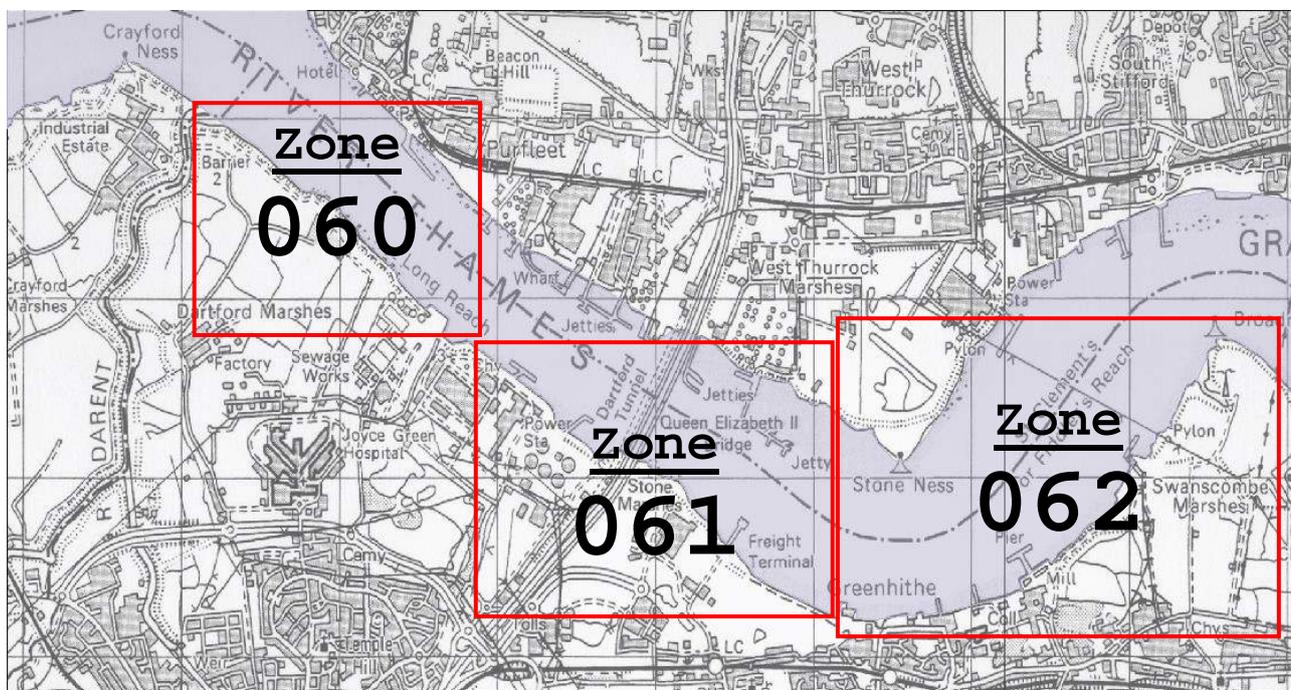


22.5 - Dartford Borough Council – Thames Foreshore (Dartford Creek to Broadness)

