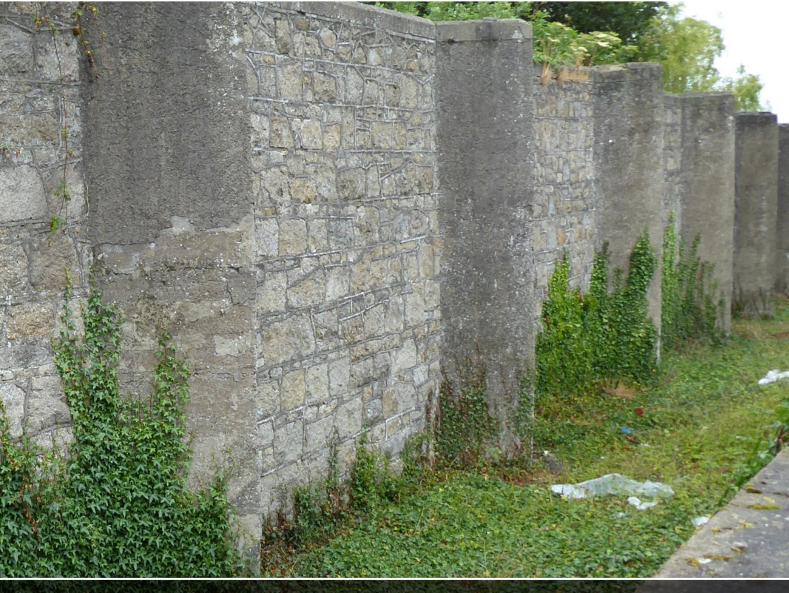
DUNDRUM CENTRAL MENTAL HOSPITAL, DUBLIN

PERIMETER WALL INVENTORY & CONDITION REPORT

Prepared for

REDDY ARCHITECTURE & URBANISM



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I. INTRODUCTION

I.I. SCOPE & PURPOSE

Prior to its closure in 2023, when its functions were transferred to the National Forensic Mental Health Service (NFMHS) Portrane, Dundrum Central Mental Hospital (CMH) had been the longest-serving institution in Ireland specifically for the provision of forensic mental health-care. With the complete transfer of its functions to Portrane, the full extent of the CMH site has been taken into the ownership of the Office of Public works pending development.



Dundrum CMH (Application site outlined in red. Additional land ownership outlined in blue)
This report has been prepared by Alastair Coey Architects (ACA), a RIAI Grade-I conservation practice. It has been prepared for Reddy Architecture & Urbanism (RAU) to inform their role as lead architects for the proposed development of the site by Dún Laoghaire Rathdown County Council in partnership with The Land Development Agency. The applicants seek to provide a sustainable and long-term use of the site through its development for residential and community use.

This report presents a brief history of the development of the site to place the wall in context, an inventory of the key components still present in June 2024, and the nature and location of any notable defects present in June 2024.

1.2. THE PROPOSALS

I.2.1. Description

The development will consist of the construction of a residential scheme of 934 no. dwellings on an overall site of c. 9.7 ha.

The subject site is in the immediate setting and curtilage of a number of proposed protected structures, namely the 'Asylum' (RPS No. 2072), the 'Catholic Chapel' (RPS No. 2071) and the 'Hospital Building' (RPS No. 2073).

The development will consist of the demolition of existing structures associated with the existing use (3,736 sq m), including:

- Single storey former swimming pool / sports hall and admissions unit (2,750 sq m);
- Two storey redbrick building (305 sq m);
- Single storey ancillary and temporary structures including portacabins (677 sq m);
- Removal of existing internal sub-divisions/ fencing, including removal of security fence at Dundrum Road entrance;
- Demolition of section of porch and glazed screens at Gate Lodge building (4 sq m);
- · Removal of walls adjacent to Main Hospital Building;
- Alterations and removal of section of wall to Walled Garden.

