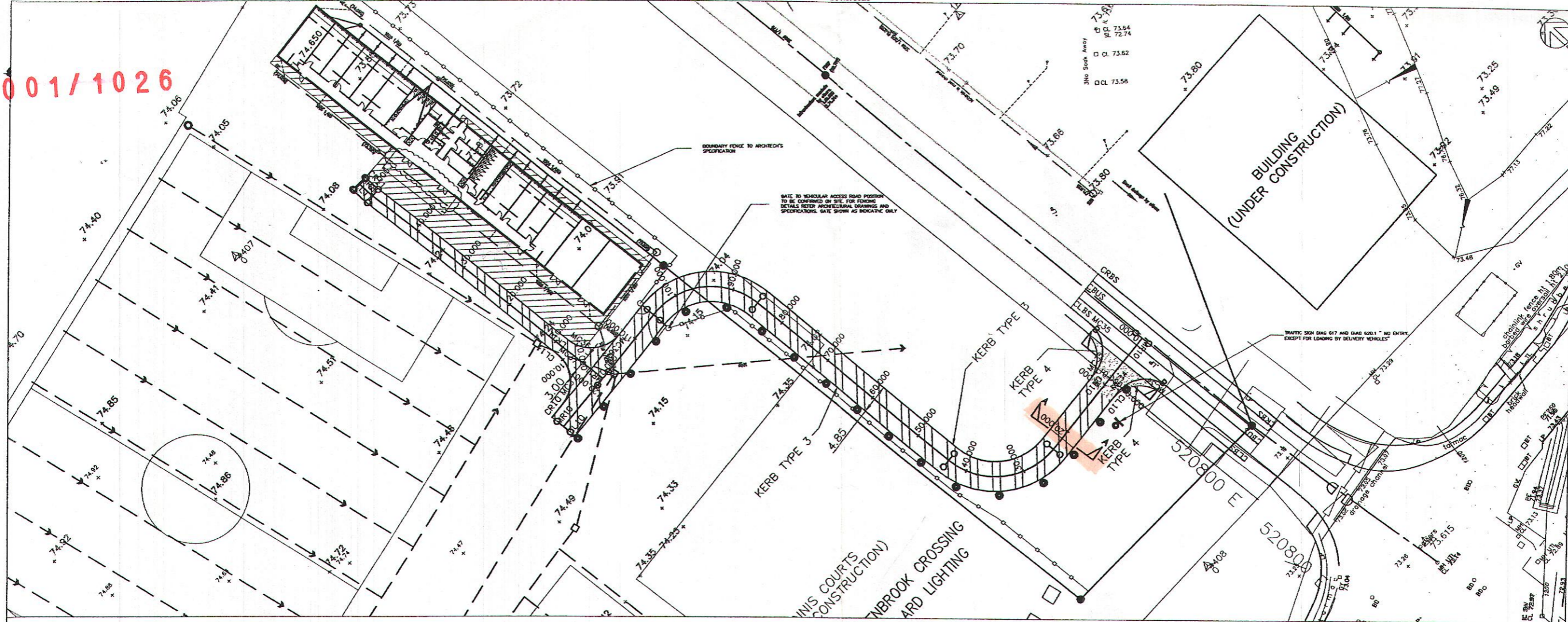


2001/1026

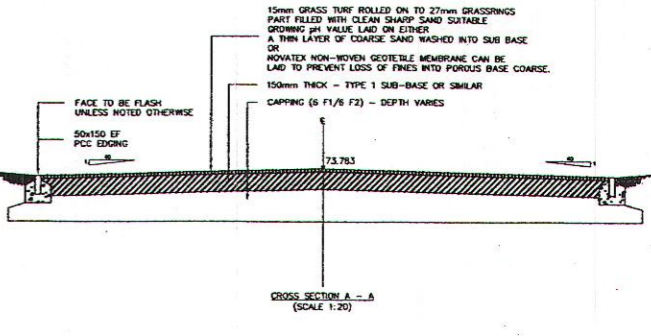
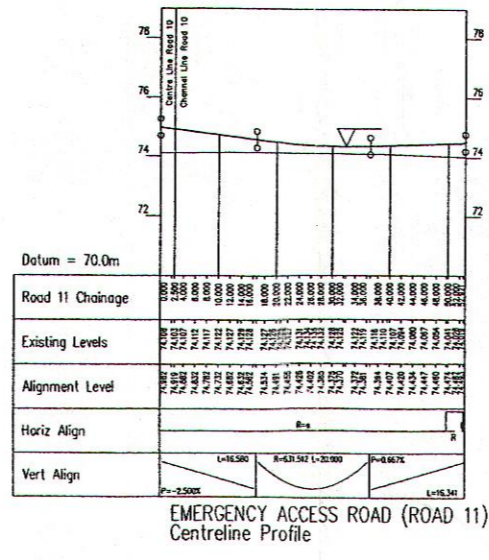
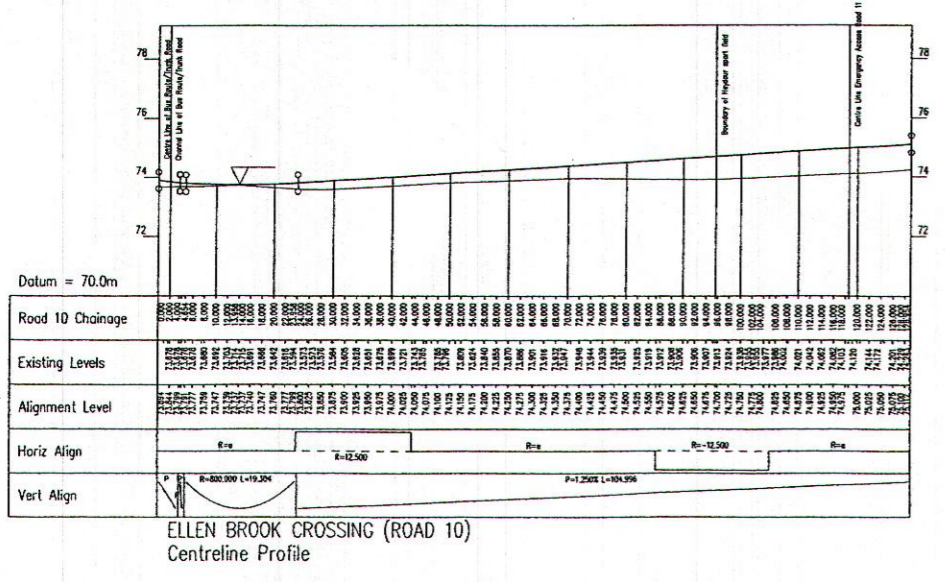
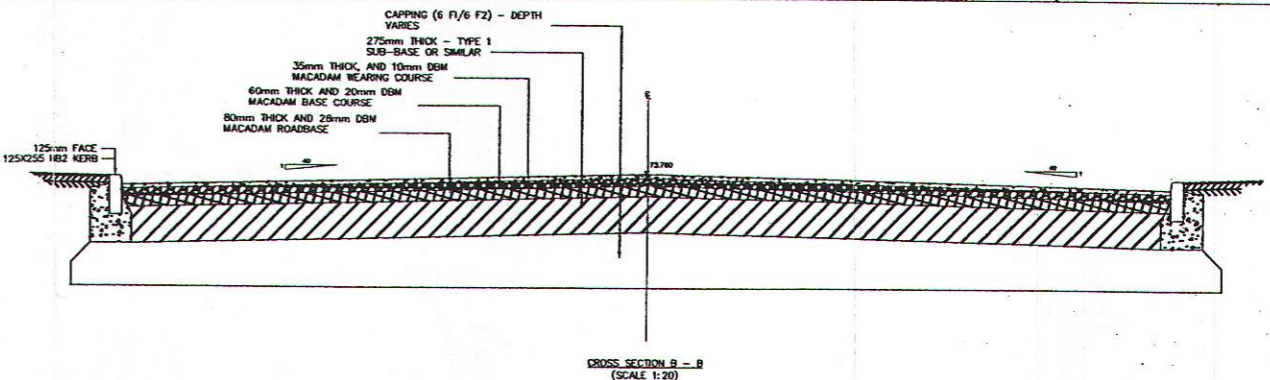
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- NOTES:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH TPS DRAWING NO. C_L(94)001 REV.1 AND MACROCON SOUTH DRAWING NO. SK-10 DATED 18-02-07.
2. ALL TRAFFIC SIGNS TO BE IN ACCORDANCE WITH THE TRAFFIC SIGN REGULATIONS AND GENERAL DIRECTIONS 1994.
3. EXISTING LEVELS TO BE CHECKED PRIOR TO CONSTRUCTION.
4. EXISTING LEVELS ARE TAKEN FROM ORIGINAL SURVEY INFORMATION PRIOR TO THE CONSTRUCTION OF THE HAUL ROAD.
5. REFER TO DRAWING C_L(94)002 FOR DRAINAGE DETAILS AND ARRANGEMENTS.