22.5.1 Ordnance Survey Landranger base

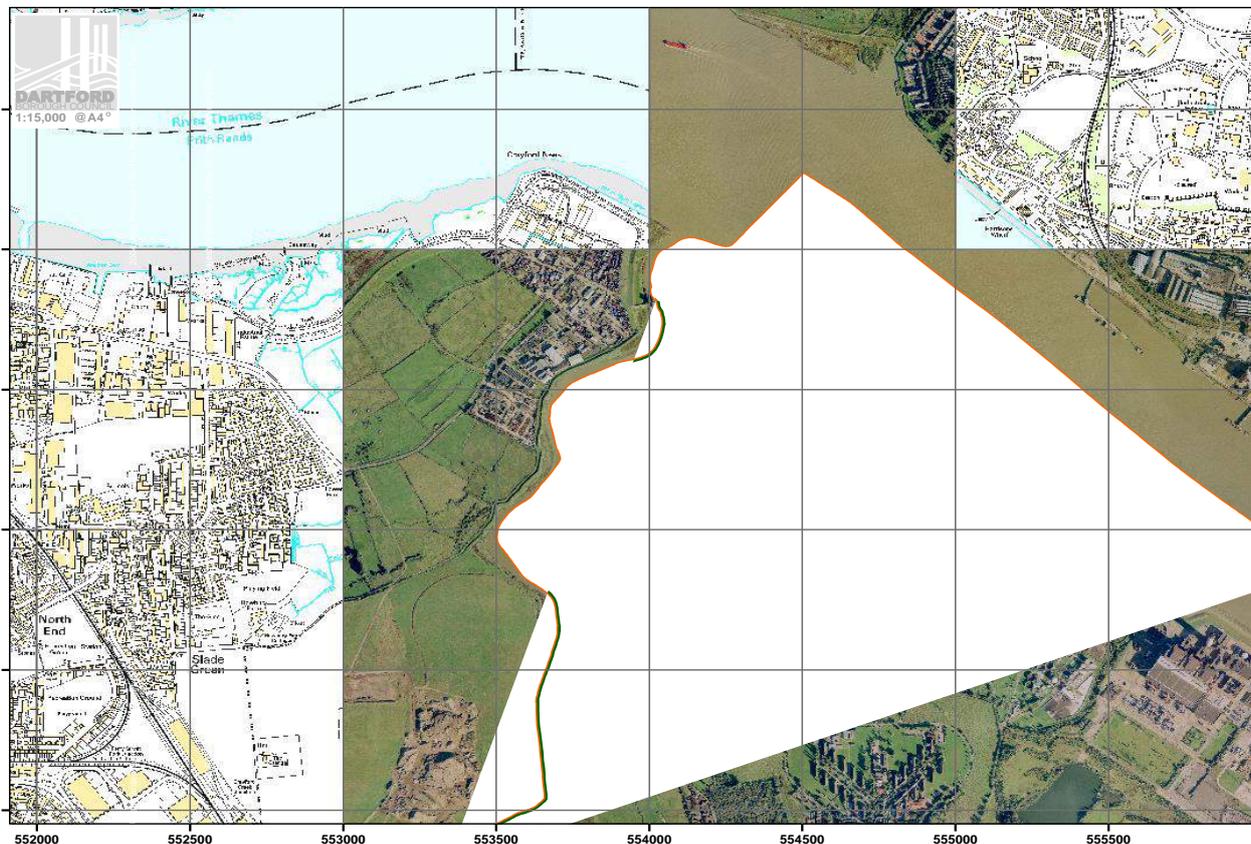


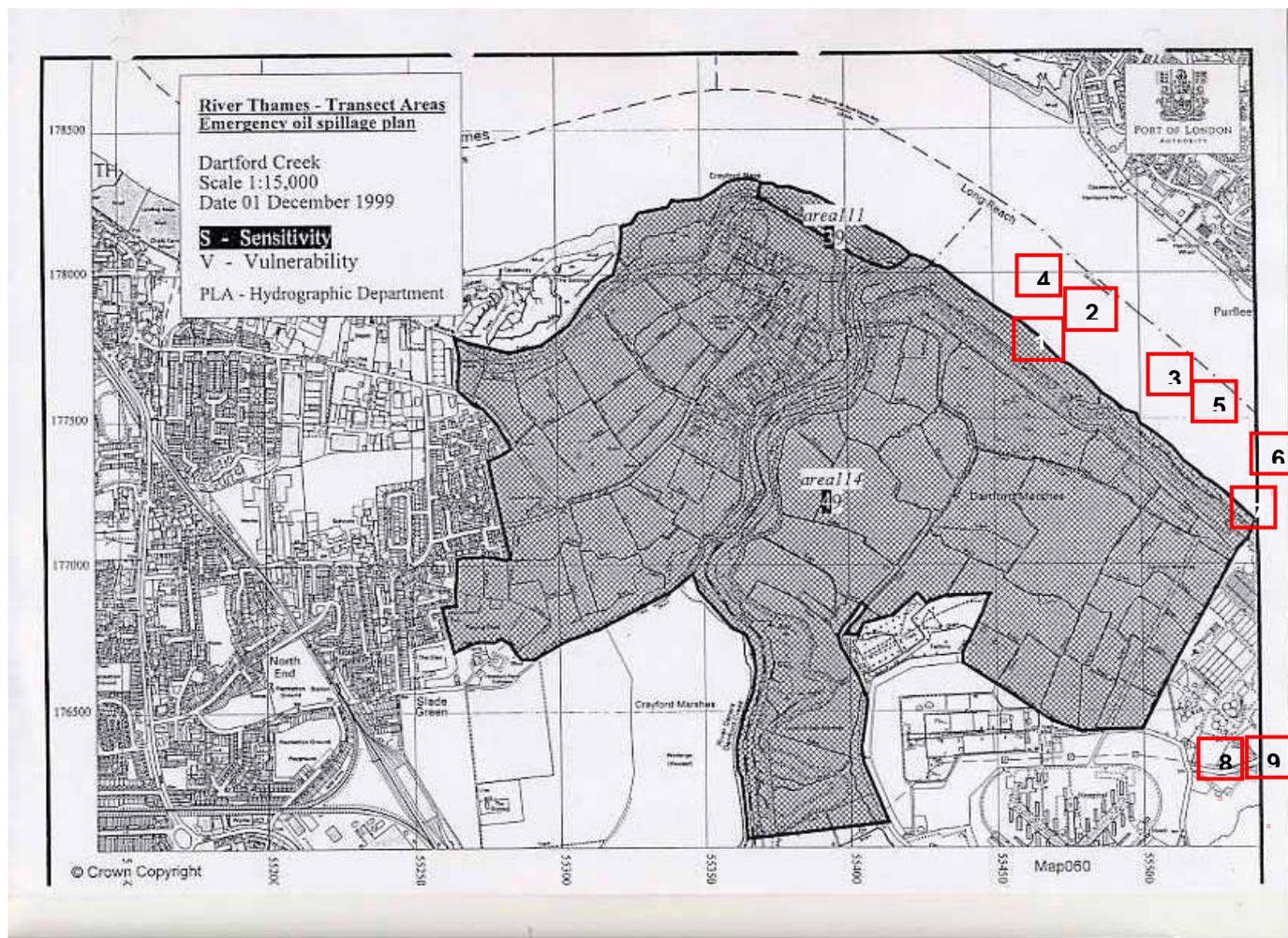
22.5.2 Ordnance Survey Aerial base

(to be inserted)

22.6 – Dartford Zonal Plans

22.6.1 Zonal Plan 060 – Dartford Creek















Zone: Dartford Creek Shoreline section: Map number 060

General description of shoreline:

Muddy shores backed by jetties and earth or structural seawalls.

Dartford and Crayford Marshes have been identified as a Local Nature Reserve for their dyke flora and fauna and remnant grazing marsh.

A moveable flood barrier is situated at the mouth of the River Darent to protect the Darent from inundation from the Thames. There is a booming plan for the Darent estuary.

The shoreline at the western extent of zone from Dartford Creek comprises areas of bare mud exposed at low tide and vegetated saltmarsh. To the east towards the Longreach Sewage Treatment Works the shoreline is typified by sporadically vegetated tidal defences comprising cobbles set in gently sloping concrete revetments. Below the defences a strip of sand, shingle and cobbles above mud is exposed at low tide.