The development will also consist of alterations and partial demolition of the perimeter wall, including:

- Alterations and removal of section of perimeter wall adjacent to Rosemount Green (south);
- Formation of a new opening in perimeter wall at Annaville Grove to provide a pedestrian and cyclist access;
- Alterations and removal of sections of wall adjacent to Dundrum Road (including removal of existing gates and entrance canopy), including reduction in height of section, widening of existing vehicular access, and provision of a new vehicle, cyclist and pedestrian access;
- Alterations and removal of section of perimeter wall adjacent to Mulvey Park to provide a pedestrian and cyclist access.

The development with a total gross floor area of c. 94,019 sq m (c. 93,941 sq m excluding retained existing buildings), will consist of 934 no. residential units comprising:

- 926 no. apartments (consisting of 342 no. one bedroom units; 98 no. two bedroom (3 person) units; 352 no. two bedroom (4 person) units; and 134 no. three bedroom units) arranged in 9 blocks (Blocks 02-10) ranging between 2 and 8 storeys in height (with a lower ground floor to Block 02 and Block 10), together with private (balconies and private terraces) and communal amenity open space provision (including courtyards) and ancillary residential facilities;
- 6 no. three bedroom duplex apartments located at Block 02, together with private balconies and terraces.
- 2 no. 5 bedroom Assisted Living Units and private rear gardens located at Block 02.

The development will also consist of 4,341 sq m of non-residential uses, comprising:

- Change of use and renovation of existing single storey Gate Lodge building (former reception/staff area) to provide a café unit (78 sq m);
- I no restaurant unit (266 sq m) located at ground floor level at Block 03;
- 3 no. retail units (1,160 sq m) located at ground floor level at Blocks 03 and 07;
- I no. medical unit (288 sq m) located at ground floor level at Block 02;
- A new childcare facility (710 sq m) and associated outdoor play area located at lower ground and ground floor level at Block 10;
- A management suite (123 sq m) located at ground floor level at Block 10; and
- A new community centre facility, including a multi-purpose hall, changing rooms, meeting rooms, storage and associated facilities (1,716 sq m) located at ground and first floor level at Block 06.

Vehicular access to the site will be from a new signalised access off Dundrum Road to the south of the existing access and the existing access of Dundrum Road will be retained for emergency vehicle, pedestrian and cyclist access only. The development will also consist of the provision of public open space and related play areas; hard and soft landscaping including internal roads, cycle and pedestrian routes, active travel routes for cyclists and pedestrians, pathways and boundary treatments, street furniture, wetland features, part-basement, car parking (524 no. spaces in total,

including car sharing and accessible spaces); motorcycle parking; electric vehicle charging points; bicycle parking (long and short stay spaces including stands); ESB substations, piped infrastructural services and connections (including connection into existing surface water sewer in St. Columbanus Road); ducting; plant (including external plant for Air Source Heat Pumps and associated internal heating plantrooms); waste management provision; SuDS measures (including green roofs, blue roofs, bio-retention areas); attenuation tanks; sustainability measures (including solar panels); signage; public lighting; any making good works to perimeter wall and all site development and excavation works above and below ground.

I.3. HERITAGE ASSETS

The Application Site contains eight elements of heritage significance that are impacted by the proposed development. This report deals specifically with the Perimter Wall (Structure 2).

The Main Hospital Building - Structure 1

The Perimeter Wall - Structure 2

The Gate Lodge - Structure 3

The Chapel - Structure 10

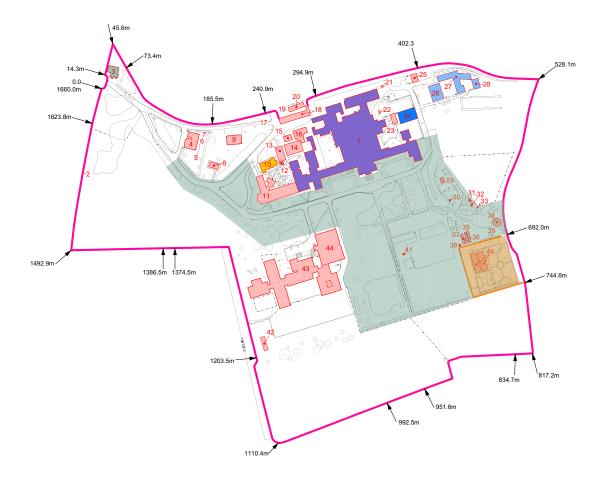
The Farmstead - Structures 26, 27 and 28

The Walled Garden - Structure 39

The Formal and Informal Landscape - Asset 45

The 'Airing Sheds' - external patient exercise areas - Structure 24

The location of each of these elements within the overall site is illustrated below.



