MAYNOOTH CYCLING CAMPAIGN

Maynooth Cycling Campaign Submission

To

NUI Maynooth & St. Patrick's College Maynooth

Mobility Management Study 2009:

Study Constultants:

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Contents

"Every time I see an adult on a bicycle I no longer despair for the future of the human race."
H.G. Wells

Introduction

Maynooth Cycling Campaign was formed in 2008 by a group of cyclists who, being aware of the challenges facing cycling and cyclists in Maynooth, decided to work to improve the cycling facilities and increase the numbers cycling in the area.

We see increases in cycling participation being achieved by addressing the following issues:

- perception of cycling safety;
- traffic volume and speed;
- cycling facilities;
- transport infrastructure;
- perception and promotion of cycling;
- road-user behaviour and
- relative costs of providing motor transport facilities being charged to users.

Many of these issues relate directly to the University campus and can be addressed in the implementation phase resulting from the current Mobility Management Study.

We look forward to co-operating with all stakeholders involved in campus access issues. We will recommend and assist in the evaluation and implementation of the practical measures necessary to increase the number of cycle journeys and popularity of cycling as a transport mode in Maynooth. Cycling's visibility and its positive promotion as a commuting mode choice by those at the highest authority level is crucial to achieving a significant increase in cyclist numbers. Other significant factors in increasing cycling uptake include ensuring that cycling routes to the campus are direct and cycle-worthy and that general cycling facilities are of a high standard.

We welcome this Mobility Management Study as we perceive access, mobility, congestion and safety issues related to motor traffic on site as demanding urgent action. In addition to reducing the potential uptake of cycling, these factors have increasingly detracted from the presentation of the campus and public perception of it, particularly over the past two to three years.

We appreciate the opportunity to present our submission to the study team and are confident that our observations regarding conditions on site will be given serious consideration.

As car drivers, pedestrians and users of public transport in addition to being cyclists, we have a uniquely comprehensive perspective on transport and mobility issues on campus and in Maynooth. While mindful that cycling cannot solve all the current mobility and congestion problems, we would argue that cycling promotion measures should form a central and integral component of an effective and cost-efficient campus access and mobility strategy.

Ultimately, we submit that measures to increase cycling uptake would be highly cost-effective in this demanding financial period, and would bring positive longterm benefits for the campus, its staff and visitors, not to mention Maynooth town and business community.

The following eight initial measures would represent a strong move to promote and encourage cycling and cyclists on campus.

Immediate measures to improve the campus cycling situation

1. **Install a well-signed cross-campus cycling route.**
2. **Install 10% of bicycle racks covered from the elements.**
3. **Enthusiastically promote cycling on College and University websites, in promotional literature and on entrance signage.**
4. **Amend Rule 7 of the General Rules of the University and St. Patrick's College (as set out in appendix 3)**
5. **Enforce parking regulations and promptly clamp cars that obstruct pedestrian, cyclist or emergency access.**
6. **Provide quality Sheffield Stand style cycle racks convenient to the entrances of all buildings.**
7. **Implement the Government Bicycle Purchase Scheme for staff immediately.**
8. **Implement charges for parking that reflect the costs of parking elsewhere in Maynooth.**

Approach adopted in compiling this submission

1. Firstly, we have briefly outlined the rationale for promotion of cycling as a regular means of transport and daily commuting.
2. Secondly, we have assessed the current mobility and access situation with a particular focus on cycling and pedestrian access and priority. We include the results of our surveys (Appendix 1) and its implications.
3. Thirdly, we have proposed a variety of measures that we believe would enhance access to and mobility on campus and promote sustainable forms of transport for shorter commutes. In this we have concentrated particularly -but not exclusively- on cycling and non-motorised access and how they might be encouraged and prioritised.

Why encourage cycling?

"Since the bicycle makes little demand on material or energy resources, contributes little to pollution, makes a positive contribution to health and causes little death or injury, it can be regarded as the most benevolent of machines."
Stuart S Wilson

The benefits of cycling

- **Improved personal health and wellbeing**
- **Cost-benefit of providing cycle facilities versus providing for motor vehicles**
- **Absenteeism reduced and punctuality improved**
- **Promotes a sustainable campus and provides leadership in sustainability issues**
- **Reduces the University's carbon footprint**
- **Improves the atmosphere of the town and campus**
- **Reduces campus/town congestion and air pollution**
- **Results in a more pleasant campus experience**
- **More economic utilisation of scarce and costly land resources**
- **Reduces landscape damage and cost of repair**

Review of Existing Mobility and Access Issues

Cycling, access and travel

- Cycling is prohibited from St. Joseph's Square to the Lyreen Bridge. This is despite the fact that cars are not restricted alongside the Aula, and in excess of twenty cars are permitted to park in unauthorised spaces there daily, obstructing traffic, service vehicles and damaging the landscape in the process.
- Both cycle lanes exiting the north campus come to a dead-end where they meet the Kilcock Road perimeter wall. There is no dedicated exit for cyclists who must dismount to exit/enter safely at the entrance opposite Manor Mills.
- The cycle lane east of the Pedestrian Bridge (north campus) collects puddles of water, making it dangerous in icy weather and crowding pedestrians and cyclists into each others' paths.
- The two-way cycle track on the campus ring road is too narrow and dangerous. It is constantly encroached upon by motor vehicles, posing serious safety risks for those cycling counter to the motor vehicle flow.
  This 'cycle lane' also serves as a de-facto pedestrian pathway.
  The cycle symbol markings are mostly obliterated.
- Cyclists must dismount to walk their bicycles to the Library bicycle racks.
  This is one of the most frequently used bicycle parking racks.

- The inbound Kilcock Road cycle lane is blocked Monday to Friday. (See Figure 1)
  The cars parking here appear to be largely University related.
  This problem only exists during term time.
- Pedestrians travelling from the entrance at Manor Mills to the Creche must travel down the centre of Carpark 3 or along the cycle lane to reach their destination. This arrangement shows no concern or priority for pedestrians and their safety.