Seasonal sensitivity (L=low, M=moderate, H=high):

| | Conservation | Amenity | Industrial |
|--------|---------------------|----------------|-------------------|
| Spring | High | Moderate | Low |
| Summer | High | Moderate | Low |
| Autumn | High | Moderate | Low |
| Winter | High | Moderate | Low |

Clean-up recommendations:

Prohibited! Exercise extreme caution before entering muddy areas, do not enter saltmarsh or exposed mud as these areas are sensitive to disturbance and damage. Leave oil to degrade naturally. – take advice from English Nature.

Recommended. Early preventative intervention using sorbant mats / barriers recommended. Follow storage and disposal instructions.

Strandline oil and contaminated debris may be collected manually from man-made tidal defences and sand/shingle/cobble substrates. Care should be taken to protect vegetated areas on the tidal defences and sand/shingle/cobbles.

A booming plan exists for Dartford Creek – extreme care must be taken during boom deployment to avoid damage to sensitive habitats.

Access routes to foreshore:

Main access route onto the Thames tidal defences footpath for 4x4 vehicles is via Littlebrook Power Station (Route 60/1).

Access for larger vehicles to Dartford Creek is possible via the former Joyce Green Hospital access off Bob Dunn Way. Please take note a padlocked Environment Agency controlled gate interrupts this route (Route 60/2).

Route 60/1: access to this length of foreshore can be gained from Littlebrook Power Station. The entrance to the power station is signposted from Junction 1a on the A282 (M25). At the security gatehouse to the Power Station follows the safety procedures and directions of the site operators in order to open to the flood door. After passing through the opening of the flood door turn immediately left (West) and follow the tracked path past Long Reach Sewage Treatment Works.

Route 60/2: access to western foreshore, from Darent Creek Barrier to Long Reach Sewage Treatment Works, for vehicles up to light goods, rubber tyred plant, disposal/skip lorries from Bob Dunn Way. Turn northwards into Joyce Green Lane and at first roundabout take first exit. There are three gates across this road at various intervals any of which may be closed and padlocked – telephone the Environment Agency on 08708 506506 to obtain information regarding keyholders contact details. There are two routes to the foreshore from this road, either can be used. There are various other footpaths over which vehicular access is difficult

Ecology considerations:

The western extent of zone comprising Dartford Creek eastwards to the Longreach Sewage Treatment Works forms part of the designated Dartford Marshes County Wildlife Site. The expanse of saltmarsh at the mouth of Dartford Creek and the tidal margins of its upstream channel supports a diverse flora including sea club rush (*Scirpus maritimus*), saltmarsh rush (*Juncus gerardii*), Borrer's saltmarsh grass (*Puccinellia fasciculata*), greater saltmarsh grass (*Puccinellia pseudodistans*), common saltmarsh grass (*Puccinellia maritima*), reflexed saltmarsh-grass (*Puccinellia distans*), English scurvygrass (*Cochlearia anglica*), sea arrowgrass (*Triglochia maritime*), common glasswort (*Salicornia ramosissima*), lesser sea-spurrey (*Spergularium marina*), sea aster (*Aster tripolium*), sea-purslane (*Halimione portulacoides*), sea plantain (*Plantago maritima*) and dittander (*Lepidium latifolium*). The tidal mudflats at the mouth of Dartford Creek support a typical estuarine crustacean and mollusc fauna. During summer months flocks of common tern (*Sterna hirundo*) gather to roost on the mudflats and saltmarsh at the mouth of the Creek. Dartford Creek is an important nursery ground for smelt (*Osmerus eperlanus*) a Kent Red Data Book migratory fish species.

Intermittent patches of vegetation on and below the tidal defences support a varied flora dominated by sea aster (*Aster tripolium*) and sea beet (*Beta vulgaris ssp maritima*). The rare (Kent Red Data Book Status 1) black redstart (*Phoenicurus ochruros*) nests within the tidal defences of this zone. The outfall from the Longreach Sewage Treatment Works attracts large numbers of sea birds.

Amenity impact:

The River Thames tidal defences footpath runs the length of this zone, forming an attractive walking route. It may be necessary to close the public footpath during clean-up operations within this zone.

Industrial & economic implications:

The Long Reach Sewage Treatment Works is situated at the eastern extent of this zone. The outfall from the treatment works is situated a short distance off-shore.

Other contacts:

Long Reach Sewage Treatment Works (via Thames Water)
Call Centre Tel. 0845 9200800
Ex-directory Emergency Contact Tel. 01793 431993

To gain access to foreshore / River Thames tidal defences via Littlebrook Power Station
Tel. 01322 271121

To ensure Gate is opened on track access to Dartford Creek off Bob Dunn Way contact
Environment Agency Southern Region Emergency Tel. 0800 252676 or Control Room
Enquiries (24 hour) Tel 01903 832323

Zonal Oil Pollution Officer

Name: David Court
Address:
Tel. Nos:01322 343434 (office)
(home)
(mobile)

Deputy ZOPO

Name: Tony Spence
Address:
Tel. Nos:01322 343434 (office)
(home)
(mobile)

Beach Master (1st)

Name: Ken Follett
Tel.01322 343434 office
0845 6341212 out of hours

Beach Master (2nd)