Heritage Assets

2. HISTORY

2.1. SETTING THE SCENE FOR THE ERECTION OF THE ASYLUM

In 1817 a Select Committee on the Lunatic Poor in Ireland found very poor conditions for lunatics. There were few specific facilities, only the privately funded St Patrick's Hospital, Dublin, and the publicly funded Richmond Asylum (opened 1815), two small asylums at Cork and Wexford, and some beds attached to Houses of Industry and to gaols in other large towns.

In the same year Dublin Castle's Chief Secretary, Robert Peel, instituted legislation creating the world's first system of public lunatic asylums, throughout Ireland. Planning of the Irish asylums was delegated to a central 'Commission of General Control and Correspondence', dealing with districts, locations and sites of the new institutions, and advised its architects, Francis Johnston, helped by his nephew, William Murray (1787-1849), on their design. By the mid-C19, ten district asylums provided over 3,000 beds in total.

In 1831 Hanwell Asylum opened in Middlesex. John Conolly was its influential superintendent who wrote extensively on treatment and design of asylums. This was influential on the construction of asylums and treatment of patients in Britain, Ireland and beyond. In 1847 his influential book *The Construction and Government of Lunatic Asylums* was published and his thoughts were firmly incorporated into the next series of Irish asylums 1845-50s.

In 1838 The Criminal Lunatics (Ireland) Act was passed, one of a series of Lunacy (Ireland) Acts passed between 1821 and 1890. When a person was detained under circumstances suggesting that they were of deranged mind and had the intention of committing a crime, then two justices were empowered to call in a physician to examine the suspect. If the physician determined that the person was a "dangerous lunatic" he could be committed to gaol until either discharged by order of two justices or removed to a lunatic asylum by order of the Lord Lieutenant.

2.2. INITIATION OF THE CRIMINAL LUNATIC ASYLUM

A House of Lords' committee in 1843 urged the creation of further asylum accommodation. In 1845 a seminal Act of Parliament was passed which permitted a State Criminal Lunatic Asylum to be set up in Ireland entirely funded by Government for which £6,000 was allotted. The type of institution was based on the form of the district asylums already in use, adapted to the criminal patients.

'the greater proportion of the inmates ... being destined to remain in it for life, it is proposed to have the structural arrangement as cheerful as circumstances will admit, so as to afford every possible facility for the recreation and occupation of the patients. It is not designed that the building should partake of the character of a 'prison'; more especially as experience has proved that in the district asylums ... such are not more inclined to attempt to escape than other patients.'

Jacob Owen, Chairman of the Board of Works and a renowned public architect, was asked to develop plans for new types of establishments to house respectively 'incurable lunatics', and 'criminal lunatics'. Plans were made for a Criminal Lunatic Asylum to contain up to 120 patients as a hospital not a prison. This was part of a campaign to build asylums in Ireland in which 'Great care has been taken to provide for the best modern improvements in such buildings, without losing sight of economy, the expense of construction, from the necessity of classification, being very great'. ²

This emerging differentiation of Irish asylum care suggests that Ireland retained the leading edge

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I Central Criminal Lunatic Asylum (Ireland) Act 8th & 9th Vic., c.107. Office of Public Works, Report on district, local and private lunatic asylums in Ireland (1846).

² OPW 13th Report, 1845.

over Britain in terms of asylum design. ³ Thus a new phase enlarged the district asylum system with 6 new establishments with a total of 1750 beds to be erected at Cork, Sligo, Killarney, Omagh, Kilkenny and Mullingar. ⁴ These supplemented the 8 built in the 1820s-30s.

2.3. CONSTRUCTION OF THE CRIMINAL LUNATIC ASYLUM, 1845-53

2.3.1. The Site

Settlement in the Dundrum area south-west of Dublin expanded after the C16. Large houses, villas and associated demesne landscapes were established from the C18 onwards making it a desirable area of countryside for the wealthy and aspiring wealthy.