Figure 1: Illegally parked cars blocking the Kilcock Road cycle lane

Perception & Promotion of Cycling on campus

- There is no impression that cycling and cyclists are welcomed on campus.
- NUI Maynooth currently lags far behind environmentally progressive institutions such as UL and UCC on the promotion and official visibility of cycling. This is particularly evident in relation to promotion of cycling on campus and on official websites.
- There are no signs indicating that cyclists are welcome on campus or where bicycle parking is located. The only cycling related signage on the south campus is several 'No Cycling' signs near the Aula and Library.
- There is no official procedure for removal of abandoned bicycles from campus racks and street furniture.
- Neither the University's nor St. Patrick's College's website makes any mention of cycling as a transport mode to access the campus.
- Cyclists are addressed with motorists in an inappropriate and outdated Rule 7 of the General Rules of the University.

Carparking and traffic management

- Approximately five hundred car parking spaces have been constructed on the north campus since 2001.
- In excess of two hundred cars are parked 'illegally' between the north and south campuses and the Kilcock Road on an average day in term time. There is little or no visible enforcement of parking regulations, double yellow lines etc. Cars are generally permitted to block pathways and cycle lanes and park on the grass verges with impunity.
- The main vehicle entrance on the Kilcock Road is rendered very dangerous by illegally parked cars impeding the view towards and out of town.
- Cars parked illegally on the North Campus Ring Road dangerously narrow a sharp bend by the All-Weather pitch and could lead to a serious accident.
- There are no spaces available for visitors on campus to park after about 9.30a.m. on an average college day, so visitors often follow the example on site and park illegally.
- Wheelchair users access to paths and access to disabled spaces is regularly impeded and blocked by vehicles. These are rarely clamped.

Cyclist Facilities

- Most of the bicycle parking provided is of the 'hook' variety, which is not suitable for secure locking of bicycles, particularly with the more effective U-shaped shackle locks.
- Bicycle parking is often located out of sight behind buildings, as if it were something to hide away.
- No cyclist changing or locker facilities are provided on campus.
- Only six bicycle parking spaces in total (behind the computer centre on the south campus) are covered from the elements.
- Numerous bicycles are locked beneath the Arts Block overhang rather than the adjacent racks, in order to take advantage of the shelter it provides.
- While carparking spaces have increased by approximately 500 spaces on the north campus since 2001, there has only been a small increase in bicycle parking spaces.
- Many bicycle racks are of the ineffective and unsuitable 'wheel holder' design. Thankfully the more recent racks are of the Sheffield Stand type that offers reasonable bicycle security and is preferred by cyclists.
- A significant bicycle parking demand indicator is the number of bicycles that are regularly locked to street furniture and trees around the Hume Building.

Detailed recommendations for improvements in mobility and access

We feel that a positive attitude in relation to cycling on the part of the University and College authorities is the most crucial requirement in achieving a cycling-friendly campus, and maximum uptake of cycling among staff and students. Such a positive attitude and engagement with cyclists, and the most up to date thinking would ensure that sustainable transport modes are fully considered. The impression that cycling and other sustainable transport options are recognised, catered to and valued as transport modes should be fostered in official publicity and incorporated in campus developments.

While some investment is vital in bringing cycling facilities up to best international standards and to achieving parity with spending catering to motor traffic, the amounts are minimal by comparison with carpark provision. It must be noted that cycle parking can often be accommodated on existing paved areas, and in addition, in excess of ten bicycles can be parked in the same space as one car. Bicycle and pedestrian transport cause negligible hazard to others and minimal wear and tear on infrastructure.

Cycling, access and travel

> *"In the past two decades, thousands of miles of trails have been paved in the United States, but many of them look as if they were designed by someone who'd never ridden a bike. By consulting more with the people who do a lot of travelling under their own power, transportation planners ought to be able to come up with imaginative schemes for making roads, paths and sidewalks more usable to them, and maybe help cut down a bit on our reliance on the automobile."*
>
> --- Trouble on the Trail, Washington Post op-ed, May 18, 1993

- Remove the dangerous and unsuitable cycle lane on the north campus ring road without delay.
- Replace the ring road cycle lane with a fully marked cycle lane on each side of the road, or failing that, with no cycle lane at all. This would be inherently safer than the current situation.
- Provide a properly designed safe access/entry point where the two exit/entry lanes on the north campus meet the Kilcock Road.
- Ensure all remaining lanes are fully marked and signposted as cycle lanes.
- Erect signs to alert pedestrians and drivers to the existence of cycle lanes.
- Any new cycle lanes and pedestrian pathways to have a slight slope so that water will not collect on them.
- To be effective and fully utilised, cycle lanes must be swept regularly to remove debris, obstructions and glass. This makes them safer but also encourages cycling by reducing unnecessary punctures and demonstrating that cyclist facilities are valued.
- Ensure that zebra crossings are well marked and signposted where necessary.
- Erect campus orientation signage at key points where they can be safely accessed by cyclists visiting the campus. (John Hume roadway opposite base

of the Pedestrian bridge, John Hume roadway from Moyglare entrance, inside south campus entrances).

- Construct an adequately proportioned cross-campus cycling route that allows easy access from the south campus entrance over the Lyreen River to the Library and through to the north campus.
- Provide a new pedestrian and cyclist entrance on the St. Mary's side of the main south campus entrance.
- Provide bicycle parking convenient to Pugin Hall to facilitate staff travelling from the north campus to dine there.
- Provide conveniently located bicycle parking beside the main administration buildings at Riverstown. This would send out a strong message of how cycling is viewed by the University authorities.
- As a minimum, permit cycling in all areas where driving of vehicles is permitted. Cycling should be permitted in all general access areas.
- The University authorities should liaise with private bus service providers to ensure that they provide carriage of bicycles at a minimal cost on all services. This facility should be well publicised on the services and on websites etc. and made a condition of offering campus access to providers.
- The University authorities should liaise with Bus Eireann and Iarnród Eireann to ensure that they provide bicycle carriage, at the very least on off-peak services.
- Provide additional bus-parking facilities (alongside the west side of the All-weather pitch, and in the Creche/Apartments area) so that buses can park safely rather than along the bicycle lane on the road at Callan as at present.