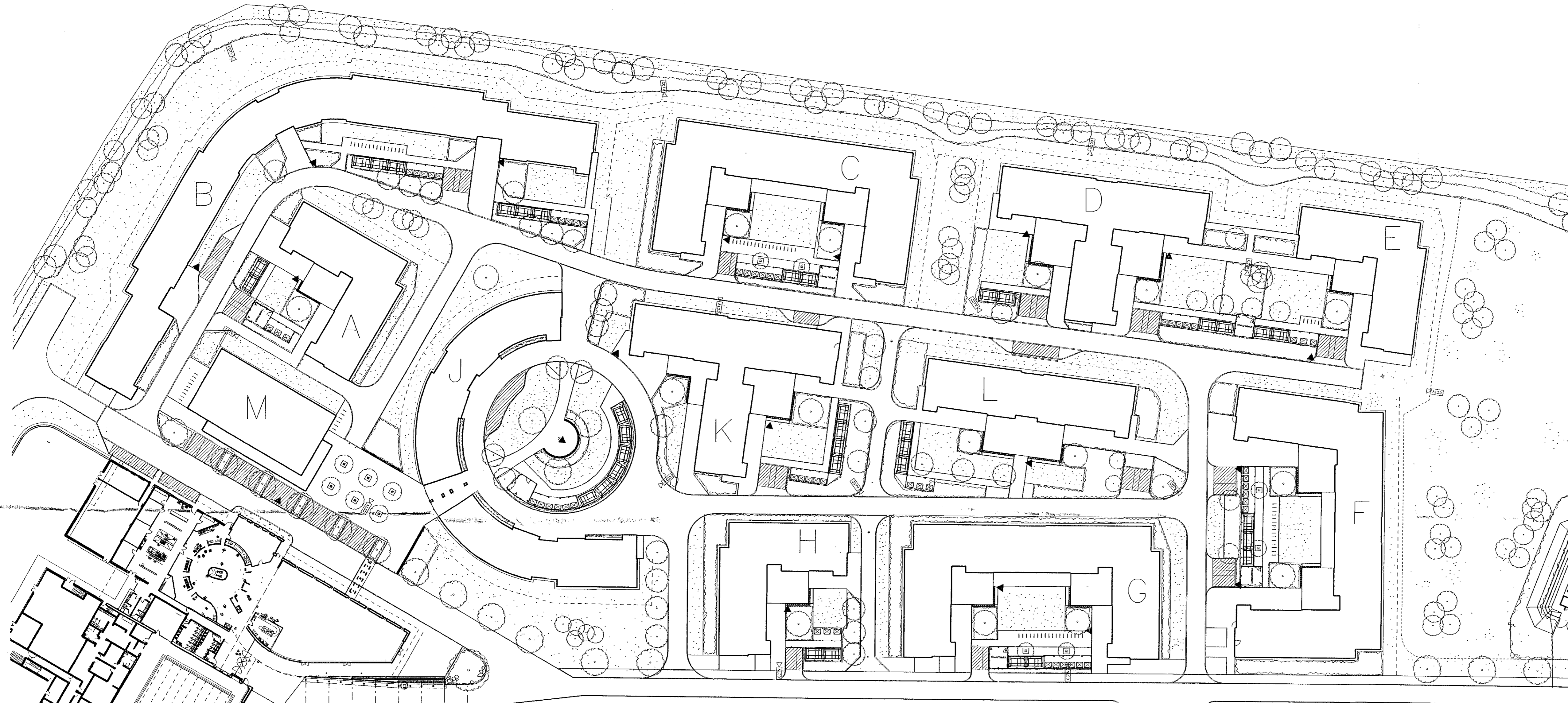
LEGEND:
- Plastic grid reinforcement to grass for emergency services vehicles access (Grassing construction type 1)
- Haul road construction type 5
- Paved area 2450x450x70mm Marshalls Trafficax Saxon

LIGHTING BOLLARD IN ACCORDANCE WITH LORNE STEWART DRAWING ER4282



Revision table with columns for No., Date, and Description of changes to the drawing.

Carillion University of Hertfordshire logos. Project: UNIVERSITY OF HERTFORDSHIRE CAMPUS REDEVELOPMENT P.F.1. Drawing Title: ELLEN BROOK CROSSING TO SPORTS FIELD. TPS Consult logo and contact information.



| | | |
|---|----------|----------------------------|
| E | 19.4.03 | AMENDMENTS TO BINS |
| D | 19.3.02 | AMENDMENTS FOR FIRE ACCESS |
| C | 17.12.01 | BLOCKS CFG AMENDED |
| B | 17.12.01 | ISSUED FOR PLANNING |
| A | 7.12.01 | ISSUED FOR COMMENT |

