2014 /428/91

TUNBRIDGE WELLS LOCAL PLAN

Site 5 Land at Greggs Wood
Blackhurst Lane
Tunbridge Wells

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SITE 5 - LAND AT GREGGS WOOD, BLACKHURST LANE, TUNBRIDGE WELLS

1 INTRODUCTION

1 1 In June 1992 an Agricultural Land Classification (ALC) survey was carried out on 78 ha of land to the north-east of Tunbridge Wells Kent ADAS was commissioned by MAFF to determine land quality affected by the proposal to include this site for development in the Tunbridge Wells Local Plan

1 2 The survey work was carried out by members of the Resource Planning Team within the Guildford Statutory Group at a detailed level of approximately 1 boring per hectare A total of 25 auger borings and two soil inspection pits were described and the site graded using MAFF s revised guidelines and criteria for grading the quality of agricultural land (MAFF 1988) These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose long term limitations on its agricultural use At the time of survey the site was in neglected permanent pasture

1 3 The distribution of grades is shown on the attached ALC map and the area and extent is given in the table below The map has been drawn at a scale of 1 10 000 any enlargement of this would be misleading

Distribution of Grades and Sub-grades

| Grade | Area (ha) | % total agricultural land |
|---|---|---|
| 1 | 1 90 | 7 |
| 2 | 15 68 | 54 |
| 3a | 5 64 | 19 |
| 3b | 2 19 | 8 |
| 4 | 3 50 | 12 |
| Total agricultural area | 28 91 | 100 |
| Non-Agricultural | 4 07 | |
| Woodland | 45 02 | |
| Total Area of site | 78 00 | |

1 4 Grades 1 2 3a 3b and 4 have been mapped at this locality Land assigned to grades 2 and 3a are subject to slight wetness or droughtiness limitations depending upon depths to gleying and slowly permeable horizons and depths over soft sandstone deposits respectively Areas of grades 3b and 4 have been mapped on the basis of gradient limitations Slopes of 7-14 were measured using an optical reading clinometer

## 2 PHYSICAL FACTORS AFFECTING LAND QUALITY

### Relief

2 1 The site ranges in altitude from 70m AOD towards the far north-west to 140m AOD along the south-eastern boundary Greggs Wood contains some areas of steeply sloping land but this has been mapped wholly as woodland Of the agricultural land on the site most falls gently from south to north However along both the eastern and to a greater extent the western boundary gradients were found to be limiting in terms of the agricultural use of the land Slope angles of 7-14 were measured using an optical reading clinometer and land has been graded 3b or 4 accordingly

### Climate

2 2 Estimates of climatic variables relevant to the assessment of agricultural land quality were obtained for representative locations in the survey area by interpolation from a 5 km gridpoint dataset (Met Office 1989)

### Climatic Interpolations

| Grid Reference | TQ608421 | TQ606415 | TQ602403 |
|---|---|---|---|
| Altitude (m MOD) | 75 | 100 | 140 |
| Accumulated Temperature ( days Jan-June) | 1431 | 1403 | 1358 |
| Average Annual rainfall (mm) | 751 | 770 | 799 |
| Field Capacity Days | 157 | 161 | 166 |
| Moisture Deficit Wheat (mm) | 107 | 102 | 96 |
| Moisture Deficit Potatoes (mm) | 99 | 94 | 85 |

2 3 The important parameters in assessing an overall climatic limitation are average annual rainfall as a measure of overall wetness and accumulated temperature as a measure of the relative warmth of a locality There is no overall climatic limitation affecting this site However climatic factors do affect the interactive limitations between soil and climate to influence soil wetness and droughtiness

### Geology and Soils

2 4 British Geological Survey (1971) Sheets 287 and 303 Sevenoaks and Tunbridge Wells respectively show the site to be predominantly underlain by deposits of Cretaceous Tunbridge Wells Sand with small outcrops of Wadhurst Clay and Recent Head deposits along the western fringe of the site

2 5 Soil Survey of England and Wales (1986) Sheet TQ64 Soils of Paddock Wood shows a number of soil series to be present within the survey area Most of the agricultural land surveyed comprises soils of the Curtisden Series These soils are described as moderately deep silty stagnogleyic argillic brown earths developed over Tunbridge Wells Sand (SSEW 1984) Curtisden Soils extend southwards through the central part of Greggs Wood Soils of the Pembury Conway/Hamble/Wickham and Cranbrook Series have been mapped beneath Greggs Wood with the Pembury Series silty typical brown earths over loams with interbedded sandstones (SSEW 1986) being most extensive