Perception and promotion of cycling on campus

- Cycling should be visible and welcomed in official NUI/SPCM publications.
- Cycling must be included as a transport option on the NUIM and SPCM websites.
- Give full consideration to bicycle parking and safety and access for cyclists and pedestrians in all future developments and plans.
- Consult Maynooth Cycling Campaign in relation to existing cycling access and facilities issues. We are keen to work with the University and College authorities to achieve the most successful outcomes.
- Provide a bicycle repair kit and pump on Security vehicles and in their offices (Security Staff currently hold jump leads for motor vehicles with flat batteries.)
- Provide ample, clear directional signage to cycle parking at all entrances.
- Liaise with Kildare County Council re town permeability for cyclists and pedestrians.
- Liaise with Kildare County Council re traffic light sequencing to improve cyclist priority.
- Engage with Maynooth Cycling Campaign re cycling promotion measures and events. These events could include an annual 'Cycle Week', publication of Maynooth Cycling Map, issuing cyclist safety information, cycling training etc.

- University and College authorities should officially endorse and –where appropriate- visibly participate in sustainable commuting modes (cycling/walking) on a regular basis.
- The University and College should implement the Government's Bicycle Purchase Scheme (sample scheme forwarded to NUIM Human Resources and Bursar's Offices in February 2009)
- University Rule No.7 should be changed to directly address cycling and cyclist issues, rather than seeing it as one and the same as motorised traffic. (See Appendix 2 for detail)

Carparking and traffic management

- Obstructing vehicles must be removed promptly from cycle lanes and pedestrian pathways.
- All illegal vehicle parking that encroaches on or blocks pedestrian or cyclist paths should be removed/dealt with immediately.
- When development works cause obstructions to cycle and pedestrian pathways an alternative safe route should be provided immediately.
- In the interests of safety of cyclists and pedestrians (the most vulnerable road users) speed limits should be strictly enforced.

Cyclist facilities

- Replace unsuitable bicycle racks (butterfly, wheel holder and hook designs) with Sheffield Stand type racks at all buildings. We recommend that six racks be provided initially at office buildings, with more installed as those show regular 80% usage.
- Student lecture buildings, the Library and Restaurant should have higher number of bicycle parking spaces.
- Bicycle parking should be located convenient to the doorway and ideally have effective passive surveillance from adjacent rooms and buildings.
- Bicycle parking should be well lit and safe for people to access their bicycles late in the evening.
- It should be possible to access all bicycle parking by cycling: it should not be necessary to dismount any more than a couple of metres from the parking facility. (Note that it is never necessary to push one's car to a carpark space!)
- Where there is a day-long parking requirement (e.g. Office/administration building), provide sheltered bicycle parking.
- An ideal area for covered bicycle parking racks on the north campus is under the overhang of the Arts Building opposite Hume. There is ample space here to park dozens of bicycles. (See Figure 2)
- An ideal area for covered bicycle parking racks on the south campus is to the right of the archway that separates the pool from Logic.
- Design quality bicycle parking spaces into all new buildings and facilities.
- Provide lockers for staff and students who cycle regularly. These could be located in corridors or common areas near washroom facilities.
- A simple drying room would be an encouragement to cyclists to persist with cycling during winter or wet weather (when car congestion is at its worst).

- Though not essential, shower facilities are helpful in encouraging more energetic cyclists or those who might cycle longer distances. They could be located in individual buildings or an arrangement could be made in agreement with the Sports Department to use their facilities. At a minimum, there should be one such well-publicised facility on each campus.
- All new office buildings should incorporate at least one shower unit and changing area to encourage occupants to cycle to campus.

Figure 2: Suitable area for covered bicycle rack installation at Arts Building

‘Carrot and stick’ measures to encourage sustainable transport modes

While the above measures make cycling safer and more attractive, it will take action to encourage people to abandon the comfort of their cars. To have people consider more sustainable methods of commuting, we propose that measures are implemented to make driving relatively less attractive. These measures would include:

- Introduce pay parking on campus. Formulate a charging system that does not unduly penalise those that try to minimise their car usage e.g. those who only drive a few times per week.
- Provide a visitor carpark at rates that would discourage daily parking by staff or students. One such carpark should be provided at a central location on each campus.
- Implement a car-pooling scheme for staff and students and provide favourable parking rates for those who participate.
- Strictly enforce no parking regulations on all roadways, green areas or ‘unofficial’ parking areas on campus.

- Engage with Kildare County Council and the Gardai to ensure that illegal parking on the Kilcock road and other roads is not allowed to continue.
- Implement a scheme that rewards those who commute sustainably e.g. an annual event to acknowledge those who walk/cycle/take public transport a significant portion of the time.
- Engage with the Local Primary and Secondary Schools to encourage sustainable modes of transport to school such as the walking bus and cycling. A reduction in the number of children that are transported to school by car would greatly reduce congestion in Maynooth, in addition to removing the need for parents to drive to school and thus on to work.

"I thought of that while riding my bike"
Albert Einstein on the theory of relativity

Conclusion

Having examined the existing facilities, we are of the firm opinion that there is huge room for improvement in the cycling situation in Maynooth in general and on the campus in particular. For the cycling cohort to increase and for it to become an accepted and popular form of daily transport requires enthusiastic and imaginative engagement from the University and College Authorities.

While our proposals will have cost implications, we are confident they are much more cost-efficient and would be of significantly greater benefit to the campus, its residents, staff and visitors than investment in motor traffic measures.

We earnestly request that this opportunity to tackle the traffic and parking problems on campus is grasped enthusiastically and that brave decisions are made to improve the health and safety of transport, the campus experience and sustainability of our locality for the benefit of all.

Maynooth Cycling Campaign
March 2009

Appendix 1.

Table 1.