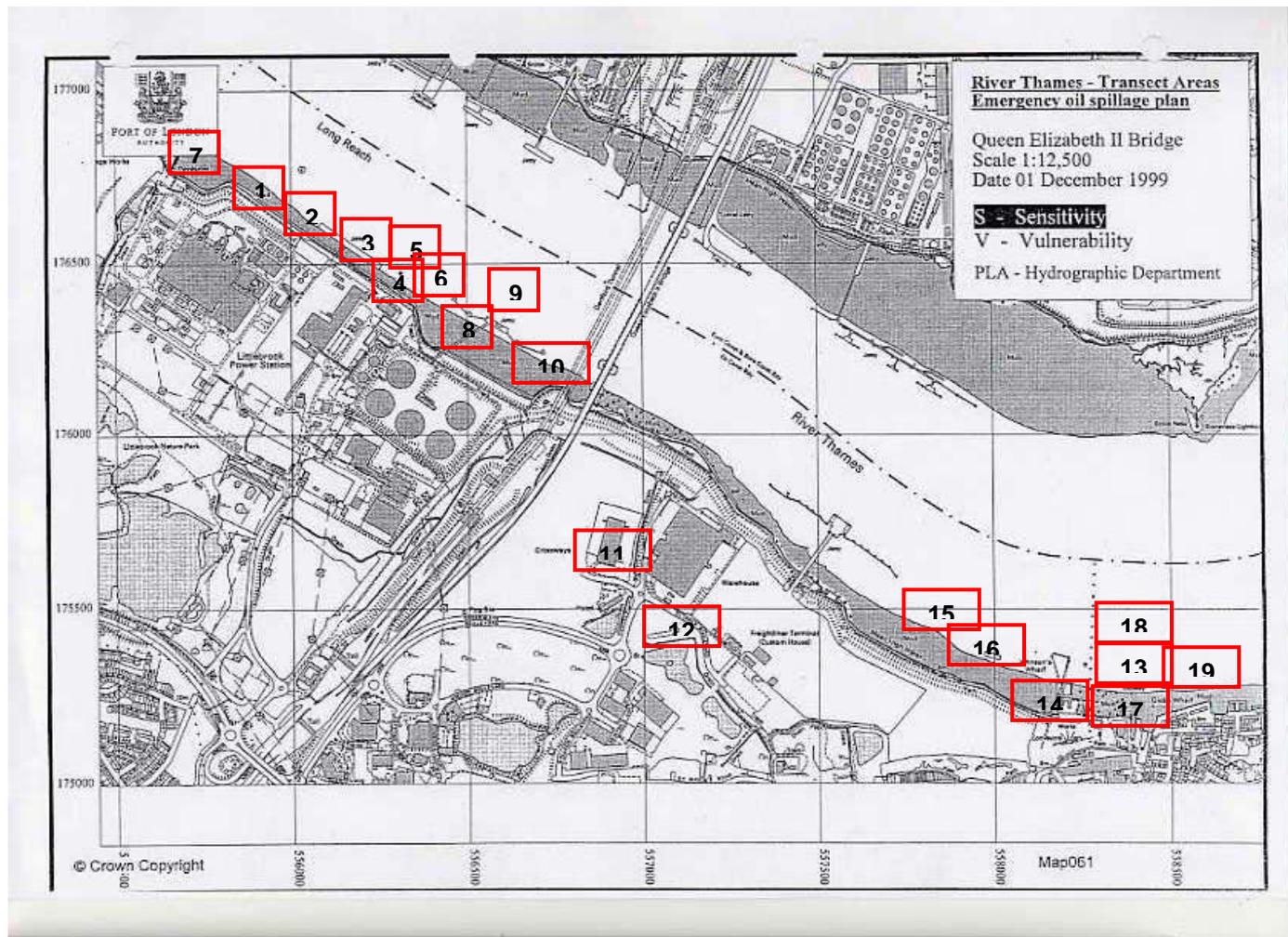
Name: Dave Clark
Tel.01322 343434 office
0845 6341212 out of hours

Other relevant information:

Booming plan details for Dartford Creek may be found at section 6.7.2.