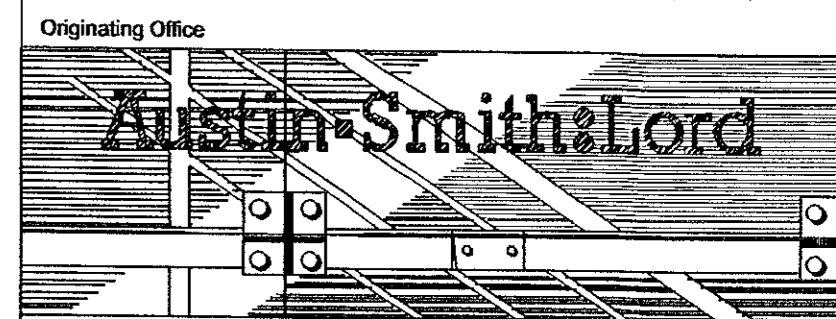
Rev/ Date Revision



Project
**UNIVERSITY OF HERTFORDSHIRE
CAMPUS REDEVELOPMENT P.F.I**

Drawing Title
**RESIDENTIAL BLOCKS
BIN/CYCLE/PARKING SCHEDULE**

Trade Packages

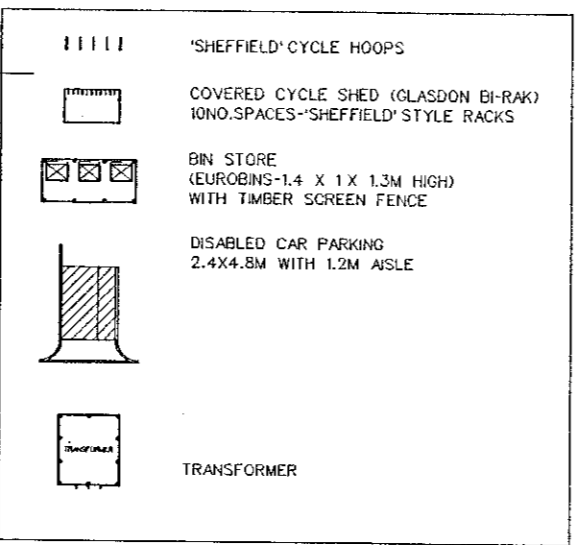


17 Bowling Green Lane London EC1R 0QA London ●
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 E-mail: aslondon@dial.pipex.com Warrington ○

SCHEDULE

| BLOCK | COVERED CYCLES | OPEN CYCLES | TOTAL CYCLES | BINS | CAR SPACE |
|-------|----------------|-------------|--------------|------|-----------|
| A | 20 | | 20 | 3 | 2 |
| B | 60 | 30 | 90 | 10 | 4 |
| C | 20 | 36 | 56 | 6 | 1-1 |
| D | 40 | | 40 | 5 | 4 |
| E | 20 | 10 | 30 | 3 | 2 |
| F | 30 | 30 | 60 | 6 | 4 |
| G | 20 | 36 | 56 | 6 | 1 |
| H | 20 | | 20 | 3 | 1 |
| J | 60 | | 60 | 6 | 2 |
| K | 40 | | 40 | 5 | 2 |
| L | 30 | | 30 | 3 | 2 |
| M | | 30 | 30 | | 15 |
| TOTAL | 360 | 172 | 532 | 56 | 43 |

KEY

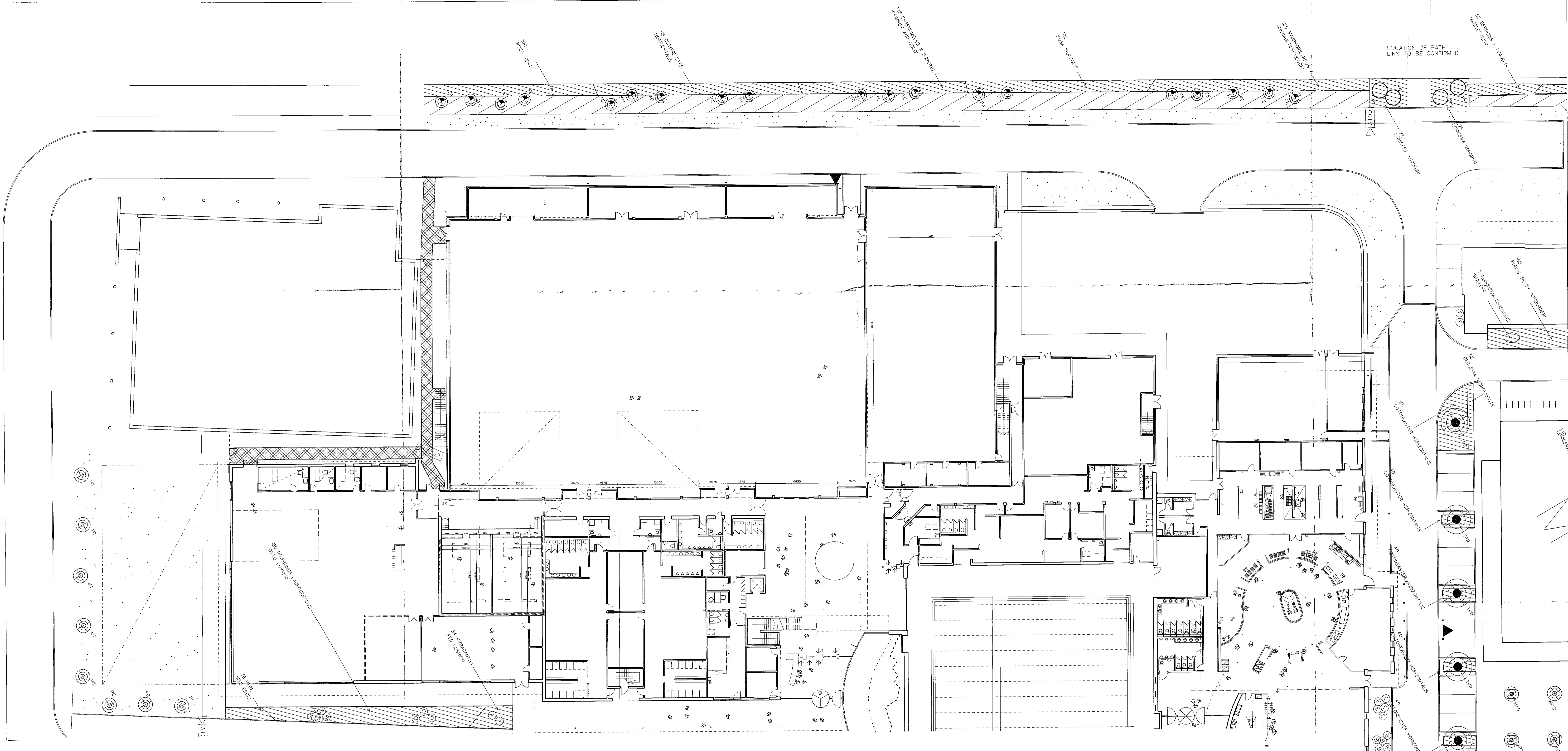


GLASS RECYCLING BINS NOT SHOWN
 *REQUIREMENTS TO BE CONFIRMED

*CYCLE REQUIREMENT - ASSUMES A 1:3 CYCLE OWNERSHIP RATE

2001/1026

| | |
|--|-------------------------------------|
| Originating Office | P LYON |
| QA System - Checks | Signature Date |
| Drawn By: | |
| Checked: | |
| Authorised: | |
| Project No. 101212 | Status PLANNING Scale (at A1) 1:500 |
| Drawing No. Dept. Ident. Type. Cost Element code. Seq. No. | Revision |
| L(90)024 | E |



SHRUBS

Table with columns: NO, SPECIES, SPACING NO/M2, HEIGHT(CM), CONTAINER, HABIT, MIN.BREAKS. Lists various shrub species and their specifications.

CLIMBERS

Table with columns: NO, SPECIES, SPACING NO/M2, HEIGHT(CM), CONTAINER, HABIT, MIN.BREAKS. Lists climbing plant species and their specifications.