Survey of Bicycle Parking Provision at NUIM/SPCM taken on 19.11.2008

NUIM Bicycle Parking Spaces, South Campus

As at 19.11.08

Location	*Hook*	*Butterfly*	*Sheffield stand*	*Wheel Holder*	*Comment*
Main entrance	72				
Rear of Pool	10				Attached to wall, hidden from view
Library Forecourt	54	24			Butterfly racks hidden in hedge foliage
Logic rear	30				Behind building, out of sight
Computer Centre at PACR	6				Only covered rack on campus
South Campus totals	**172**	**24**	**0**	**0**	

Total of all bicycle parking spaces on South Campus **196**

NUIM Bicycle Parking Spaces, North Campus

As at 19.11.08

Location	*Hook*	*Butterfly*	*Sheffield stand*	*Wheel Holder*	*Comment*
Education House			10	12	
St. Annes (east)			8		
Arts Building east side	108				Bicycles parked under overhang instead for shelter
Restaurant	0				Currently a building site, fate of racks unknown
Callan N. side (on gravel)	48			10	Only 24 accessible, also currently a building site
" S.E. corner				12	Close to entrance, semi-sheltered
Bio-sciences NW corner			22		Far from doorway
Rye Hall			20	12	Outside main entrance
Student Union			14		
Sciences at Banklink				24	Prominent, semi-sheltered
River Apartments				100	Racks loose, not well affixed to ground
Village Apartments	24			10	Wheel holder rack on grass, not near path
North Campus totals	**180**	**0**	**74**	**180**	

Total of all bicycle parking spaces on North Campus **460**

Totals North & South campuses combined **352** **24** **74** **180**

Total bicycle parking spaces on North & South Campuses **630**

See notes below

Notes to Bicycle Parking Survey:

- A mere 11.7% of racks are of the recommended Sheffield Stand design. Encouragingly, these are the most recently installed racks.
- Many of the existing racks are not used due to poor location rendering them hidden or awkward to access or use.
- There are no signposts indicating location of racks.
- Racks of unsuitable design are avoided by cyclists whenever possible due to damage caused to bicycles and poor security potential. Unsuitable design racks are a waste of investment.
- The 'Wheel Holder' design is particularly unsuitable for racer style bicycles due to buckling damage to wheels, while mountain bike tyres will not fit in the spaces provided.
- The 'Butterfly' design does not offer sufficient security or stability for any type of bicycle, and also results in damage to bicycles.
- The 'Hook' design offers poor security for all bicycles and causes damage to some bicycle cables and frames.
- Bicycles attached to street furniture around the Hume and other buildings indicate the demand for bicycle parking in this area.

Appendix 2.

Proposal for change to Rule 7 of the General Rules of the University

*Maynooth Cycling Campaign was formed in 2008 to work for an improvement in the conditions for cyclists and promote cycling in Maynooth and surrounding areas. Recently, we were made aware of Rule 7 of the General Rules of the University and College and having considered it, we would like to make the following proposals to bring the rule up to date and more relevant to cyclists and their specific responsibilities.

We the members of Maynooth Cycling Campaign, feel that Rule 7 of the General Rules of the University is both inappropriate and unenforceable in its present wording, and suggest a revised wording dealing exclusively with cyclists and bicycles. We feel that this would be one small part of acknowledging cycling on campus and alerting cyclists to their duties and responsibilities. These are in some respects distinct from those of motorists.

We feel the speed limit of 15 miles/25Km per hour is inappropriate with reference to cyclists, as it is not possible for cyclists to calculate their speed in this way and thus observe the limit (and it is one which they would hardly reach in any case) so we suggest this is removed from the new wording.

We suggest that the duty of responsible courteous road manner is specified and that adherence to the general rules of the road should also be required.

Finally, it is a fact that large numbers of bicycles are abandoned on campus annually. Grounds staff recently removed 40 bicycles in various states of dilapidation from campus bicycle racks and around the campus. Since being removed on 4th July last, only one of these has been claimed by its owner. To ensure the proper presentation of the campus and availability of bicycle racks for daily use, we suggest that an annual removal schedule is notified to staff and students and carried out as detailed in the revised wording below.

Our proposed revised wording for Rule 7 (or other numbered rule addressing cyclists on campus) is as follows:

Proposed revised wording

7. Cyclists must obey the rules of the road as they apply on campus, and cycle in a manner and at a pace that respects and is considerate of other road users. Cycling is prohibited on the footbridge linking north and south campuses and in such other areas as are indicated by signposts. Bicycles must be parked at bicycle racks provided at key locations on campus. Bicycles left in a dilapidated condition attached to bike racks or abandoned around the campus will be removed annually in August. If these bicycles have not been claimed by their rightful owners within five months, three weeks public notice will be given after which they will be disposed of by the University Authorities.

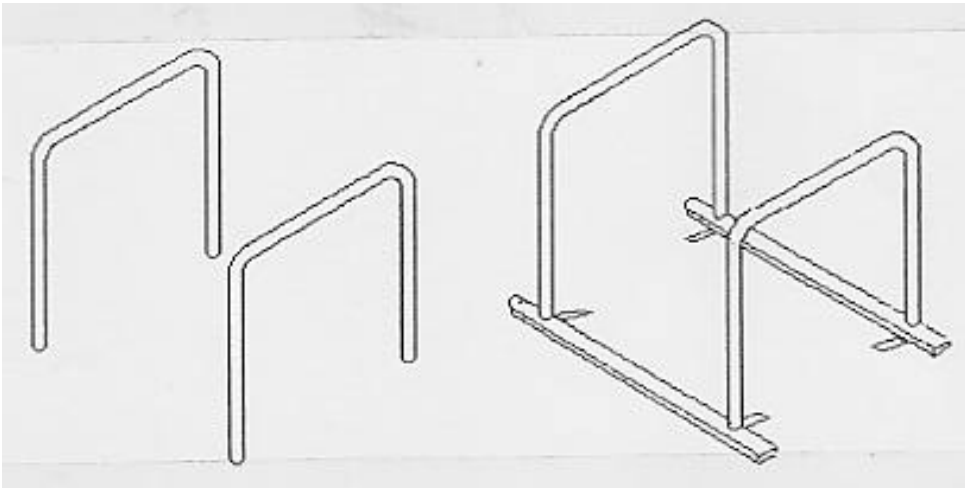
APPENDIX 3

CYCLE PARKING STANDARDS

(Adapted from London Cycling Campaign 'Cycle Parking Equipment and Installation Standard' November 2001)

The following three sections provide guidelines on the standards for cycle parking equipment, including general requirements, locations, and installation. Appendix 1 provides recommendations for the scale of provision and Appendix 2 lists a range of equipment suppliers.