2 6 Detailed field examination of the soils on the site indicates the presence of fine and medium silty or sandy soils whose drainage status is variable but generally well to moderately well drained Occasional profiles rest directly over impenetrable (to soil auger) medium soft sandstone deposits at moderate depths (ie below about 65 cm)

## 3 AGRICULTURAL LAND CLASSIFICATION

3 1 The quality of the agricultural land on this site ranges from excellent to poor Grade 1 has been mapped where the limitations to agricultural use are non-existent or only very minor whereas Grade 4 has been assigned where severe limitations are present Land graded 2 and 3a is principally limited by the interaction between soil and climatic factors giving rise to soil wetness and/or droughtiness limitations Grades 3b and 4 are mapped where the main limitation is that of gradient

Grade 1

3 2 Land with no or very minor limitations to agricultural use represents 7% of the total agricultural area surveyed Profiles typically comprise non-calcareous fine sandy silt loam topsoils which may be very slightly stony (ie 2-3% by volume soft sandstone fragments) These overlie medium sandy silt loam subsoils which sometimes become more sandy with depth passing to medium sandy loam Subsoils contain 2-3% sandstone fragments by volume and may occasionally become impenetrable (to soil auger) over sandstone below about 95 cm Although profiles are gleyed from 28-45 cm subsoils are not slowly permeable and are thereby assigned to wetness class I

This land has good reserves of available water for plant growth and despite being slightly affected by groundwater gleying is generally freely draining and workable given the light soil textures and prevailing climatic conditions

Grade 2

3 3 Land of this quality accounts for the largest proportion of the agricultural land surveyed (ie 54%)

It occurs in two different situations

- Most of the land assigned to this grade is primarily affected by a soil wetness limitation but occasionally slight soil droughtiness may also be affecting the land to an equal degree

Non-calcareous fine sandy silt loam or silt loam topsoils which may be very slightly stony overlie similar textures in the upper subsoil and pass to heavier textures such as medium or heavy silty clay loam below about 45-55 cm depth Subsoils contain variable quantities of stone typically in the range 2-15% sandstone fragments by volume and occasionally become impenetrable over sandstone below 62 cm

Profiles are gleyed from 27cm and within 45 cm and were typically found to be slowly permeable below 42 to 55 cm Wetness Class II or III was assigned depending upon depth to gleyed and slowly permeable horizons and land graded 2 according to the interaction of drainage status with topsoil texture Those profiles which were impenetrable over sandstone within 65-70 cm were also limited to grade 2 by a slight risk of soil droughtiness Otherwise land is solely limited by slight soil wetness

- A number of profiles were found to be well drained Wetness Class I or II but were primarily limited by slight soil droughtiness Profiles are similar to those described previously the difference being that they contain slightly more sandy horizons ie sandy loam loamy sand or very occasionally sand and/or are more stony in the subsoil (ie 5-15% sandstone by volume) and/or are shallow over sandstone from 67 cm The risk of slight soil droughtiness is therefore the overriding limitation to agricultural use not soil wetness

Grade 3a

3 4 Land assigned to this grade comprises soil profiles which are less well drained than those described in section 3 3 Non-calcareous silt loam topsoils overlie similar textures or medium silty clay loam subsoils They are generally deep (only very occasionally do they become impenetrable over sandstone below 100 cm) and only very slightly stony (2-5% sandstone fragments by volume)

Profiles are gleyed from below the topsoil and slowly permeable below about 45 cm and are thus assigned to Wetness Class III These drainage characteristics combine with silt loam topsoils to give rise to a slight soil wetness limitation such that grade 3a is appropriate

Grade 3b

3 5 A number of small units of sub-grade 3b have been mapped across the site the limitation to agricultural use being that of gradient Slope angles were measured using an optical reading clinometer and where gradient exceeds 7 but is less than 11 subgrade 3b is assigned On slopes of this degree difficulties will be experienced with the operation of mechanised farm machinery and equipment