In 1846 a 30 acre agricultural site was bought at Dundrum, 3 miles from Dublin for the proposed criminal lunatic asylum. This was cultivated as 7 small fields east of the main road (1st edition OS, Figure 4). It stood in an area of detached villas of varying sizes in landscaped grounds, with Anna Villa, Summerville, Roebuck Park and Grove adjacent. The north site boundary followed the Church Town Lower townland boundary.

The isolated rural character of the site was a key consideration in the selection of the site for any Irish or British asylum at this point. Medical theory and an enlightened attitude to the housing of patients dictated that they should not be the object of ridicule or public gaze as had been the case at Bethlem in London in the C18. Thus a building in extensive grounds sited well out of the pressures of urban life was believed to be both humane and help the patients to recover, if possible with the benefit of extensive views to lift their mood. A roadside wall prevented prying eyes from the public realm, and helped ensure patients did not escape, although the whole site was not necessarily walled, particularly against agricultural land. At Dundrum the dramatic views south towards the Wicklow Mountains would have been regarded as beneficial for the patients.

2.3.2. Structures

Plans were prepared in 1846 for the building for 120 male and female convict lunatics by OPW Architect Jacob Owen who was regarded at the time as an 'eminent architect in Ireland'. ⁵The planning of the asylum coincided with the publication in 1847 of the influential book by the Superintendent of Hanwell Asylum near London, John Conolly, The Construction and Government of Lunatic Asylums whose thoughts were firmly incorporated into this series of Irish asylums built in the 1840s-50s including Dundrum.⁶ The layout indicates the maturity of Irish asylum planners. Owen designed a special asylum and not a prison. It was a roughly symmetrical, three-storey building accommodating 120 lunatics. The main differences from the earlier Irish asylums were its chapel, a separate 'hospital' (infirmary) with its own yard, and increased dormitory accommodation.

Tenders were sought for the erection of the asylum building, to designs made by Owen shortly beforehand i.e. 1846-early 1847.⁷ His preliminary plans and elevations were published in 1848 and demonstrate the approach taken. Some differences are evident in the planned grounds around the building between the layout and that as executed, published in 1850, e.g. triangular womens' airing courts were modified by 1850 to become rectangular. By 1848, 'The buildings have been contracted for' and the works were 'proceeding satisfactorily.' ⁸

By 1850 the buildings had been completed. The asylum opened as the first forensic mental hospital in Britain or Ireland and possibly worldwide. The plan and view was published in 1851 with a report in the Civil Engineer. The asylum was intended to contain 80 male and 40 female patients at a total

³ Reuber, 1996

⁴ Inspectors of Lunacy in Ireland, 1845. Commissioners of Public Works in Ireland, 1848

⁵ OPW 14th Report, 1846, 6.

⁶ Reuber, 1996.

⁷ Dublin Evening Post, 8 June 1847.

⁸ OPW 16th Report, 8 July 1848, 16 and Figs 13-15.

cost of £15,000. The main building was constructed of blackstone or Calp rubble with granite dressings, both local materials, in so-called Early English (but in reality more Tudorbethan) style. The single-storey ornamental lodge at the gateway echoed the style of the main building and was in the same materials.

2.3.3. The Country House Model⁹

The 21 acres as laid out largely reflect the components of a typical Irish district asylum of this mid-C19 period (1840s-50s), as shown on the 1871 OS. These were, in turn, based on the features of the well-established ornamental country house demesne adapted for therapeutic use and included many of those features recommended by Conolly in 1847. Particular features of this sort included the gateway, ornamented gate lodge, drive through parkland, forecourt, kitchen garden, farm and service areas. Adaptations for the asylum use included the disproportionately large area of the kitchen garden (c.8 acres) designed to make the institution with its large number of residents self-sufficient in these crops, and the absence of gardens around the main building. Gardens were replaced by the airing courts to the rear, although ornamental pleasure ground-style planting enhanced the setting of the forecourt to make an ornamental arrival. The character was expansive, ornamental and therapeutic as a humane regime to encourage recovery. This contrasted with the starkly punitive layout of grounds in prisons and workhouses where the grounds were purely utilitarian and tightly drawn around the buildings.