2. The cycle parking standard



Overview

The purpose of the standard for cycle parking equipment and installation is to specify:

- the principal requirements for design
- the equipment to be used
- how this equipment is to be installed

Equipment standard

The standard equipment is known as the Sheffield parking stand or rack (toastrack), named after the city where it was first developed. Each stand accommodates two cycles, one ether side of the rack. This is not a registered or patented design.

The benefits of the Sheffield stand include:

- **security –** the cycle frame (with or without a crossbar) and, if desired, the wheels, can be secured to the rack
- **convenience –** it supports the cycle effectively, even while it is being locked and luggage or accessories removed
- **cost –** cheap, durable, and easy to maintain
- **visually acceptable**

The standard defines:

- the material used to construct the equipment and

- the dimensions of the equipment.

This standard excludes cycle storage lockers intended for medium to long-term high security cycle parking. There may be a charge for these and the provider may assume a degree of liability for security.
Cycle lockers can be an expensive solution, but are becoming an increasingly popular option for cycle storage. They are generally more secure than a stand and allow the cyclist to store accessories. The lockers, usually made of fiberglass or stainless steel, also protect the cycle from the elements. Cyclists are given a key which cannot be duplicated to get access to the locker. Details of suppliers can be found in the appendix.

This is a general purpose, universally applicable standard which is appropriate to any amenity where cycles need to be parked. These include places of work, educational establishments, shopping □enters, railway stations and other transport interchanges, pavements and all other amenities used by the public. These sites may be on establishment or local authority land. LCC will seek endorsement of this standard by national cycling groups, local authorities, amenity groups, and interest groups in the London area.

General requirements
Cycle stands should be provided in visible and accessible locations where they will be well used and:
- offer reasonable security against theft
- support cycles without damaging them
- not endanger pedestrians and other traffic
- are visually acceptable.

Security is the most important requirement. While it is useful to have under cover parking for protection against rain, it may be unacceptable on security grounds if it reduces visibility.

Locations
Cycle parks are an appropriate feature of virtually any amenity or facility. They may be located within a development or on an adjacent pavement. Either way, they should be as close as possible to the traveller's actual destination. As well as encouraging cycle use it is more likely that the stands will be used in preference to railings, street furniture etc. Larger buildings, such as hospitals or universities, will therefore need several cycle parks near to each entrance. Locations which typically require cycle parking include:
- **transport** rail, underground/metro, light rail and bus stations
- **places of work** office blocks, factories
- **education** schools, colleges, universities
- **shopping/services** high streets, markets, superstores, suburban shopping parades, doctors' and dentists' surgeries
- **entertainment** public houses, restaurants, fast food, bingo halls, theatres, cinemas, concert halls, tourist information □enters and attractions.
- **housing** normal blocks of flats, student, sheltered accommodation
- **community** post offices, libraries, museums, swimming pools, sports □enters, parks and gardens, hospitals, health □enters, places of worship, cemeteries, community centers.

- **government** town halls, social security and employment service offices, police stations, law courts.

Scale of provision
Appropriate scales of provision for different types of locations are set out in Appendix 1.

Table 1. Equipment standard
The standard equipment is known as the Sheffield parking stand or rack (toastrack), named after the city where it was first developed. Each stand accommodates two cycles, one either side of the rack. This is not a registered or patented design.
The benefits of the Sheffield stand include:
- **security –** the cycle frame (with or without a crossbar) and, if desired, the wheels, can be secured to the rack
- **convenience –** it supports the cycle effectively, even while it is being locked and luggage or accessories removed
- **cost –** cheap, durable, and easy to maintain
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The standard defines:
- the material used to construct the equipment and
- the dimensions of the equipment.

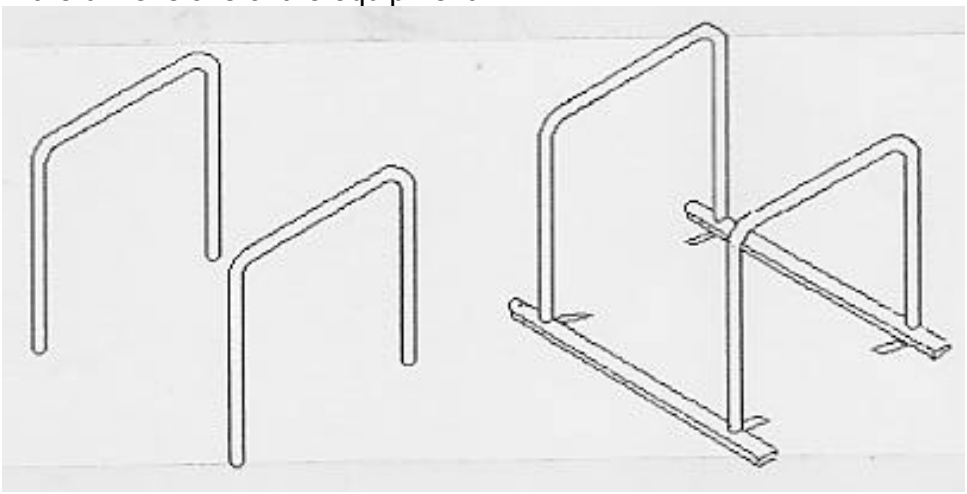

Figure 1. Sheffield cycle parking stands and racks

Material
The required material is:-
- galvanised steel tube coated with PVC, polyester, or nylon
- stainless steel tube

Dimensions – stands
The required dimensions are:
A external diameter of tube: 50 mm minimum 75 mm maximum
B thickness of tube wall: 25 mm minimum
C radius of bend: 100 mm minimum 250 mm maximum
D length of stand: 700 mm minimum 1000 mm maximum
E height of stand above ground level: 800 mm + 50 mm
F baseplate for stands: 150 mm x 150 mm x 6 mm minimum
(surface fixing model – Fig 2)

G extra length of vertical sections 250 mm minimum
(ground embedding model – Fig 3)

Dimensions – racks
The required dimensions are:
A – E as above
H space between individual bars 850 mm ±100 mm
If the individual bars are placed too close together, then only one side of each bar may be
used. This is an inefficient use of parking space. Similarly, if cycles are forced into too
narrow a space, they may be damaged and there will also be a health and safety hazard.