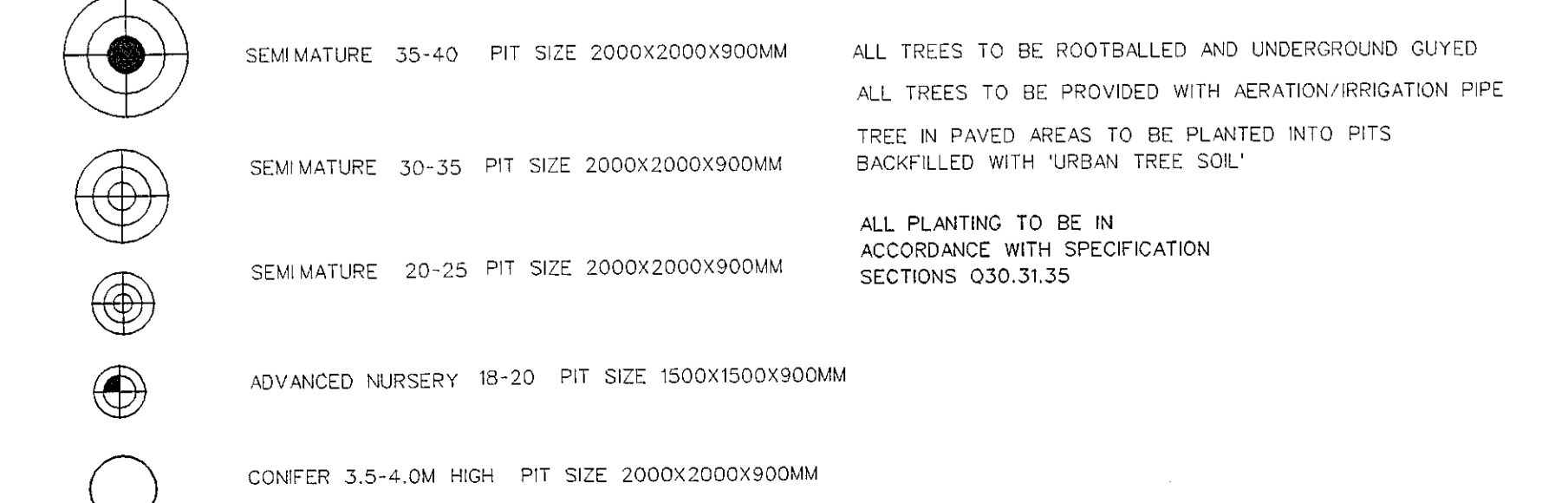
APPROX 300M OF SCREEN FENCE PROVIDE CLIMBER AT 2.5M CENTRES=120PLANTS SUBJECT TO DETAIL DESIGN OF SCREEN FENCE ALL CLIMBERS TO BE PROVIDED WITH AND TIED INTO STAINLESS STEEL WIRE COMPLETE WITH HEAVY DUTY FIXING EYES AND TURNBUCKLES

PERENNIALS

Table with columns: NO, SPECIES, SPACING NO/M2, CONTAINER. Lists perennial plant species and their specifications.

TREES

Table with columns: NO, SPECIES, FORM, TRANSPLANTED, GIRTH(CM), HEIGHT(CM), CLEAR STEM(CM). Lists tree species and their specifications.



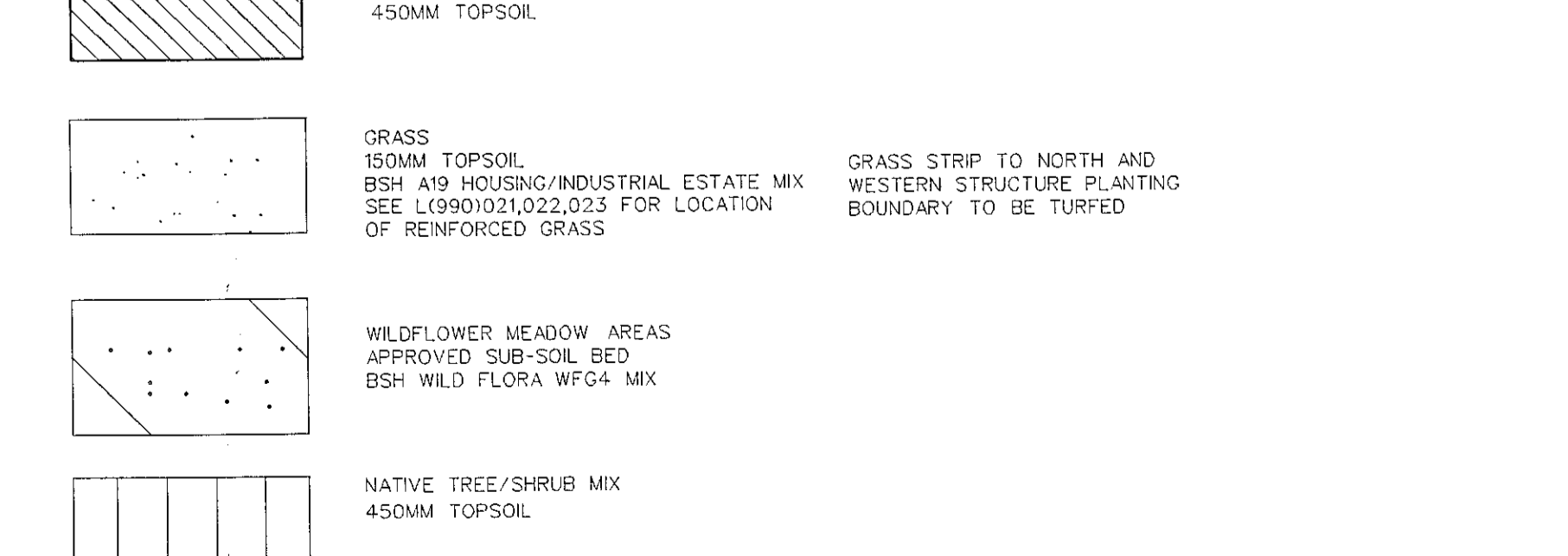
SPECIMEN SHRUBS

Table with columns: NO, SPECIES, HEIGHT(CM), CONTAINER, HABIT, MIN.BREAKS. Lists specimen shrub species and their specifications.

NATIVE SHRUB MIX (1980m2)

Table with columns: NO, SPECIES, SPACING SUPPLY, HEIGHT(CM). Lists native shrub mix species and their specifications.