2.3.4. The Layout

It is unclear who designed the wider grounds. The layout displays considerable quality and a thorough understanding of contemporary landscape principles. Owen designed the enclosed environs of the hospital including the walled spaces behind the building as shown by the published plans, but probably not the wider grounds. The quality of design and the planting suggests that a professional designer was employed, perhaps a locally based Dublin practitioner or a nurseryman.

Owen's plan shows walled spaces behind the hospital building, to the north, divided into therapeutic airing courts for secure patient exercise and functional service yards. The hospital building was divided, typically, axially into male and female halves respectively to west and east, with the related open spaces adjacent to the accommodation of the respective genders. The male side had two airing courts for different classes of patients with lean-to shelters and privies serving each class straddling a single wall (now no. IC West Wing outdoor area). This was reflected on the female side (now no. IJ East Wing outdoor area). The airing court layout, both spaces and structures are of great significance as one of the most specific, defining features of a C19 asylum.

North of the male courts was the detached yard serving the adjacent infirmary, serving both sexes. North of the female airing courts was the drying yard serving the adjacent laundry in which the female patients worked. Adjacent to the west of the drying yard was the kitchen yard, again a preserve of female patients and adjacent to the kitchen. A central yard behind the main entrance was enclosed by buildings. The courts and working yards were enclosed by walls to prevent escapes. Further analysis is required to establish the survival of the original pattern of courts and yards and associated structures.

The position of the airing courts differed from the model used in England as they were north of the building rather than to the south which was favoured in England in order to maximise patients' exposure to long views, fresh air and sunshine. Furthermore the airing courts were walled where in England the preference was instead to use sunk walls and banks known as ha-has against open boundaries to provide a secure area which allowed the uninterrupted views into the wider landscape and if possible beyond. The arrangement at Dundrum may have been a more secure adaptation to the criminal occupants, but other Irish District Asylums of this period had a similar arrangement with airing courts to the north, such as Sligo, Kilkenny and Mullingar:

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⁹ The derivation of the mid-C19 asylum landscape from the country house landscape in the British context is discussed in detail in Rutherford (2003). This applies to a great extent to Irish district asylums.

A medical journal noted that the situation of the asylum was 'most cheerful and picturesque, and its whole management most ably and humanely conducted ...'The need for a similar asylum in England was noted, following the example of Ireland and a resolution was passed to this effect by the Association of Medical Officers. ¹⁰

The 1851 Civil Engineer report noted 15 acres of grounds to be tilled by the patients, presumably including the kitchen garden and perhaps in the East Paddock. This was typically both for economic and therapeutic purposes for those male patients who were well enough to work. The drains emptied into a tank distant from the building, and were then discharged by pipes over a considerable portion of the grounds.

As the whole of the 30 acres that the Board was 'obliged to purchase was not required for the immediate use of the asylum, it had not been enclosed within its boundary walls.' Nine acres [to the south] was to be let for 7 years at a rent of £45 a year after which the ground could again be disposed of, or added to that for the use of the asylum, should it be required. 11 Although this area was not brought into the site until considerably later (by 1908) it always formed the open frame for the views beyond the kitchen garden of the distant mountains and was later laid out with the current playing fields.

Works to the grounds continued and by 1853 the ornamental entrance lodge (now the gatehouse) was completed within the wall at the north-west corner, along with other works which had been 'postponed until the experience in working the institution proved the necessity for them'. ¹²

2.4. DEVELOPMENT IN THE 1850s AND 1860s

The asylum had reached capacity by 1863 when a 50 bed extension was proposed. In 1863 building works included many to the main building. In the grounds alterations were made to the 'out-offices and enclosure walls' for a total sum of over £4,000. In 1866 a chapel for Protestant patients was built within the main complex. In 1868 part or all of the boundary was rebuilt. In 1868 part or all of the boundary was rebuilt.

Meanwhile in England in 1863 the English State Criminal Lunatic Asylum opened at Broadmoor, Berks, designed by prison architect Joshua Jebb, but again modelled on the established district (in England known as County) asylum precedent.