22.6.2 Zonal Plan 061 – Queen Elizabeth II Bridge



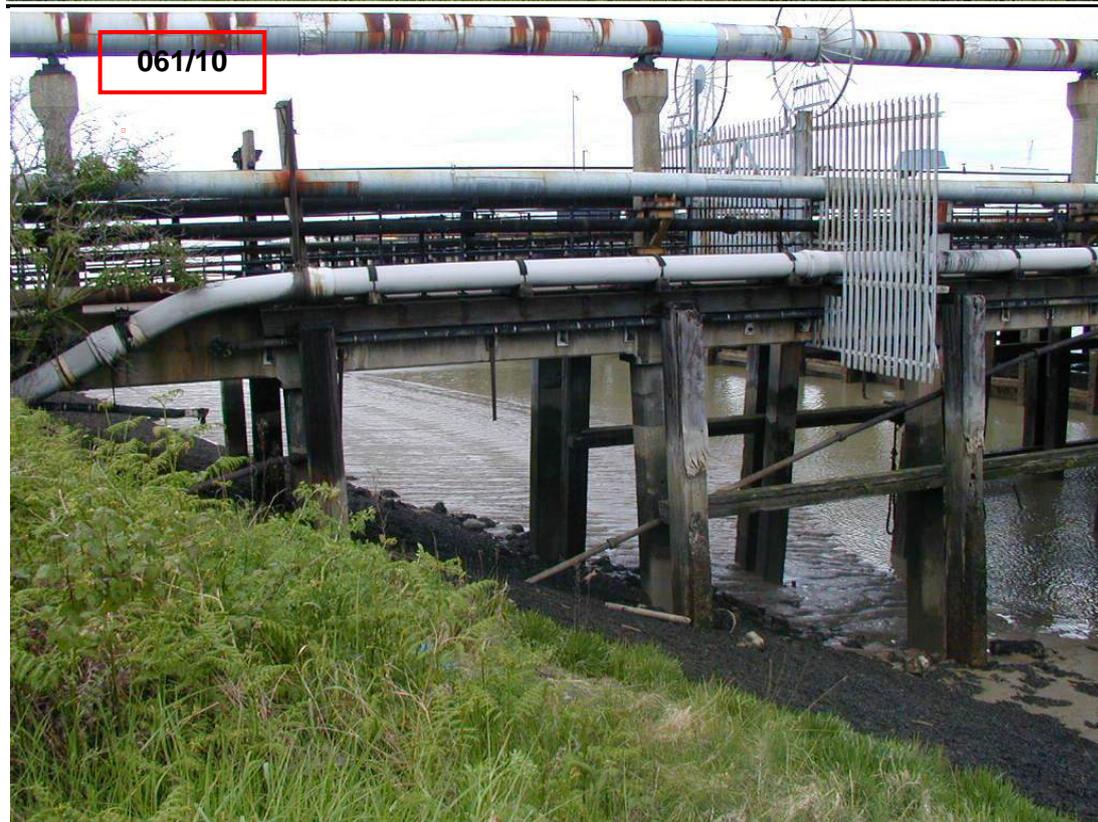






















Zone: **Queen Elizabeth II Bridge**
 Shoreline section: **Map number 061**

General description of shoreline:

A heavily modified stretch of shoreline with concrete and cobble sea wall to the west of the zone and concrete and metal piles with timber boarding to the east of the zone. Industry and transportation infrastructure dominate with redevelopment for housing a feature of the eastern extent of this zone. Below the defences a strip of sand, shingle and cobbles above mud is exposed at low tide. Small patches of saltmarsh persist at the foot of the defences and some vegetation has taken a hold on the structures themselves. A number of jetties and wharfs associated with industrial activity are a feature of this zone

Seasonal sensitivity (L=low, M=moderate, H=high):

| | Conservation | Amenity | Industrial |
|--------|---------------------|----------------|-------------------|
| Spring | Moderate | Low | High |
| Summer | Moderate | Low | High |
| Autumn | Moderate | Low | High |
| Winter | Moderate | Low | High |

Clean-up recommendations:

Prohibited: Do not enter saltmarsh or exposed mud as these areas are sensitive to disturbance and damage. Leave oil to degrade naturally.

Recommended: Early preventative intervention using sorbant mats / barriers recommended.

Strandline oil and contaminated debris may be collected manually from man-made tidal defences and shingle substrates. Care should be taken to protect vegetated areas on the tidal defences and shingle/cobbles. If bulk oil accumulates on the tidal defences and on sand/shingle/cobble shoreline low pressure seawater flushing may be effective. Re-mobilised oil must be collected and recovered using booms and skimmers

operated from shallow draft vessels at high water.

Seawater flushing of Jetties and QEII bridge piers may need to be considered. Entrapment of oil between tides within voids behind piles and boarding at the eastern extent of zone is a potential complicating factor.

Access routes to foreshore:

Main access route onto the Thames tidal defences footpath for 4x4 vehicles is via Littlebrook Power Station.

Access to the eastern extent of the zone is via private access roads and Station Road

Ecology considerations:

Though a heavily modified zone sand/shingle/cobbles and mudflats below the defences support a typical estuarine crustacean, annelid and mollusc fauna - which in turn attracts predatory fish and bird species.

Patches of saltmarsh and vegetated areas on the defences support a diverse flora including saltmarsh rush (*Juncus gerardii*), Borrer's saltmarsh grass (*Puccinellia fasciculata*), greater saltmarsh grass (*Puccinellia pseudodistans*), common saltmarsh grass (*Puccinellia maritima*), reflexed saltmarsh-grass (*Puccinellia distans*), English scurvygrass (*Cochlearia anglica*), sea arrowgrass (*Triglochia maritima*), common glasswort (*Salicornia ramosissima*), lesser sea-spurrey (*Spergularium marina*), sea aster (*Aster tripolium*), sea-purslane (*Halimione portulacoides*), sea beet (*Beta vulgaris* ssp. *Maritima*), sea plantain (*Plantago maritima*) and annual sea-blite (*Suaeda maritima*).

Sea birds congregate and roost on jetties within this zone including a small colony of cormorant (*Phalacrocorax carbo*).

Amenity impact:

The River Thames tidal defences footpath runs the length of the western sector of this zone forming a walking route. It may be necessary to close the public footpath during clean-up operations within this zone.

There is no public access to the central sector of this zone, though this area does comprise an element of panoramic views from vehicles traveling into Kent across the QEII Bridge.

Residential development overlooks the shoreline at the eastern extent of the zone with public access to defences.

Industrial & economic implications:

Littlebrook Power Station is a seawater extractor and must be alerted as a priority if pollution is threatened

Other contacts:

To alert to oil pollution incidents and/or gain access to foreshore / River Thames tidal defences contact Littlebrook Power Station 24 hour tel. 01322 271121.

Le Crossing Ltd. Control Room Duty Officer
24 hour tel. 01322 221603

Dartline (Europort) tel. 01322 281122

Beach Master (1st)

Name: Ken Follett

Tel.01322 343434 office
0845 6341212 out of hours

Beach Master (2nd)