Table 1. Installation and maintenance standard
The installation standard defines:
- the criteria for selecting installation sites
- the required dimensions for installation
- requirements for securing stands or racks to the ground
- signing
- maintenance requirement

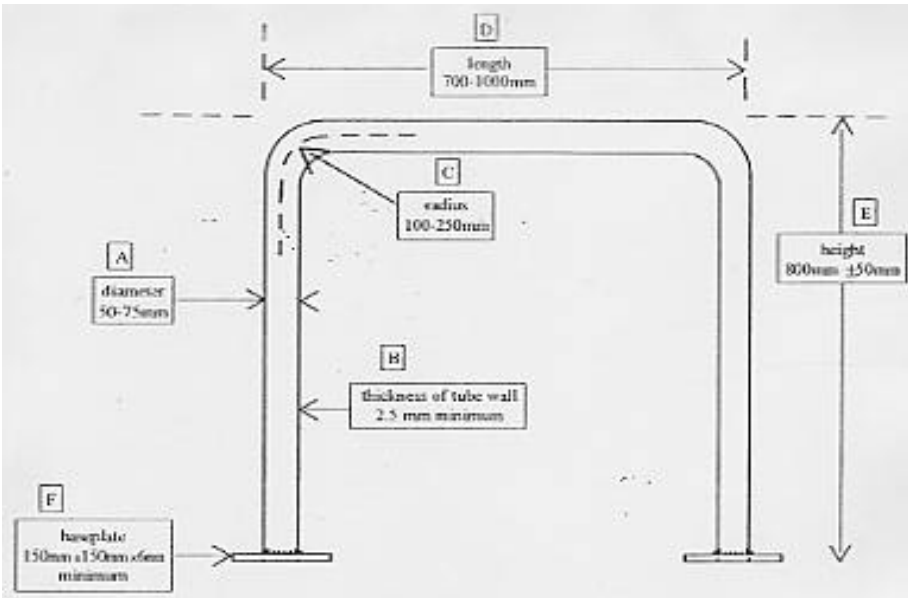

Figure 2. Dimensions for Sheffield cycle parking stand bolted into the ground.

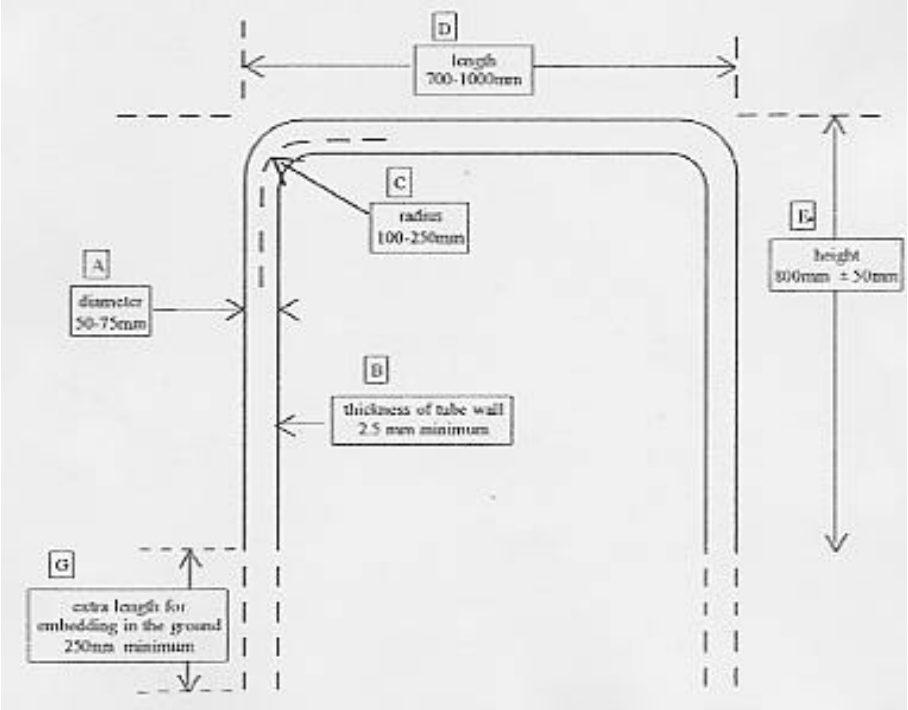

Figure 3. Dimensions for Sheffield cycle parking stand embedded in the ground.

Criteria for site selection

The criteria for site selection include:

Table 1. ease and convenience of access, including:

- near the entrance to the amenity, including each building entrance at larger sites
- easy for prospective new users to find
- avoid the need to carry cycles on stairs
- lit at night

b) visibility to at least one of the following:

- staff working at the amenity
- passing members of the public
- security guards
- video surveillance systems

c) avoids places where a van might easily be used for bulk cycle theft

d) safe and non-obstructive for pedestrians and other traffic

e) visual harmony with the surroundings

Dimensions for installation

The required dimensions are:

A: space between stands 1000mm ± 100 mm

B: space between stands and perimeter line barrier on all sides: 650 mm minimum

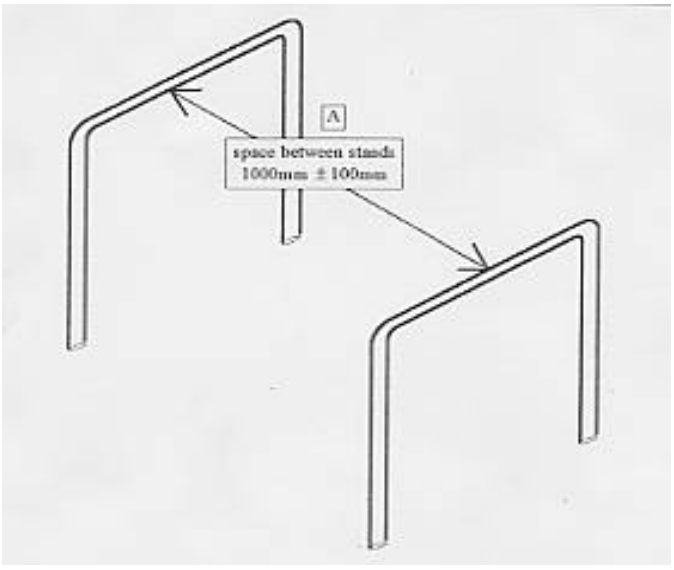

Figure 4. Space between stands

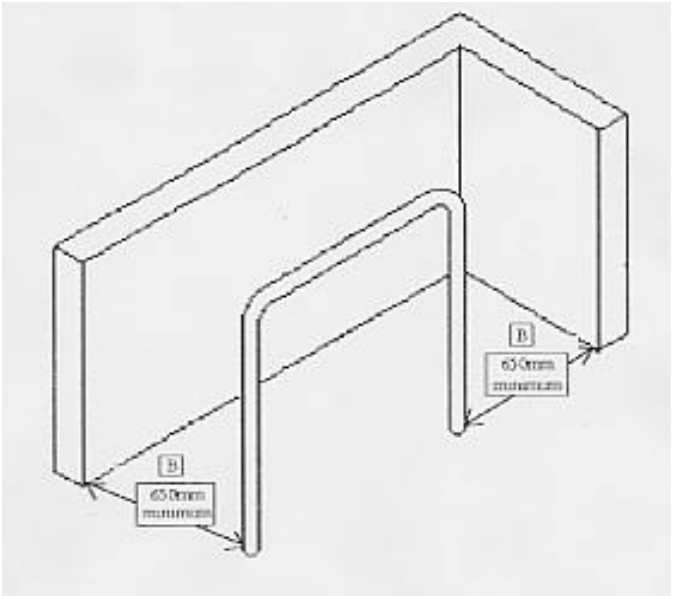

Figure 5. Space between stands and perimeter line

Dimensions for compact installation

As mentioned above, stands should not be placed too close together. However, an exceptional circumstances, eg extremely limited space, an alternative specification may be applied. But this is not for general use and should be avoided wherever practicable. Where ground space is restricted, stands can be placed at an oblique angle.

The required dimensions are:-

A: space between stands 750 mm minimum

B: space between stands and perimeter line/barrier on all sides 600 mm minimum.

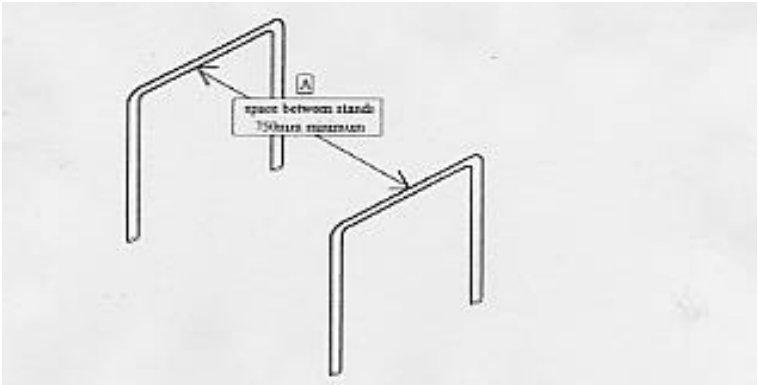

Figure 6. Space between stands for compact installation

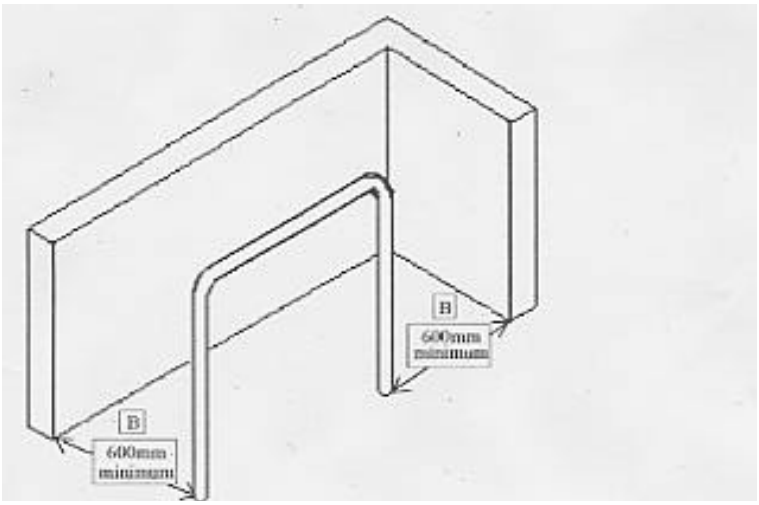

Figure 7. Space between stands and perimeter line for compact installation

Securing stands to the ground

Stands must be secured to the ground by one of the following methods:

- bolting to a hard level surface using at least two high-security bolts (eg, m10 Rawbolts) passing through each baseplate
- embedding in concrete to a minimum depth of 250 mm

On sloping ground, stands must be aligned across the slope to avoid cycles slipping down hill.