The first detailed published plan of the layout of Dundrum asylum is the Ordnance Survey 2nd edition at 6" scale, surveyed c.1871. It shows the original layout completed c.1850 and reflects building alterations executed in the 1860s.

Typically the grounds were divided into several main areas as follows:

I. The approach to the hospital building from the gateway and the lodge off Dundrum Road along a drive sweeping through the west paddock. The lodge was in fashionable Picturesque style, single storey with ornamented barge boards and other features. The drive led to the forecourt and ornamental grounds on the south side in front of the building, giving access to the main entrance. Leading south from the main entrance the central axial path was framed by woody planting and enjoyed a view of the distant mountains, a key view which survives.

10 Journal of Psychological Medicine and Mental Pathology, Volume 4 (1851), 622-23.

- 11 OPW 16th Report, 8 July 1848, 16 and Figs 13-15
- 12 OPW 20th Report, 1853.
- 13 Dublin Builder, 15 June, 1862.
- 14 OPW 31st Report, 8. Irish Builder, 1863. James Higgins Owen (1822-1891) is identified as the architect of alterations to the enclosure wall, with this phase of construction being undertaken by the contractor John G. Meighan of Kings Inn Street.
- 15 Dublin Evening Post 30 June 1866.
- 16 Saunders's News-Letter 18 July 1868. A 'Notice to Builders' called for sealed tenders to be submitted for the 'Building of a New Boundary Wall at the Central Lunatic Asylum, Dundrum, according to Plans and Specifications to be seen' at the office of the Board of Public Works.

- 2. Walled airing courts for secure patient exercise to the north of the building, and working yards reflecting domestic activities. Each court had a lean-to shelter against the wall (called Airing Sheds on the 1850 plan) for the patients as well as privies.
- 3. Productive kitchen gardens and walled orchard in the south section of the hospital site.
- 4. Further parkland east of the building an including the East paddock.
- 5. Service areas north and east of the yards and airing courts including farmstead and stables with yards and gateways in the north-east corner. As well as having a productive purpose for the institution, male patients would have worked on the farm for therapeutic purposes.

Together this comprised just over 21 acres of the original 30 acres purchased, with to the south:

6. Farmland south of the productive gardens. This 9 acres remained let to a farming tenant. 17

The BMJ in 1874 noted the similarity of the criminal asylum with a district asylum as, 'there is nothing distinctive in its general aspect from what is observable in ordinary hospitals for the insane; ... the grounds of 28 acres may be considered quite open, surrounded by a wall of from 8 to 10 feet. ... Up to the present time, but 6 patients permanently escaped'. This indicates that the originally tenanted land to the south (now playing fields) had been incorporated into the main site and the wall extended around it.

2.5. FURTHER DEVELOPMENT PHASE, 1860-1910

The layout is shown in greater detail on the 1908 OS surveyed in 1908. By this point the landscape design had reached its zenith. It remained largely as shown on the 1871 OS with some differences, one major, but the rest relatively minor, including:

- 1. The greatest change was to move the drive south-west away from the north boundary on a new line to give a more sweeping serpentine approach to the south front of the building and forecourt. This avoided the detached Catholic chapel in the parkland which formed a feature along this new line of the drive. The drive was lined on the south side by a line of specimen trees. It is likely that it was realigned c.1901 when the chapel was built.
- 2. A circular or octagonal gazebo had been added towards the west end of the kitchen garden (since moved off-site). This echoes those found in the airing courts at Broadmoor (see Appendix F for illustrations).
- 3. The boundary wall reached its current configuration, including the construction of a section along the realigned south boundary where the formerly tenanted farmland had been taken into the hospital grounds.

2.6. DEVELOPMENT IN THE C20 AND C21

After World War II various buildings were added to the grounds. The largest were localised in a group on the west half of the former kitchen garden. These, while damaging, did not irreversibly damage the special qualities of the original character or layout, nor obscure the important south axis from the entrance to the main hospital that bisected the kitchen garden and offered dramatic views of the distant Wicklow Mountains. Various smaller structures were erected but these did not greatly damage the overall significance.