PLANTING DENSITY: 2 PLANTS/M2 IN GROUPS OF 5-9 ALL PLANTING MULCHED WITH 75MM BARK MULCH AS SPECIFICATION



ALL TREES TO BE ROOT-BALLED AND UNDERGROUND GUYED ALL TREES TO BE PROVIDED WITH AERATION/IRRIGATION PIPE TREE IN PAVED AREAS TO BE PLANTED INTO PITS BACKFILLED WITH URBAN TREE SOIL

ALL PLANTING TO BE IN ACCORDANCE WITH SPECIFICATION SECTIONS Q30.31.35

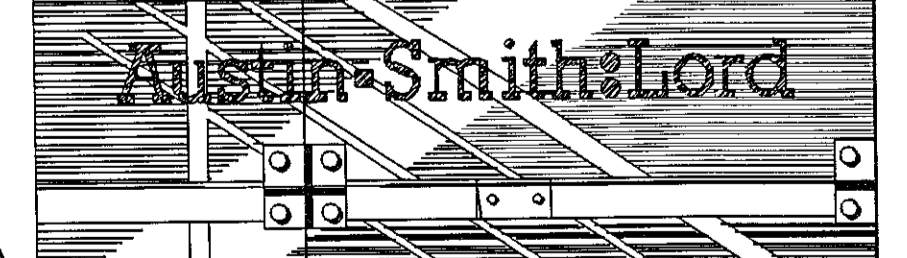
- 6 4.4.03 PLANTING ADDED TO SERVICES COMPOUND AS AGREED WITH PLANNERS
5 2.4.03 AMENDED TO ARLINGTON/MACDOUGALL REQUIREMENTS
4 3.2.03 TREES AMENDED FOR SERVICES SPECIMEN DETAILS ADDED
3 15.10.02 TREES AMENDED FOR CCTV SCHEDULE AMENDED
2 3.10.02 CONSTRUCTION ISSUE
1 28.8.02 CONSTRUCTION ISSUE



Project UNIVERSITY OF HERTFORDSHIRE CAMPUS REDEVELOPMENT P.F.I

Drawing Title PLANTING PLAN 3 OF 3 2001/1026

Trade Packages



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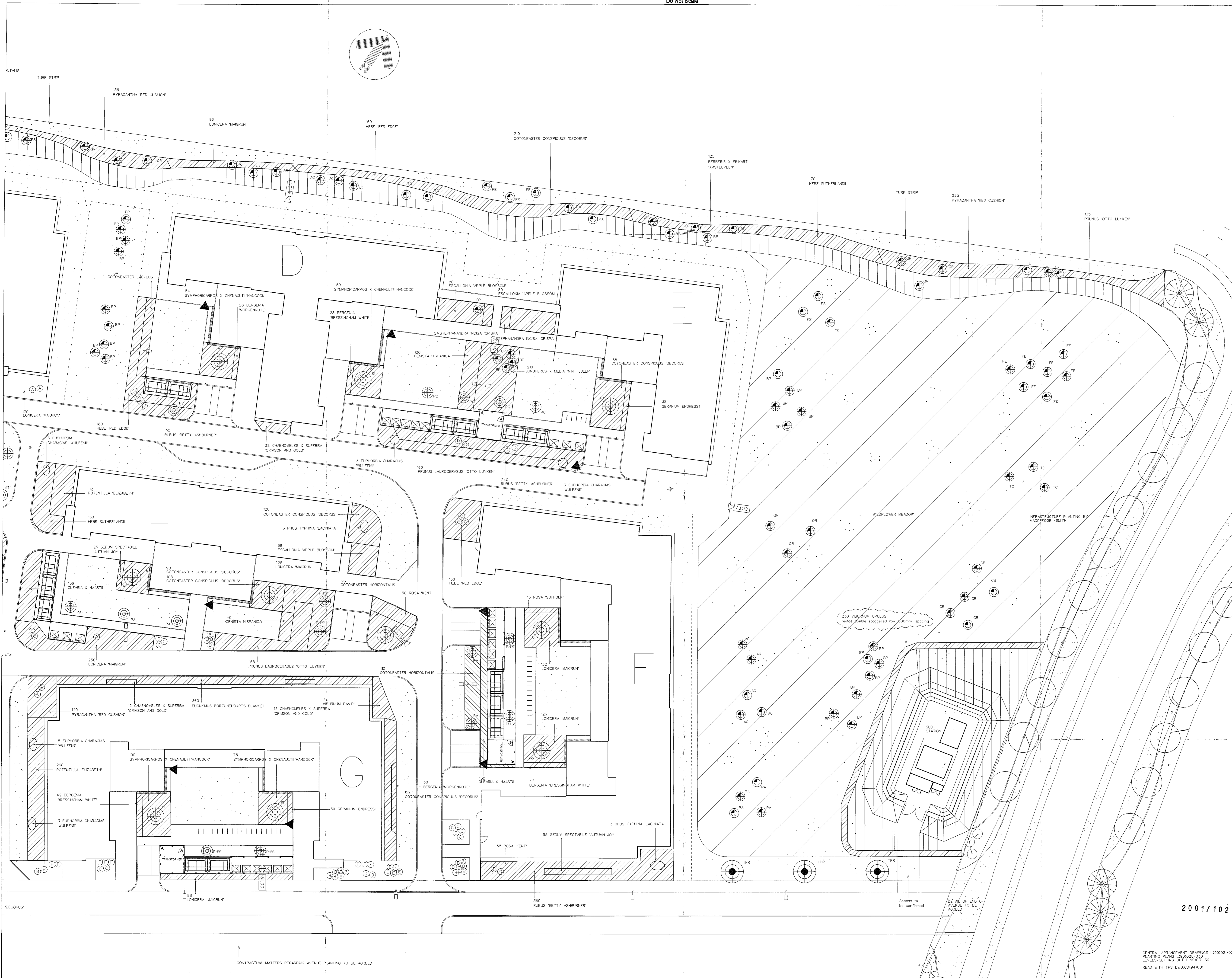
Originating Manager Response P LYON
QA System - Checks Signature Date

Drawn By: CM
Checked:
Authorised:

Project No: 101214 Status: CONSTRUCTION Scale (at A3): 1:200
Drawing No: 000 Date: 02/08/01 Type: 02b/02a/02c/02d/02e/02f/02g/02h/02i/02j/02k/02l/02m/02n/02o/02p/02q/02r/02s/02t/02u/02v/02w/02x/02y/02z/02aa/02ab/02ac/02ad/02ae/02af/02ag/02ah/02ai/02aj/02ak/02al/02am/02an/02ao/02ap/02aq/02ar/02as/02at/02au/02av/02aw/02ax/02ay/02az/02ba/02bb/02bc/02bd/02be/02bf/02bg/02bh/02bi/02bj/02bk/02bl/02bm/02bn/02bo/02bp/02bq/02br/02bs/02bt/02bu/02bv/02bw/02bx/02by/02bz/02ca/02cb/02cc/02cd/02ce/02cf/02cg/02ch/02ci/02cj/02ck/02cl/02cm/02cn/02co/02cp/02cq/02cr/02cs/02ct/02cu/02cv/02cw/02cx/02cy/02cz/02da/02db/02dc/02dd/02de/02df/02dg/02dh/02di/02dj/02dk/02dl/02dm/02dn/02do/02dp/02dq/02dr/02ds/02dt/02du/02dv/02dw/02dx/02dy/02dz/02ea/02eb/02ec/02ed/02ee/02ef/02eg/02eh/02ei/02ej/02ek/02el/02em/02en/02eo/02ep/02eq/02er/02es/02et/02eu/02ev/02ew/02ex/02ey/02ez/02fa/02fb/02fc/02fd/02fe/02ff/02fg/02fh/02fi/02fj/02fk/02fl/02fm/02fn/02fo/02fp/02fq/02fr/02fs/02ft/02fu/02fv/02fw/02fx/02fy/02fz/02ga/02gb/02gc/02gd/02ge/02gf/02gg/02gh/02gi/02gj/02gk/02gl/02gm/02gn/02go/02gp/02gq/02gr/02gs/02gt/02gu/02gv/02gw/02gx/02gy/02gz/02ha/02hb/02hc/02hd/02he/02hf/02hg/02hh/02hi/02hj/02hk/02hl/02hm/02hn/02ho/02hp/02hq/02hr/02hs/02ht/02hu/02hv/02hw/02hx/02hy/02hz/02ia/02ib/02ic/02id/02ie/02if/02ig/02ih/02ii/02ij/02ik/02il/02im/02in/02io/02ip/02iq/02ir/02is/02it/02iu/02iv/02iw/02ix/02iy/02iz/02ja/02jb/02jc/02jd/02je/02jf/02jg/02jh/02ji/02jj/02jk/02jl/02jm/02jn/02jo/02jp/02jq/02jr/02js/02jt/02ju/02jv/02jw/02jx/02jy/02jz/02ka/02kb/02kc/02kd/02ke/02kf/02kg/02kh/02ki/02kj/02kk/02kl/02km/02kn/02ko/02kp/02kq/02kr/02ks/02kt/02ku/02kv/02kw/02kx/02ky/02kz/02la/02lb/02lc/02ld/02le/02lf/02lg/02lh/02li/02lj/02lk/02ll/02lm/02ln/02lo/02lp/02lq/02lr/02ls/02lt/02lu/02lv/02lw/02lx/02ly/02lz/02ma/02mb/02mc/02md/02me/02mf/02mg/02mh/02mi/02mj/02mk/02ml/02mm/02mn/02mo/02mp/02mq/02mr/02ms/02mt/02mu/02mv/02mw/02mx/02my/02mz/02na/02nb/02nc/02nd/02ne/02nf/02ng/02nh/02ni/02nj/02nk/02nl/02nm/02nn/02no/02np/02nq/02nr/02ns/02nt/02nu/02nv/02nw/02nx/02ny/02nz/02oa/02ob/02oc/02od/02oe/02of/02og/02oh/02oi/02oj/02ok/02ol/02om/02on/02oo/02op/02oq/02or/02os/02ot/02ou/02ov/02ow/02ox/02oy/02oz/02pa/02pb/02pc/02pd/02pe/02pf/02pg/02ph/02pi/02pj/02pk/02pl/02pm/02pn/02po/02pp/02pq/02pr/02ps/02pt/02pu/02pv/02pw/02px/02py/02pz/02qa/02qb/02qc/02qd/02qe/02qf/02qg/02qh/02qi/02qj/02qk/02ql/02qm/02qn/02qo/02qp/02qq/02qr/02qs/02qt/02qu/02qv/02qw/02qx/02qy/02qz/02ra/02rb/02rc/02rd/02re/02rf/02rg/02rh/02ri/02rj/02rk/02rl/02rm/02rn/02ro/02rp/02rq/02rr/02rs/02rt/02ru/02rv/02rw/02rx/02ry/02rz/02sa/02sb/02sc/02sd/02se/02sf/02sg/02sh/02si/02sj/02sk/02sl/02sm/02sn/02so/02sp/02sq/02sr/02ss/02st/02su/02sv/02sw/02sx/02sy/02sz/02ta/02tb/02tc/02td/02te/02tf/02tg/02th/02ti/02tj/02tk/02tl/02tm/02tn/02to/02tp/02tq/02tr/02ts/02tt/02tu/02tv/02tw/02tx/02ty/02tz/02ua/02ub/02uc/02ud/02ue/02uf/02ug/02uh/02ui/02uj/02uk/02ul/02um/02un/02uo/02up/02uq/02ur/02us/02ut/02uu/02uv/02uw/02ux/02uy/02uz/02va/02vb/02vc/02vd/02ve/02vf/02vg/02vh/02vi/02vj/02vk/02vl/02vm/02vn/02vo/02vp/02vq/02vr/02vs/02vt/02vu/02vv/02vw/02vx/02vy/02vz/02wa/02wb/02wc/02wd/02we/02wf/02wg/02wh/02wi/02wj/02wk/02wl/02wm/02wn/02wo/02wp/02wq/02wr/02ws/02wt/02wu/02wv/02ww/02wx/02wy/02wz/02xa/02xb/02xc/02xd/02xe/02xf/02xg/02xh/02xi/02xj/02xk/02xl/02xm/02xn/02xo/02xp/02xq/02xr/02xs/02xt/02xu/02xv/02xw/02xx/02xy/02xz/02ya/02yb/02yc/02yd/02ye/02yf/02yg/02yh/02yi/02yj/02yk/02yl/02ym/02yn/02yo/02yp/02yq/02yr/02ys/02yt/02yu/02yv/02yw/02yx/02yy/02yz/02za/02zb/02zc/02zd/02ze/02zf/02zg/02zh/02zi/02zj/02zk/02zl/02zm/02zn/02zo/02zp/02zq/02zr/02zs/02zt/02zu/02zv/02zw/02zx/02zy/02zz

L(90)030 6

GENERAL ARRANGEMENT DRAWINGS L(90)021-023
PLANTING PLANS L(90)028-030
LEVELS/SETTING OUT L(90)031-36
READ WITH TFS DWG.C01941001



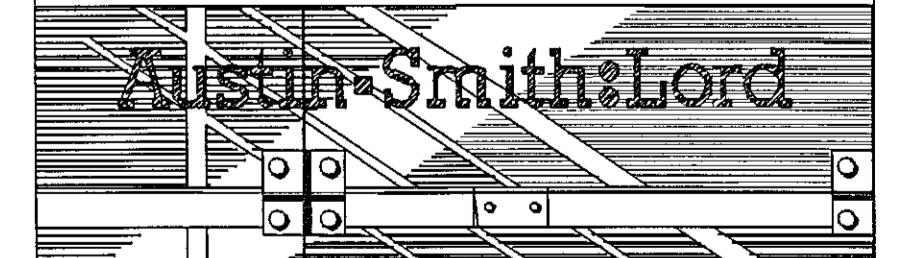
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|----------|----------|--|
| 6 | 44.03 | PLANTING ADDED TO SERVICES COMPOUND AS CONFIRMED BY PLANNERS |
| 5 | 24.03 | AMENDED TO ARLINGTON/MACDREGOR/SMITH REQUIREMENTS |
| 4 | 42.03 | TREES AMENDED FOR SERVICES SPECIMENS DETAILS ADDED |
| 3 | 15.10.02 | TREES AMENDED FOR OCTV** |
| 2 | 31.02 | sub-mission planting address** |
| 1 | 28.8.02 | CONSTRUCTION ISSUE** |
| A | 14.8.02 | TENDER ISSUE |
| Rev/Date | Revision | |