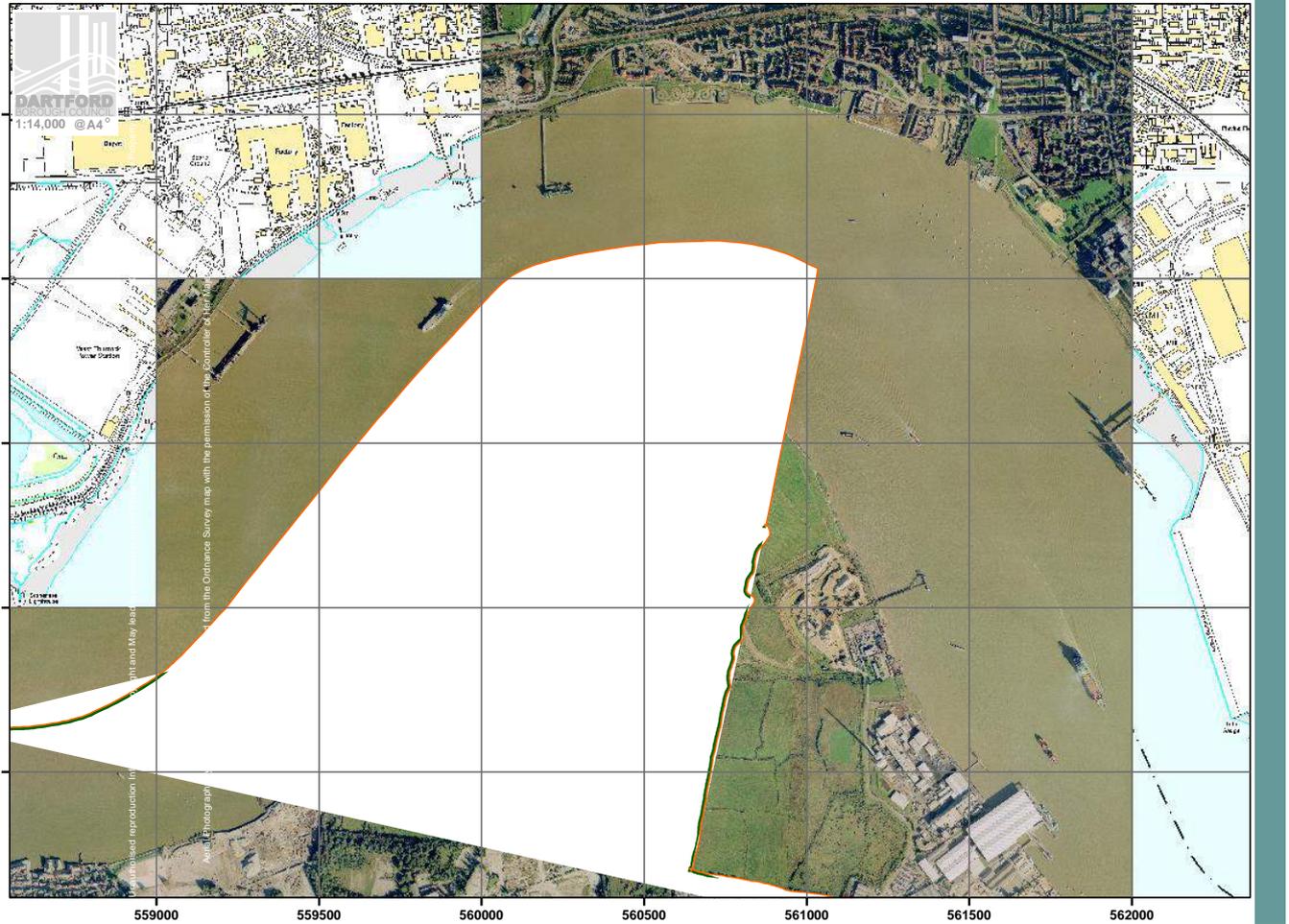
Name: Dave Clark

Tel.01322 343434 office
0845 6341212 out of hours

Other relevant information:

None

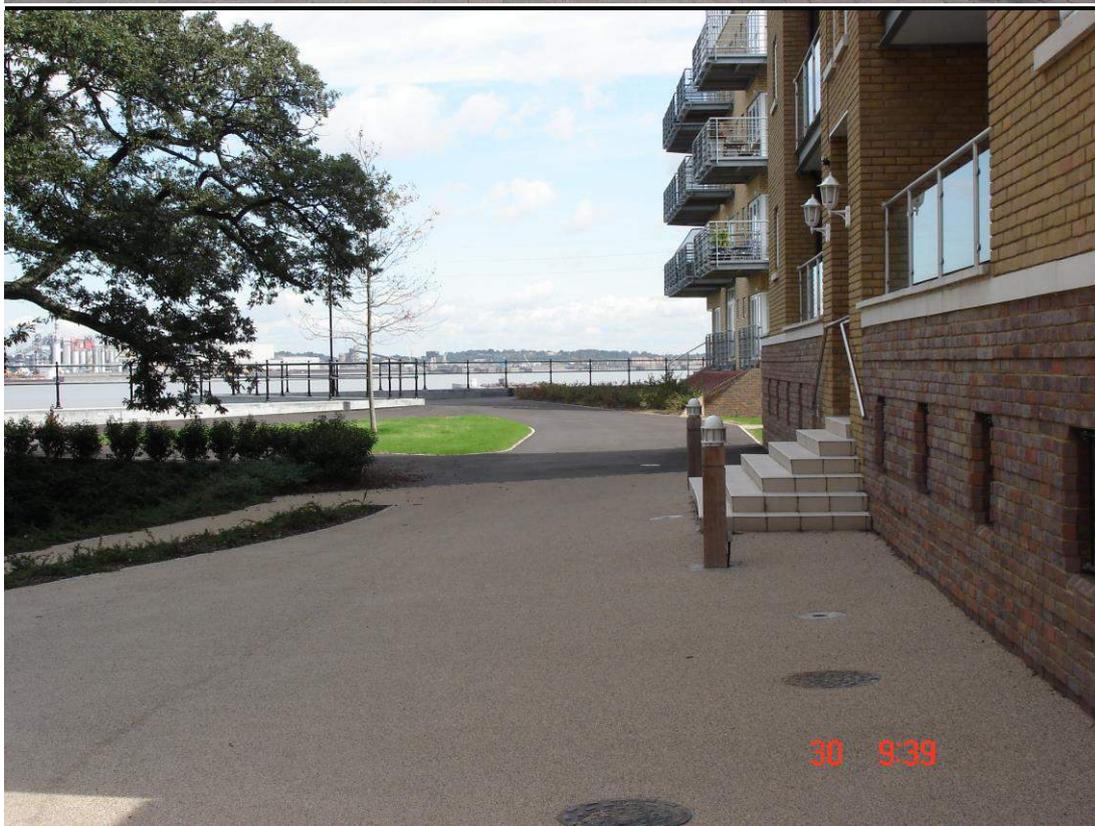
22.6.3 Zonal Plan 062 – Broadness





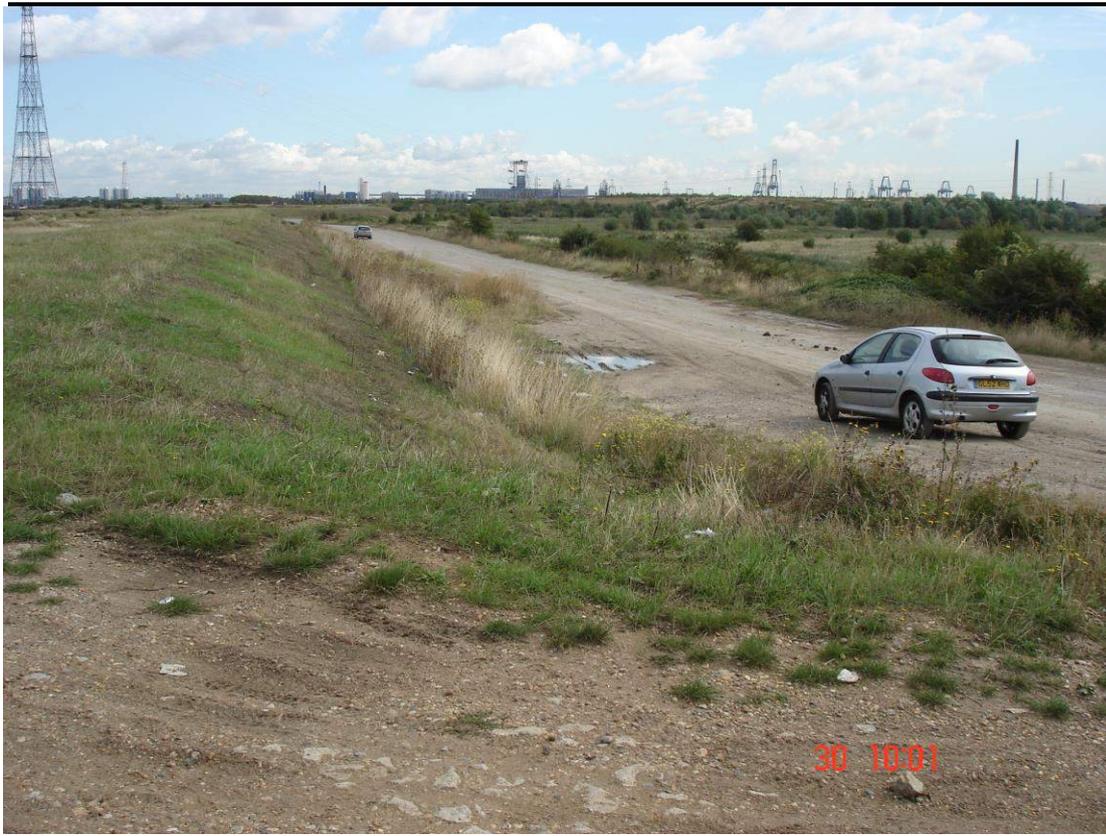
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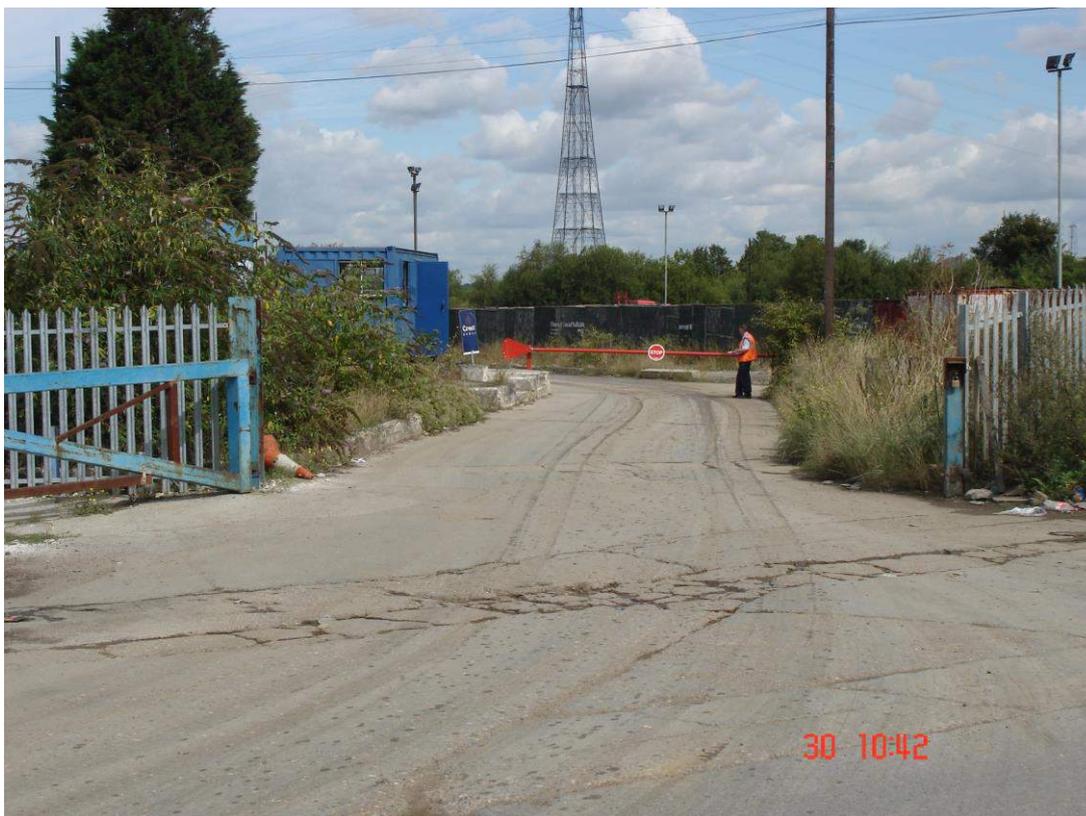