A car park was laid out on the east half of the former kitchen garden. Most of the historic buildings and features were left in situ. Losses included the mortuary against the roadside wall and a small

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¹⁷ Griffith Valuation noted this as Occupier: George Kinahan Esq. Immediate Lessor: Comrs. Of Public Works Tenement: Land; 9 acres and 31 perches Valuation: £33.

¹⁸ BMJ, 3 January 1874, 25.

building nearby to the south. The circular or octagonal building in the west half of the kitchen garden, in the area now built on, seems to have been relocated to a position north of the walled garden (no. 35, Bandstand), but has recently been relocated off site.

Today, many of the key buildings, features and spaces survive reflecting the layout and character established by c.1910 to a considerable degree.

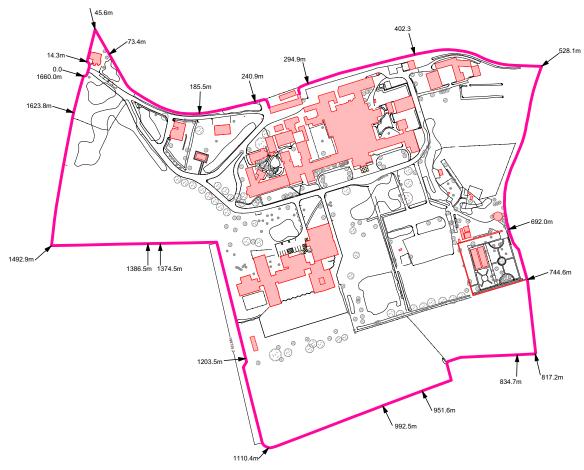
3. INVENTORY

3.1. OVERVIEW

The perimeter wall at the Dundrum Central Mental Hospital was complete to its current extent by 1874. Built in granite and limestone rubble with concrete copings, and one short section in mass concrete, it is 1660m in length and encloses grounds of c.28 acres. The position of principal junctions/features are referenced as shown below in Figure 1. Running dimensions used in this report are measured from the south side of the entrance gateway on Dundrum Road, proceeding clockwise.

3.2. SURVEY

The full extent of the wall was surveyed in detail between the 12th and 14th April 2021. The findings have been updated to reflect the condition in June 2024.



Wall Overview

3.3. INVENTORY

3.3.1. Composition

The wall is constructed in the main part from faced and roughly squared rubble granite stones, with some sections being built in limestone stones similarly sized and dressed. Stones are laid to courses, with each course being approximately 450mm.

One contiguous section of walling is constructed from cast-in-situ mass-concrete, this being situated between 745m and 835m

Typical sections of walling are shown below.

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Typical section of walling



Section of wall comprising in-situ mass concrete

Copings to the wall are in the main part formed from pre-cast concrete units, with some sections having been formed from in-situ mass concrete with a smooth cement render applied.

3.3.2. Existing Openings in Walls

The wall is contiguous and un-broken save for the following openings:

0m

Main vehicular entrance

Brick piers with concrete canopy over. Metal vehicular gates with metal pedestrian gate to north.



170m

Blocked pedestrian access

Block and start granite jambs and granite voussoirs.



259m

Service yard vehicular access

Jambs and voussoirs of four-pointed arch opening in ashlar granite blocks. Granite hood moulding. Painted timber gates.



270-300m

Service yard pedestrian access

Four pedestrian openings with brick dressings to jambs and flat brick arches over. Painted timber sheeted doors.



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527m Blocked pedestrian access.



830m Blocked pedestrian access.



3.3.3. Other Notable Features

Other notable features of the wall as observed on its inner face are noted below:

Buttresses

In a number of extended sections (refer to drawings) the wall has internal buttresses at c. 7m intervals. These are composed of an in-situ concrete core containing large aggregate and rendered with a harled (wet-dash) finish.



Height extensions

Between 45m and 60m a section of wall has been extended upwards in concrete blocks by some 600mm



Concrete faced/rendered section

Between 1300m and 1315m a section of wall has been built-out and rendered in a cement-based render. The outside face at this location is in coursed rubble stone and shows signs of there having been an opening present or formed at some point in the past.



Concrete foundation

Sections of the wall (externally) on Dundrum Road were observed to be built on a mass-concrete foundation.