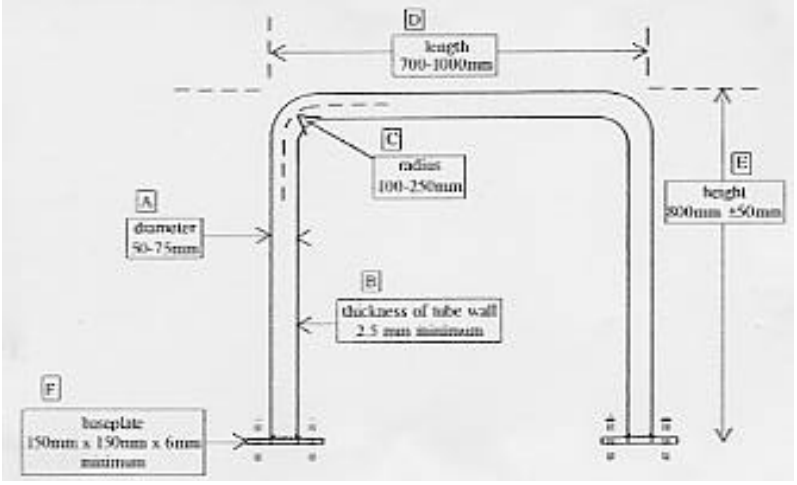

Figure 8. Stand secured by bolting to a hard level surface

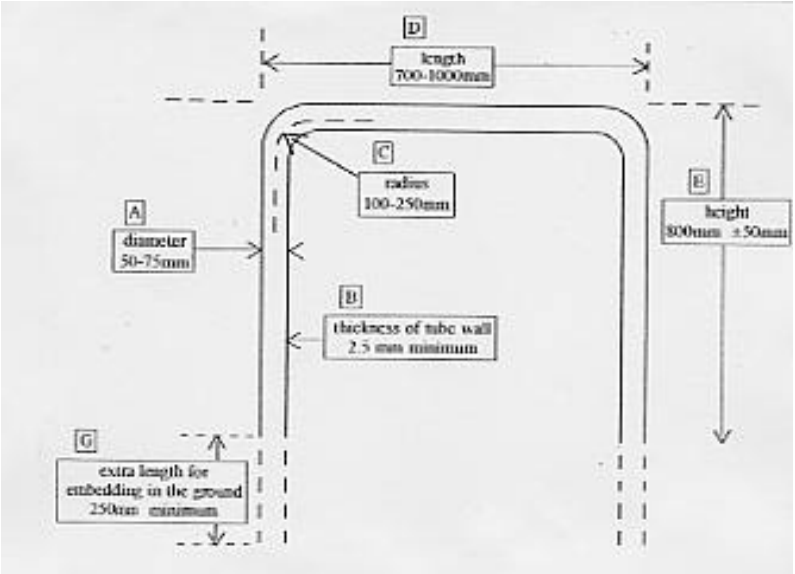

Figure 9. Stand secured by embedding in concrete

Securing racks to the ground

Racks (linked together by horizontal base members) may be secured to the ground by bolting to a hard level surface with high-security bolts (eg, m10 Rawlbolts). Racks are usually supplied with small welded feet through which the bolts can be inserted. On sloping ground, racks must be aligned across the slope to avoid cycles slipping down hill.

Signing

Parking signs may enhance the installation. If used they should comply with Department of Transport Traffic Signs (amendment) regulations 735.1 or 735.2, dated 1982 or later. Typical signs are illustrated below.

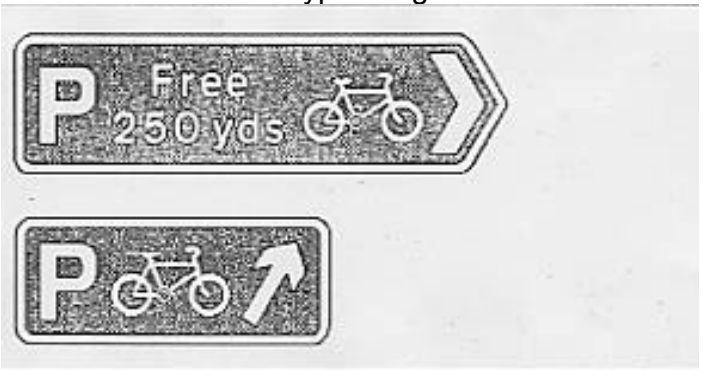

Figure 10. Typical cycle park signs

Where there may be doubts as to owner's risk, for example at railway stations, special signs indicating the risk are required. If used, these signs might conform to the following pattern:-

Figure 11. Indicator of owner's risk

Maintenance

Sheffield racks and stands require relatively little maintenance. However, as with any multiple user facility, they do need routine inspection and maintenance.

Appendix A: Scale of provision

The London Cycling Forum (LCF) has recommended scales of provision based on gross floor area. These scales are far below the levels applied in a number of cycle friendly towns outside London. They are probably also insufficient for the increase in cycle use envisaged by the GLA's transport strategy, so only serve as a general guide to minimum requirements.

The London Cycling Campaign recommends that:

- standards of at least the LCF recommendations are incorporated in London Boroughs' Unitary Development Plans and made a condition of development planning consents.
- existing facilities are equipped to these standards.
- use is regularly monitored and provision augmented to keep pace with increasing usage.

Table 1. Recommended scale of provision for cycle parking

Location category	Location	Unit of gross floor area/cycle parking space
Transport	Railway stations	5 spaces/peak period train
	Bus stations	2 spaces/100 peak period passengers
Places of work		
	Offices 700m2	
	Factories & warehouses 850m2	
	Educational Schools – primary 500m2	
	Schools – secondary 300m2	
	Universities, colleges 200m2	
	Shopping and services 500m2	
	Entertainment Pubs & restaurants 140m2	
	Fast food 70 m2	
	Theatres & cinemas 450m2	
	Leisure & sports centres 300m2	
	Housing (at ground floor level) Normal 150m2	
	Student 100m2	
	Sheltered 450m2	
	Community Hospitals 700m2	
	Health centres 350m2	

Appendix B: Cycle Parking Equipment Suppliers

www.aremco-product

www.autopa.co.uk

Boyco Manufacturing Co.

www.broxap.co.uk

www.cycle-safe.com

Dixon-Bate Ltd

www.falco.nl

www.furnitubes.com

www.glasdon.com

www.lockit-safe.co.uk

Macemain Amstad Ltd

www.starlite-media.co.uk

The Cyclevice