Zone: **Broadness**
 Shoreline section: Map number **062**

General description of shoreline:

Bare mud exposed at low tide backed by sea wall or metal piles at western extent of zone where historic industrial land uses are giving way to residential development. Some small patches of sandy and shingle shoreline exist influenced by existing and past aggregate industry land uses. Shoreline becomes more natural in character on approach to the Broadness Saltmarsh on the tip of Swanscombe peninsula with areas of saltmarsh, vegetated cobbles and rough grassland. A creek within the Broadness Saltmarsh is utilised for houseboat moorings and is a key landscape feature of the Swanscombe peninsula (a booming plan has been drawn up for the creek). A number of jetties and other manmade structures are characteristic of this zone.

Seasonal sensitivity (L=low, M=moderate, H=high):

| | Conservation | Amenity | Industrial |
|--------|---------------------|----------------|-------------------|
| Spring | High | Moderate | Low |
| Summer | High | Moderate | Low |
| Autumn | High | Moderate | Low |
| Winter | High | Moderate | Low |

General description of shoreline:

Bare mud exposed at low tide backed by sea wall or metal piles at western extent of zone where historic industrial land uses are giving way to residential development. Some small patches of sandy and shingle shoreline exist influenced by existing and past aggregate industry land uses. Shoreline becomes more natural in character on approach to the Broadness Saltmarsh on the tip of Swanscombe peninsula with areas of saltmarsh, vegetated cobbles and rough grassland. A creek within the Broadness Saltmarsh is utilised for houseboat moorings and is a key landscape feature of the Swanscombe peninsula (a booming plan has been drawn up for the creek). A number of jetties and other manmade structures are characteristic of this zone.

Seasonal sensitivity (L=low, M=moderate, H=high):

| | Conservation | Amenity | Industrial |
|--------|---------------------|----------------|-------------------|
| Spring | Moderate | Low | High |
| Summer | Moderate | Low | High |
| Autumn | Moderate | Low | High |
| Winter | Moderate | Low | High |

Clean-up recommendations:

Prohibited: Do not enter saltmarsh or exposed mud as these areas are sensitive to disturbance and damage. Leave oil to degrade naturally.

Recommended: Strandline oil and contaminated debris may be collected manually from man-made tidal defences. Care should be taken to protect adjacent saltmarsh, rough grass and other vegetated areas on the tidal defences and sand / shingle / cobbles. If bulk oil accumulates on the tidal defences low pressure seawater flushing may be affective. Re-mobilised oil must be collected and recovered using booms and skimmers operated from shallow draft vessels at high water. Seawater flushing of Jetties may need to be considered.

Protection of Broadness Saltmarsh and boats in creek area may be possible through booming entrance. If this is attempted care to be taken not to trample surrounding vegetation.

Access routes to foreshore:

Western extent of zone may be accessed via Ingress Park. A private track (Green Manor Way) provides access to Broadness Saltmarsh and Creek. A footpath runs along the defences for much of this zone.

Ecology considerations:

The more natural landscape incorporating saltmarsh and rough grassland at the Broadness Saltmarsh on the tip of the Swanscombe peninsula is particularly sensitive to disturbance and damage in ecological terms. Mudflats below the defences support a typical estuarine crustacean, annelid and mollusc fauna - which in turn attracts predatory fish and bird species.

Areas of saltmarsh, rough grass and vegetated substrates on and below the defences support a diverse flora including saltmarsh rush (*Juncus gerardii*), Borrer's saltmarsh grass (*Puccinellia fasciculata*), greater saltmarsh grass (*Puccinellia pseudodistans*), common saltmarsh grass (*Puccinellia maritima*), reflexed saltmarsh-grass (*Puccinellia distans*), English scurvygrass

(Cochlearia anglica), sea arrowgrass (Triglochia maritima), common glasswort (Salicornia ramosissima), lesser sea-spurrey (Spergularium marina), sea aster (Aster tripolium), sea-purslane (Halimione portulacoides), sea beet (Beta vulgaris ssp. Maritima), sea plantain (Plantago maritima) and annual sea-blite (Suaeda maritima).

The patches of sandy shoreline typical of this zone support the only populations of prickly saltwort (Salsola kali) and common sea-lavender (Limonium vulgare) recorded within the Borough.

Amenity impact:

The existence of residential development at the western extent of the zone and houseboat moorings at Broadness Saltmarsh lend some significance in amenity terms. However, public access to the remainder of the zone is practically difficult – though a public footpath runs along much of the length of the defences.

Industrial & economic implications:

Major residential and commercial development is now underway in this zone with industrial activity much reduced.

Other contacts:

None

Beach Master (1st)

Name: Ken Follett

Tel.01322 343434 office
0845 6341212 out of hours

Beach Master (2nd)

Name: Dave Clark

Tel.01322 343434 office
0845 6341212 out of hours

Other relevant information:

Booming plan details for the creek at the Broadness Saltmarsh may be found at section 6.7.1.