HIGHWAY DRAINAGE SOAKAWAYS OFFERED FOR ADOPTION PLOT/ DRIVES SOAKAWAY TO REMAIN PRIVATE

HIGHWAY STATEMENT:
-NEW ROAD TO BE OFFERED FOR ADOPTION TO WREXHAM COUNCIL. ROAD WIDTH VARIES 5.0m PLUS CURVE WIDENING
-FOOTPATH WIDTH 2.0m. INCLUDING NEW OFF-SITE FOOTPATH NORTH OF ENTRANCE.
-HIGHWAY VERGE 500mm (EXISTING ROAD SIDE)
-CURVE WIDENING ON INTERNAL BEND
-NO PRIVATE DRAINAGE TO ENTER PROPOSED ROAD

PUMPING STATION:
TO BE OFFERED FOR ADOPTION TO WELSH WATER
COVER LEVEL 73.25m
INVERT LEVEL 71.87m
OUT PIPE INVERT 71.91m [1.3m MIN. COVER]
RISING MAIN 80mm UPVC: LENGTH 263m TO F20
MANHOLE F20 INVERT 73.13: PUMP HEAD=1.25m GRADE 1:209
GRP PUMPING STATION BY ALL PUMP SOLUTIONS LTD

HIGHWAY SOAKAWAY NOTE:
-GULLIES TO DRAIN TO CATCHPIT BEFORE EACH SOAKAWAY
-MAX 360m2 PER SOAKAWAY
-SOAKAWAY TO BE MIN. 5m APART
-GOOD INFILTRATION AREA: TP8-NORTHWARDS
-HD4 AND HD5 LINKED BY 225mm PIPE

FOR MANHOLE SCHEDULES SEE OFF-SITE DRAINAGE DRAWING 1387-10
FOR PUMPING STATION AND COMPOUND SEE DRAWING 1387-11
FOR HIGHWAY SOAKAWAY AND CATCHPIT DETAILS SEE DRAWING 03
FOR HIGHWAY SOAKAWAY SCHEDULE, AND PRIVATE SOAKAWAY DETAILS AND SCHEDULE, SEE DRAWING 08

Drawing List

GENERAL ARRANGEMENT/ DRAINAGE LAYOUT	1387/01
ROAD SETTING OUT	1387/02
ROAD CONSTRUCTION DETAILS	1387/03
MANHOLE DETAILS	1387/04
DRAINAGE DETAILS	1387/05
LONG SECTIONS AND HIGHWAY SCHEDULES	1387/06
LONG SECTIONS NOT UNDER ROAD	1387/07
PRIVATE DRAINAGE	1387/08
DRAINAGE LAYOUT OFF-SITE	1387/10
PUMPING STATION AND COMPOUND	1387/11
DRAINAGE SECTION 104 (AS 01, COLOURED FOR WATER AUTHORITY)	1387/21
HIGHWAYS SECTION 38	1387/22

-ALL EXISTING SEWERS, INVERTS DIAMETERS TO BE CONFIRMED ON SITE AT THE EARLIEST OPPORTUNITY
-SECTION 106 AGREEMENT TO BE IN PLACE BEFORE ANY CONNECTION WORKS TO PUBLIC SEWER

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