Grade 4

3 6 Two units of grade 4 have been mapped where gradients exceed 11 (angles of 11-14 were recorded across these areas) On this land the safe and efficient operation of farm machinery will be severely restricted and the assessment of poor quality agricultural land reflects this

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2014/428/91

Resource Planning Team
ADAS Reading

SOURCES OF REFERENCE


- BRITISH GEOLOGICAL SURVEY (1971) Sheet 287 Sevenoaks

- BRITISH GEOLOGICAL SURVEY (1971) Sheet 303 Tunbridge Wells

- MAFF (1988) Agricultural Land Classification of England and Wales Revised guidelines and criteria for grading the quality of agricultural land

- METEOROLOGICAL OFFICE (1989) Climatological datasets for Agricultural Land Classification

- SOIL SURVEY OF ENGLAND AND WALES (1984) Bulletin 15 Soils and their use in South-East England

- SOIL SURVEY OF ENGLAND AND WALES (1986) Sheet TQ64 Soils of Paddock Wood and accompanying bulletin

| SAMPLE NO | GRID REF | USE | ASPECT | GRDNT | GLEY | SPL | WETNESS CLASS | WHEAT GRADE | WHEAT AP | WHEAT MB | POTS AP | POTS MB | M REL DRT | FLOOD | EROSN EXP | FROST DIST | CHEM LIMIT | ALC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | TQ60604200 | PAS | N | 01 | 042 | 042 | 3 | 2 | 182 | 80 | 137 | 43 | 1 | | | | WE | 2 | |
| 4 | TQ60704200 | PAS | N | 01 | 045 | 045 | 3 | 2 | 139 | 37 | 138 | 44 | 1 | | | | WE | 2 | |
| 8 | TQ60504190 | PAS | N | 04 | 024 | | 2 | 2 | 105 | 3 | 108 | 14 | 2 | | | | WD | 2 | |
| 9 | TQ60604190 | PAS | N | 05 | 038 | 055 | 3 | 2 | 132 | 30 | 147 | 53 | 1 | | | | WE | 2 | |
| 10 | TQ60704190 | PAS | E | 03 | 045 | | 1 | 1 | 146 | 44 | 127 | 33 | 1 | | | | | 1 | |
| 12 | TQ60404180 | PAS | W | 06 | 038 | | 1 | 1 | 150 | 48 | 139 | 45 | 1 | | | | | 1 | |
| 12P | TQ60404180 | PAS | W | 06 | 042 | | 1 | 1 | 000 | 0 | 000 | 0 | 1 | | | | | 1 | |
| 13 | TQ60504180 | PAS | W | 03 | 030 | 045 | 3 | 3A | 000 | 0 | 000 | 0 | 2 | | | | WE | 3A | |
| 13P | TQ60504180 | PAS | W | 03 | 029 | 045 | 3 | 3A | 134 | 32 | 136 | 42 | 2 | | | | WE | 3A | |
| 14 | TQ60604180 | PAS | E | 03 | 030 | 060 | 3 | 3A | 165 | 63 | 151 | 57 | 1 | | | | WE | 3A | |
| 15 | TQ60704180 | PAS | E | 04 | 032 | | 1 | 1 | 122 | 20 | 132 | 38 | 2 | | | | DR | 2 | |
| 16 | TQ60804180 | PAS | E | 06 | 028 | | 1 | 1 | 173 | 71 | 131 | 37 | 1 | | | | | 1 | |
| 18 | TQ60404170 | PAS | W | 06 | 045 | 068 | 2 | 1 | 180 | 78 | 142 | 48 | 1 | | | | | 1 | |
| 19 | TQ60504170 | PAS | W | 05 | 045 | 080 | 2 | 2 | 192 | 90 | 154 | 60 | 1 | | | | WE | 2 | |
| 20 | TQ60604170 | PAS | E | 03 | 032 | 055 | 3 | 2 | 167 | 65 | 133 | 39 | 1 | | | | WE | 2 | |
| 21 | TQ60704170 | PAS | E | 02 | 026 | 026 | 4 | 3B | 131 | 29 | 124 | 30 | 2 | | | | WE | 3B | |
| 23 | TQ60504160 | PAS | W | 04 | 028 | | 2 | 1 | 118 | 16 | 128 | 34 | 2 | | | | DR | 2 | |
| 24 | TQ60604160 | PAS | E | 06 | 085 | | 1 | 1 | 110 | 8 | 92 | 2 | 2 | | | | DR | 2 | |
| 25 | TQ60404150 | PAS | E | 06 | 055 | 055 | 2 | 1 | 181 | 79 | 146 | 52 | 1 | | | | GR | 4 | Slope |
| 26 | TQ60504150 | PAS | W | 05 | 045 | | 1 | 1 | 132 | 30 | 143 | 49 | 1 | | | | | 1 | |
| 27 | TQ60604150 | PAS | E | 06 | 028 | 045 | 3 | 3A | 170 | 68 | 135 | 41 | 1 | | | | WE | 3A | |
| 28 | TQ60704150 | PAS | E | 06 | 037 | 060 | 3 | 2 | 132 | 30 | 145 | 51 | 1 | | | | WE | 2 | |
| 31 | TQ60604140 | PAS | N | 01 | 023 | | 2 | 1 | 88 | 14 | 88 | 6 | 3A | | | | DR | 3A | |
| 32 | TQ60704140 | PAS | E | 05 | 020 | 045 | 3 | 3A | 164 | 62 | 128 | 34 | 1 | | | | WE | 3A | |
| 35 | TQ60604130 | PAS | NE | 05 | 065 | | 1 | 1 | 118 | 16 | 105 | 11 | 2 | | | | DR | 2 | |
| 36 | TQ60704130 | PAS | NE | 03 | 027 | 050 | 3 | 2 | 145 | 43 | 140 | 46 | 1 | | | | WE | 2 | |
| 41 | TQ60704120 | PAS | NE | 03 | 055 | | 1 | 1 | 159 | 57 | 122 | 28 | 1 | | | | | 1 | |

| SAMPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | ABUN | CONT | PED COL | GLEY | STONES 2 | 6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 27 | fszl | 10YR53 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27 42 | fszl | 10YR64 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 42 65 | mzcl | 10YR64 00 | 10YR66 00 | C | | 25Y 70 80 | Y | 0 | 0 | MSST | 5 | | M | | | Y | | |
| | 65 95 | fsl | 25Y 72 00 | 10YR68 00 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 95 120 | hzcl | 25Y 70 80 | 10YR68 00 | M | | 25Y 70 80 | Y | 0 | 0 | | 0 | | M | | | | | |
| 4 | 0 27 | fs l | 10YR52 53 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27 45 | fszl | 10YR63 00 | 10YR74 00 | F | | | | 0 | 0 | MSST | 5 | | M | | | | | |
| | 45 77 | h cl | 10YR63 00 | 10YR66 00 | M | | 25Y 70 80 | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 77 85 | mzcl | 10YR63 00 | 10YR66 00 | M | | | Y | 0 | 0 | MSST | 15 | | M | | | Y | | Imp 85+ msst |
| 8 | 0 24 | zl | 10YR42 52 | 10YR74 76 | C | | | | 0 | 0 | | 0 | | | | | | | |
| | 24 50 | m l | 10YR63 73 | 25Y 82 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 50 60 | lms | 10YR63 73 | 10YR66 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 60 62 | lms | 10YR63 73 | 10YR66 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | | Imp 62+ m t |
| 9 | 0 32 | fszl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 32 38 | zl | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 38 55 | l | 10YR62 00 | 10YR66 00 | C | | 10YR72 82 | Y | 0 | 0 | | 0 | | M | | | | | Few Mn concs |
| | 55 70 | mzcl | 25 Y80 00 | 10YR66 00 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | Imp 70 msst |
| 10 | 0 30 | fszl | 10YR52 42 | | | | | | 2 | 0 | MSST | 2 | | | | | | | |
| | 30 45 | ms l | 10YR53 00 | | | F | 10YR52 00 | | 0 | 0 | MSST | 3 | | M | | | | | |
| | 45 52 | msl | 10YR53 00 | 10YR52 00 | C | | 10YR72 00 | Y | 0 | 0 | MSST | 3 | | M | | | | | |
| | 52 95 | msl | 10YR72 73 | 10YR58 00 | C | | | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| 12 | 0 29 | fszl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | Imp 95+ msst |
| | 29 38 | fs l | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 38 50 | fszl | 10YR53 00 | | | C | 10YR72 00 | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 50 58 | mszl | 10YR53 00 | | | C | 10YR72 00 | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 58 70 | msl | 10YR54 00 | | | F | 10YR72 00 | | 0 | 0 | | 0 | | M | | | | | |
| | 70 80 | lms | 10YR54 00 | | | F | 10YR72 00 | | 0 | 0 | | 0 | | M | | | | | |
| | 80 120 | ms | 10YR54 00 | | | | | | 0 | 0 | MSST | 2 | | M | | | | | |
| 12P | 0 28 | fszl | 10YR52 00 | | | | | | 1 | 0 | MSST | 1 | | | | | | | |
| | 28 42 | fszl | 10YR53 00 | | | | | | 2 | 0 | MSST | 2 | MDCOAB FM | M | | | | | Commo worm holes |
| | 42 70 | ms l | 10YR53 00 | 10YR72 71 | C | | | Y | 2 | 0 | MSST | 2 | MDCOAB FM | M | | | | | Becomi g die |
| | 70 85 | lms | 10YR54 00 | 10YR72 00 | F | | | | 2 | 0 | MSST | 2 | WKCOAB VF | M | | | | | |
| | 85 120 | ms | 10YR54 00 | | | | | | 2 | 0 | MSST | 2 | SGRAIN VF | M | | | | | Almost str ct reles |
| 13 | 0 30 | zl | 10YR42 52 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 30 45 | mzcl | 10YR62 00 | 10YR58 00 | C | | 25Y 80 00 | Y | 0 | 0 | | 0 | | M | | | | | Common Mn concs |
| | 45 82 | h cl | 25Y 80 00 | 10YR66 00 | M | | | Y | 2 | 0 | MSST | 2 | | M | | | Y | | Imp 82 msst |
| 13P | 0 29 | zl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 29 54 | mzcl | 25Y 80 00 | 10YR66 68 | M | | | Y | 0 | 0 | | 0 | MDVCAB XF | P | Y | | Y | | Common Mn concs |
| | 54 120 | h cl | 25Y 80 00 | 10YR66 68 | M | | | Y | 0 | 0 | | 0 | STCPRM XF | P | Y | | Y | | Fewer roots |

| SAMPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | ABUN | CONT | PED COL | GLEY | STONES 2 | 6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 0 30 | zl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 30 60 | zl | 25 Y74 00 | 10YR66 00 | C | | 25 Y80 00 | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 60 100 | mzcl | 25 Y74 72 | | M | | 25 Y80 00 | Y | 0 | 0 | MSST | 2 | | M | | | Y | | Imp 100+ msst |
| 15 | 0 32 | fszl | 10YR52 00 | | | | | | 3 | 0 | MSST | 3 | | | | | | | |
| | 32 45 | mszl | 10YR53 00 | 10YR58 00 | C | | 10YR64 00 | Y | 0 | 0 | MSST | 3 | | M | | | | | Common Mn concs |
| | 45 72 | mszl | 25 Y74 00 | 10YR58 00 | C | | 10YR73 00 | Y | 0 | 0 | MSST | 3 | | M | | | | | Imp 72+ msst |
| 16 | 0 28 | fs l | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 28 120 | mszl | 10YR63 00 | 75YR58 00 | C | | 10YR72 00 | Y | 0 | 0 | MSST | 3 | | M | | | | | Fe Mn co cs |
| 18 | 0 26 | fszl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 26 45 | fs l | 10YR53 00 | 10YR73 00 | F | | | | 0 | 0 | | 0 | | M | | | | | |
| | 45 68 | fsl | 10YR53 00 | 75YR56 00 | C | | 10YR82 00 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 68 100 | mzcl | 25Y 70 80 | 10YR66 76 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 100 120 | mzcl | 25Y 70 80 | 10YR66 76 | C | | | Y | 0 | 0 | MSST | 5 | | M | | | Y | | |
| 19 | 0 27 | zl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27 45 | zl | 10YR53 00 | | F | | 10YR62 00 | | 0 | 0 | MSST | 2 | | M | | | | | |
| | 45 80 | l | 10YR64 00 | 10YR66 00 | C | | 10YR62 72 | Y | 0 | 0 | MSST | 5 | | M | | | | | Few Mn concs |
| | 80 120 | hzcl | 25 Y80 70 | 10YR64 66 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| 20 | 0 32 | fs l | 10YR42 00 | | | | | | 0 | 0 | MSST | 1 | | | | | | | |
| | 32 55 | m l | 10YR53 63 | 10YR74 00 | C | | | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 55 75 | mz l | 10YR64 00 | 75YR68 00 | C | | 25Y 70 00 | Y | 0 | 0 | MSST | 5 | | M | | | Y | | |
| | 75-100 | mzcl | 10YR68 00 | 25Y 70 00 | F | | | Y | 0 | 0 | MSST | 10 | | M | | | Y | | |
| | 100 120 | hzcl | 25Y 70 80 | 10YR66 00 | M | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| 21 | 0 26 | mzcl | 10YR53 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 26 75 | hzcl | 25Y 70 80 | 10YR66 00 | M | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 75 90 | mzcl | 10YR73 00 | 10YR66 00 | M | | 25Y 70 80 | Y | 0 | 0 | | 0 | | M | | | Y | | Imp 90 |
| 23 | 0 28 | fs l | 25Y 52 00 | | | | | | 0 | 0 | MSST | 2 | | | | | | | |
| | 28 40 | f zl | 10YR63 00 | 10YR76 00 | C | | 10YR82 00 | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 40 60 | mcl | 10YR63 00 | 10YR76 00 | C | | 10YR82 72 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 60 67 | mcl | 10YR63 00 | 10YR76 00 | C | | 10YR72 82 | Y | 0 | 0 | MSST | 10 | | M | | | | | Imp 67 msst |
| 24 | 0 32 | msl | 10YR42 00 | | | | | | 0 | 0 | MSST | 2 | | | | | | | |
| | 32 50 | msl | 10YR43 00 | 10YR66 00 | F | | 10YR74 00 | | 0 | 0 | MSST | 5 | | M | | | | | |
| | 50 85 | lms | 10YR43 00 | 10YR66 74 | F | | | | 0 | 0 | MSST | 15 | | M | | | | | |
| | 85 120 | lms | 10YR74 00 | 10YR66 00 | C | | 10YR72 00 | Y | 0 | 0 | MSST | 10 | | M | | | | | |
| 25 | 0 34 | fs l | 10YR53 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 34 55 | zl | 10YR53 63 | | | | | | 0 | 0 | MSST | 2 | | M | | | | | |
| | 55 85 | mzcl | 75YR53 00 | 10YR74 00 | F | | | Y | 0 | 0 | | 0 | | M | | | Y | | Few Mn concs |
| | 85 120 | mzcl | 10YR54 64 | 10YR56 66 | F | | | Y | 0 | 0 | | 0 | | M | | | Y | | Common Mn concs |
| 26 | 0 26 | fszl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 26 45 | f l | 10YR53 00 | | | | 10YR52 00 | | 0 | 0 | MSST | 5 | | M | | | | | |
| | 45 70 | fs l | 10YR62 00 | 10YR58 00 | C | | 10YR72 00 | Y | 0 | 0 | MSST | 10 | | M | | | | | Imp 70+ msst |

| SAMPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | ABUN | CONT | PED COL | GLEY | STONES 2 | 6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 0 28 | zl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 28 120 | mzcl | 10YR74 00 | 10YR66 00 | F | | 10YR62 72 | Y | 0 | 0 | MSST | 2 | | M | | | Y | | |
| 28 | 0 22 | fszl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 22 37 | fszl | 75YR56 00 | 10YR74 84 | F | | | | 0 | 0 | | 0 | | M | | | | | |
| | 37 60 | fszl | 10YR68 00 | 25Y 70 80 | C | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 60 70 | mzcl | 10YR73 00 | 10YR66 00 | M | | 25Y 70 80 | Y | 0 | 0 | | 0 | | M | | | | | Imp 70+ |
| 31 | 0 23 | fszl | 10YR42 00 | | | | | | 0 | 0 | MSST | 5 | | | | | | | |
| | 23 40 | zl | 10YR74 00 | 10YR66 00 | C | | 25Y 70 00 | Y | 0 | 0 | MSST | 5 | | M | | | | | |
| | 40 42 | zl | 10YR74 00 | 10YR66 00 | C | | 25Y 70 00 | Y | 0 | 0 | MSST | 15 | | M | | | | | Imp 42+ stone |
| 32 | 0 20 | zl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 20 65 | mzcl | 10YR63 00 | 10YR66 00 | M | | 10YR72 00 | Y | 0 | 0 | MSST | 5 | | M | | | Y | | SPL 45+ |
| | 65 120 | mzcl | 25Y 80 00 | 10YR66 00 | C | | | Y | 0 | 0 | MSST | 1 | | M | | | Y | | |
| 35 | 0 23 | msl | 10YR42 52 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 23 35 | msl | 10YR52 54 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 35-65 | msl | 75YR56 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 65 100 | ms | 10YR53 00 | 10YR66 00 | C | | 10YR62 00 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 100 120 | ms | 10YR81 82 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| 36 | 0 27 | fszl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27 50 | f l | 10YR53 00 | 10YR74 00 | C | | | Y | 0 | 0 | MSST | 2 | | M | | | | | |
| | 50 60 | h l | 10YR63 00 | 10YR66 00 | C | | 10YR71 00 | Y | 0 | 0 | MSST | 5 | | M | | | Y | | |
| | 60 80 | h cl | 10YR71 00 | 10YR66 00 | M | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 80 90 | mzcl | 10YR63 00 | 10YR66 00 | C | | 10YR71 00 | Y | 0 | 0 | MSST | 15 | | M | | | Y | | Imp 90 to y |
| 41 | 0 35 | ms l | 10YR42 52 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 35 45 | mszl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 45 55 | mszl | 10YR42 00 | 10YR66 00 | F | | | | 0 | 0 | MSST | 5 | | M | | | | | |
| | 55 70 | msl | 10YR53 00 | 10YR56 00 | C | | 40YR62 00 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 70 105 | ms l | 10YR53 00 | 10YR56 00 | C | | 10YR62 00 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 105 120 | lms | 10YR73 00 | 10YR56 00 | C | | 10YR72 00 | Y | 0 | 0 | MSST | 5 | | M | | | | | |