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4. CONDITION

4.1. Condition in 2021

The following defects were noted to be present during the detail survey in 2021:

Missing/loose masonry

Incidences of missing and/or loose masonry on the inner face of the wall are very few, and in those instances noted are limited to a small number of stones. At no point on the inner face of the wall are there any points where the integrity or stability of the facing is a cause for concern.



Plumbness

The vast majority of the inner face of the wall measures as being plumb to within +2/-0 degrees off vertical, with + indicating an outward lean or batter. The maximum measured lean/batter noted was +5 degrees, and this over a limited section. In summary, the plumbness of the wall is overwhelmingly good and does not point to any concerns with its underlying stability.

Condition of bedding and pointing mortar (internal).

The inner face of the wall has been comprehensively re-pointed in cement-based ribbon pointing at some stage since construction, though the weathering indicates that this took place some significant time ago. Failure of the pointing has occurred in small sections, these being uniformly distributed. Failure and loss of this pointing will continue, exposing the bedding mortar and eventually leading to loosening of masonry.



Condition of bedding and pointing mortar (external)

The pointing on the external face of the wall has been similarly renewed at some time since construction, though not as consistently or latterly to the same high standard. Weathering and deterioration is slightly more pronounced than on the inside face, doubtless due to a more relaxed attitude to growth of vegetation on the outside face, but widespread/serious failure is not evident.



Condition of copings

Coping condition is generally good, with failure being limited to those sections where the coping has been poured in-situ and rendered. Loss of the render has exposed the core and deterioration has accelerated. Repair to the deteriorated sections should be undertaken as soon as possible to preclude further decay of the wall heads.



Condition of render

Rendering to the wall is confined to the mass concrete buttresses. In a number of locations failure of this render has exposed the inner-core of the buttress. Render repairs should be carried out to protect the core of the buttresses from deterioration.



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Vegetative growth

Although there are areas of vegetative growth (mainly originating from the external face and progressing over the coping) there are no significant instances of woody growth that might pose a risk to the structure of the wall.



4.1.1. Condition in 2024

With the closure of the hospital in 2022/23 and the relocation of its function to the NFMHS Portrane, the site has entered a phase where the levels of site maintenance have been reduced, including to the boundary wall.

Whilst the overall inventory and condition of the wall has not changed in a substantial sense, the reduction in maintenance has resulted in the unchecked growth of invasive vegetation. Whilst not damaging in the short term, the establishment of this vegetation could lead to accelerated deterioration of the wall as roots become established. A selection of comparative images are shown below:





April 2021 June 2024





April 2021 June 2024

5. CONCLUSIONS

5.1. CONDITION AS OBSERVED IN 2021

The inside face of the wall had obviously benefited from ongoing care and maintenance, and barring some minor deteriorations was observed to be in a good condition overall. Deteriorations to the copings where noted should be addressed, as the coping provides the needed protection to the wall-head at the most vulnerable point of the wall. Whilst the pointing was noted to be in good condition for a large majority of the wall, aging and failure of the cement-based pointing was evident. A program of renewing the pointing where failed would ensure the continued stability of the masonry, preventing erosion of the bedding mortar and loosening of stones, and also preventing the growth of invasive vegetation.

The outside face of the wall on Dundrum Road and at Rosemount Green had been observed to be in the same overall good condition as the corresponding inside face, with deterioration of the pointing and copings commensurate with the inside face though slightly worse at lower level.

5.2. CONDITION AS OBSERVED AS 2024

The cessation of routine maintenance has allowed vegetation to become established on the face of the wall and at its foot. This process will accelerate as time passes.

Growth of vegetation does not present an issue in the short-term, but as it becomes more established roots will penetrate into the fabric of the wall. This will both cause damage to the wall, and make the vegetation harder to eradicate. In the medium to long term the established roots will start to cause structural damage to the wall.

5.3. OVERALL CONCLUSION

In conclusion, the wall at Dundrum CMH has been found to be substantially intact and generally in good condition. The resumption of general maintenance is required, and in the medium-term a comprehensive programme of re-pointing should be undertaken to ensure that the good condition is preserved.

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