SOIL PIT DESCRIPTION

Site Name TWLP GREGGS WOOD Pit N mber 13P

G id Reference TQ60504180 A e age Ann al Ra nfall 770 mm
Acc m lated Temperat e 1403 deg days
F eld Capacity Le el 161 days
Land Use
Slope and Aspect 03 degrees W

| HORIZON | TEXTURE | COLOUR | STONES 2 | TOT STONE | MOTTLES | STRUCTURE |
|---|---|---|---|---|---|---|
| 0 29 | ZL | 10YR52 00 | 0 | 0 | | |
| 29 54 | MZCL | 25Y 80 00 | 0 | 0 | M | MDVCAB |
| 54 120 | HZCL | 25Y 80 00 | 0 | 0 | M | STCPRM |

Wetness Grade 3A Wetness Class III
Gleying 029 cm
SPL 045 cm

Drought Grade 2 APW 134mm MBW 32 mm
APP 136mm MBP 42 mm

FINAL ALC GRADE 3A
MAIN LIMITATION Wetness

SOIL PIT DESCRIPTION

Site Name TWLP GREGGS WOOD P t N mber 12P

Grid Reference TQ60404180 A erage Ann al Rainfall 770 mm
Acc m lated Temperature 1403 deg ee days
Field Capacity Le el 161 days
Land Use
Slope and Aspect 06 degrees W

| HORIZON | TEXTURE | COLOUR | STONES 2 | TOT STONE | MOTTLES | STRUCTURE |
|---|---|---|---|---|---|---|
| 0 28 | FSZL | 10YR52 00 | 1 | 1 | | |
| 28 42 | FSZL | 10YR53 00 | 2 | 2 | | MDCOAB |
| 42 70 | MSZL | 10YR53 00 | 2 | 2 | C | MDCOAB |
| 70 85 | LMS | 10YR54 00 | 2 | 2 | F | WKCOAB |
| 85 120 | MS | 10YR54 00 | 2 | 2 | | SGRAIN |

Wetness Grade 1 Wetness Class I
Gl y g 000 cm
SPL No SPL

Dro ght G ade 1 APW 000mm MBW 0 mm
APP 000mm MBP 0 mm

FINAL ALC GRADE 1
MAIN LIMITATION