Project
UNIVERSITY OF HERTFORDSHIRE
CAMPUS REDEVELOPMENT P.F.I

Drawing Title
PLANTING PLAN
1 OF 3

Trade Packages



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Telephone: 0207 251 6161 Cardiff
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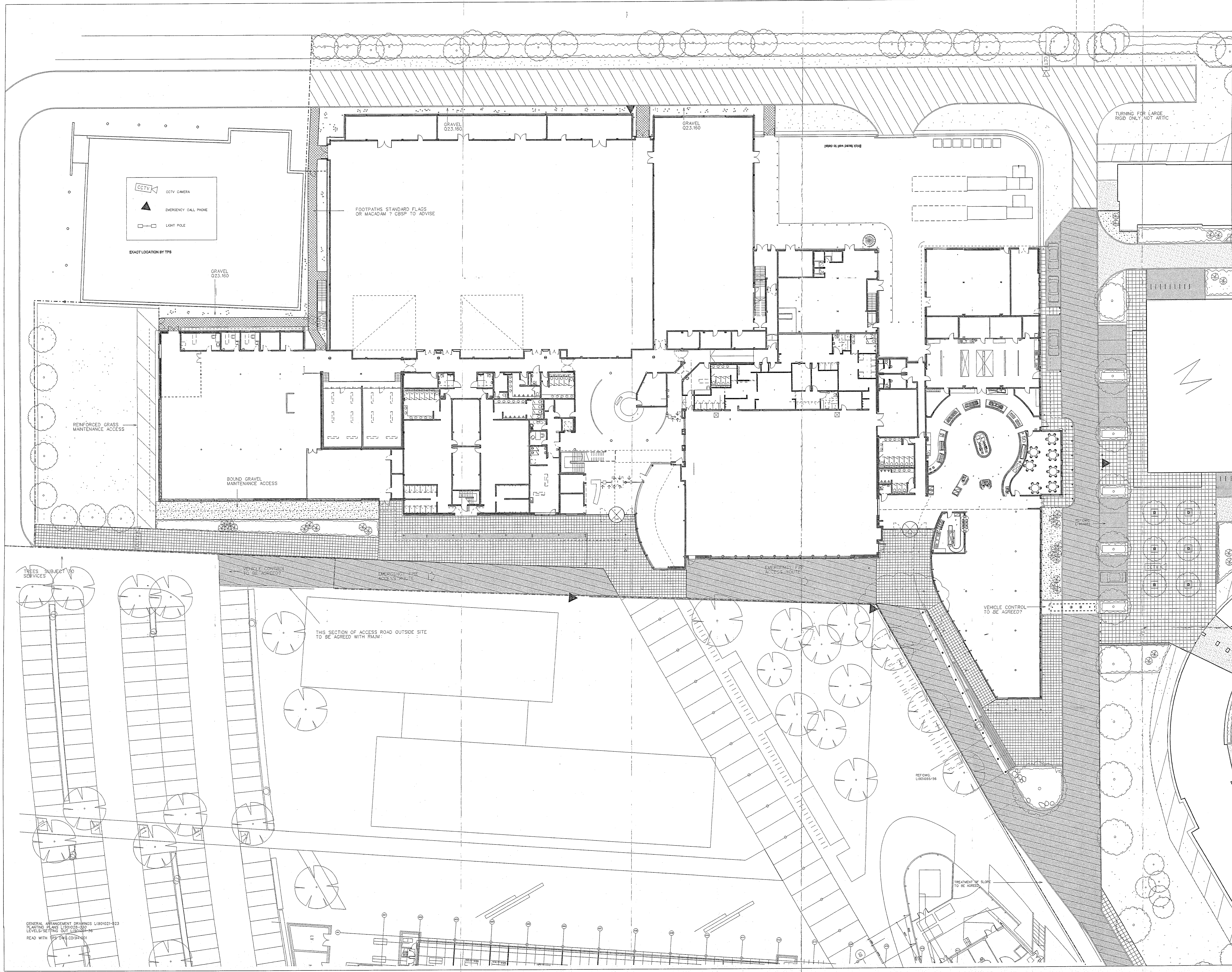
Originating Manager/Responsible P LYON
QA System - Checks Construction Signature Date
Drawn By: CM
Checked:
Authorised:

| | | | | | |
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| Project No: | 1112.14 | Status: | CONSTRUCTION | Scale (at A0): | 1:200 |
| Drawing No: | L(9)028 | Rev. No.: | 6 | Revision: | |

2001/1026
GENERAL ARRANGEMENT DRAWINGS L19028-023
PLANTING PLANS L19028-030
LEVELS/SETTING OUT L19028-36
READ WITH TFS DWG:CD1941001

CONTRACTUAL MATTERS REGARDING AVENUE PLANTING TO BE AGREED

Access to be confirmed
DETAIL OF END OF PAVEMENT TO BE AGREED



- KEY**
- REIN BOUND GRAVEL WEARING COURSE ON MACADAM BASE TO ENGINEER'S SPEC. PAVEMENT TYPE 1 REF:Q23.160
 - POC SLEEF PAVING MATERIALS GRASS TRAFFICA 450 X 450MM COLOUR MATCHING TRAFFICA ON BOUND COMPACTED SAND BED. REF:Q23.160 PAVEMENT TYPE 2
 - POC SETT PAVING MATERIALS "EGOLA" COLOUR-PERMANENT GREY ON BOUND COMPACTED SAND BED. REF:Q23.600-600MM THICK PAVEMENT TYPE 3
 - POC SETT PAVING MATERIALS "EGOLA" COLOUR-PERMANENT GREY ON BOUND COMPACTED SAND BED. REF:Q23.600-600MM THICK PAVEMENT TYPE 4
 - MACADAM ACCESS ROAD TO ENGINEER'S SPEC PAVEMENT TYPE 5
 - BOUND GRAVEL WITH SPECIMEN PLANTING IN PITS
 - POC KERBS REF:Q23.160
 - POC PARKERS REF:Q23.160
 - MOWING STRIP 500 WIDE EDGING/GRAVEL INFILL. THESE ARE TO BE TO BEAR DWG:L90/023
 - STEEL BENCH DWG:L90/023
 - CYCLE RACK "SHUFFLE" STYLE HOOPS REF:Q23.411 DWG:L90/023
 - BOLLARD REF:Q23.160 L90/023
 - REMOVABLE BOLLARD REF:Q23.160
 - COVERED CYCLE STORE REF:Q23.415 DWG:L90/023
 - SCREEN FENCE TO BEAR CONCRETE BASE SLAB REF:Q23.370 DWG:L90/023
 - BN STORE WITH 1800MM HIGH TIMBER SCREEN FENCE REF:Q23.370 DWG:L90/023
 - TREE CIRCLE IN PAVED AREA REF:Q23.252 L90/023
 - TREE BEARKLED WITH URBAN TREE SOIL REF:Q23.256
 - SHRUB PLANTING IN 400MM TOPSOIL REF:Q23.1
 - TREE PLANTING REF:Q23.1
 - PLASTIC GRID REINFORCEMENT TO GRASS FOR CHERRY PICKER ACCESS. CHECK LOCATION TO BE AGREED. REF:Q23.355
 - GRASS SEEDING AREA ON 100MM TOPSOIL TUFF TO BOUNDARY STRUCTURE LANDSCAPE REF:Q23.1
 - WILDFLOWER MEADOW GRASS SEEDING REF:Q23.1
 - PARKING FOR DISABLED DWG:L90/023
 - SITE BOUNDARY

carillion
U of H University of Hertfordshire

Project:
UNIVERSITY OF HERTFORDSHIRE CAMPUS REDEVELOPMENT P.F.I

Drawing Title:
EXTERNAL WORKS LAYOUT MATERIALS 3 OF 3

Trade Packages:

Originating Office:
Ashton-Smith & Lord

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 Telephone: 0207 253 8161 Cardiff ○
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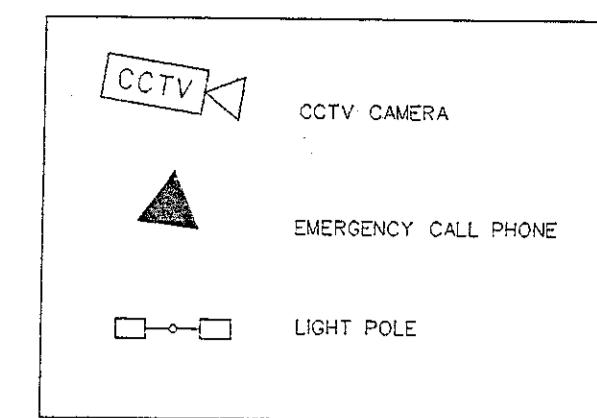
Originating Manager/Responsible: **P LYON**
 QA System - Checks: _____ Signature: _____ Date: _____
 Drawn By: **CM**
 Checked: **2001/1026**
 Authorised: _____

Project No: **101214** Status: **CONSTRUCTION** Scale (at A0): **1:200**
 Drawing No: **L(90)023** Rev. No: **5**

GENERAL ARRANGEMENT DRAWINGS L(90)021-023
 PLANTING PLANS L(90)024-030
 LEVELS/SETTINGS ONLY L(90)031-035
 READ WITH REF:Q23.160

GENERAL ARRANGEMENT DRAWINGS L(90)001-003
PLANTING PLANS L(90)025-030
LEVEL SETTING OUT L(90)031-045
READ WITH TFS 015-024/001

KEY PLAN



EXACT LOCATION BY TFS

- RESIN BOUND GRAVEL WEARING COURSE ON MACADAM BASE TO ENGINEERS SPEC. PAVEMENT TYPE 1 REF:025.250
- POC SLAB PAVING MARSHALLS TEST 4.4 COLOUR PENNANT GREY ON SOAM COMPACTED SAND BED REF:025.600-80MM THICK PAVEMENT TYPE 2
- POC SETT PAVING MARSHALLS TEST 4.4 COLOUR PENNANT GREY ON SOAM COMPACTED SAND BED REF:025.600-80MM THICK PAVEMENT TYPE 3
- POC SETT PAVING MARSHALLS TEST 4.4 COLOUR PENNANT GREY ON SOAM COMPACTED SAND BED REF:025.600-80MM THICK PAVEMENT TYPE 4
- MACADAM ACCESS ROAD TO ENGINEERS SPEC PAVEMENT TYPE 5
- BOUND GRAVEL WITH SPECIMEN PLANTING IN PITS
- POC KERBS REF:010.110
- POC FINISHED REF:010.110
- MOWING TRIM 500 WIDE REF:050.100
- STEEL BENCH REF:050.220
- CYCLE RACK SHEFFIELD STYLE HOOPS REF:050.410 DWG L(90)041
- BOLLARD REF:050.300 L(90)045
- REMOVABLE BOLLARD REF:050.391
- COVERED CYCLE STORE REF:050.410 DWG L(90)054 - 052
- 800MM HIGH TRIPPER SCREEN FENCE TO HEAR CONCRETE BASE SLAB
- 8M STORE WITH 800MM HIGH TRIPPER SCREEN FENCE REF:050.410 DWG L(90)052 CONCRETE BASE SLAB
- TREE GRILLE IN PAVED AREA REF:050.220 L(90)045
- TREE PIT BACK-FILLED WITH URBAN TREE SOIL REF:031.550
- SHRUB PLANTING IN 450MM TOPSOIL REF:031
- TREE PLANTING REF:031
- PLASTIC GRID REINFORCEMENT TO GRAVE FOR CHERRY PICKER ACCESS EXACT LOCATIONS TO BE SUBMITTED
- GRASS SEEDING AREA ON SOAM TOPSOIL TYPED TO BOUNDARY STRUCTURE LANDSCAPE
- WILD/LOWER MEADOW GRASS SEEDING REF:030
- PARKING FOR DISABLED DWG L(90)040

- 4 3.4.03 SITE BOUNDARY
- 3 3.4.03 PAVING AMENDED AT SPORTS ENTRANCE
- 3 17.2.03 STEPS AREA UPDATED
- 3 18.1.03 CCTV CAMERA POSITION ADDED
- 1 29.08.02 CONSTRUCTION ISSUE
- 1 18.07.02 KEY AMENDING FIRE ACCESS GRASS OMITTED
- 0 14.8.02 TENDER ISSUE
- 0 24.05.02 COUNTRYWIDE DETAILS AMENDED
- 0 11.6.02 AMENDED TO LATEST FLOOR PLANS
- 0 18.3.02 KEYS FOR ADDED SCALE AMENDED
- 0 18.3.02 AMENDMENTS TO FLOOR PLANS
- 0 1.8.02 PRELIMINARY

carillion
University of Hertfordshire

Project
**UNIVERSITY OF HERTFORDSHIRE
CAMPUS REDEVELOPMENT P.F.I**

Drawing Title
**EXTERNAL LAYOUT
MATERIALS 2 OF 3**

Trade Packages

Originating Office
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Originating Manager/Responsible P LYON
QA System - Checks Signature Date
Drawn By: CM
Checked:
Authorised:

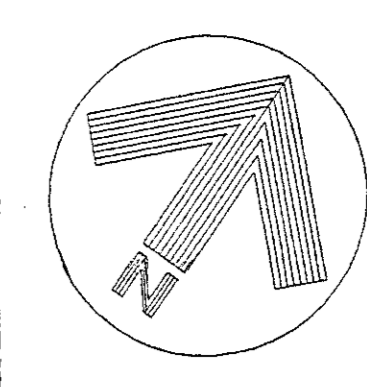
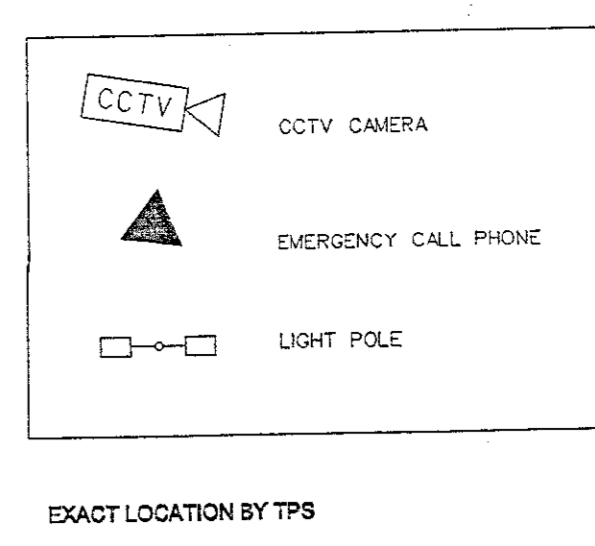
Project No: 101214
Scale: (at A3) 1:200
Drawing No: 01 of 03
CONSTRUCTION
Date: 2001/10/26
Revision: 4

TREATMENT TO BE AGREED SUBJECT TO RMJM DETAILS

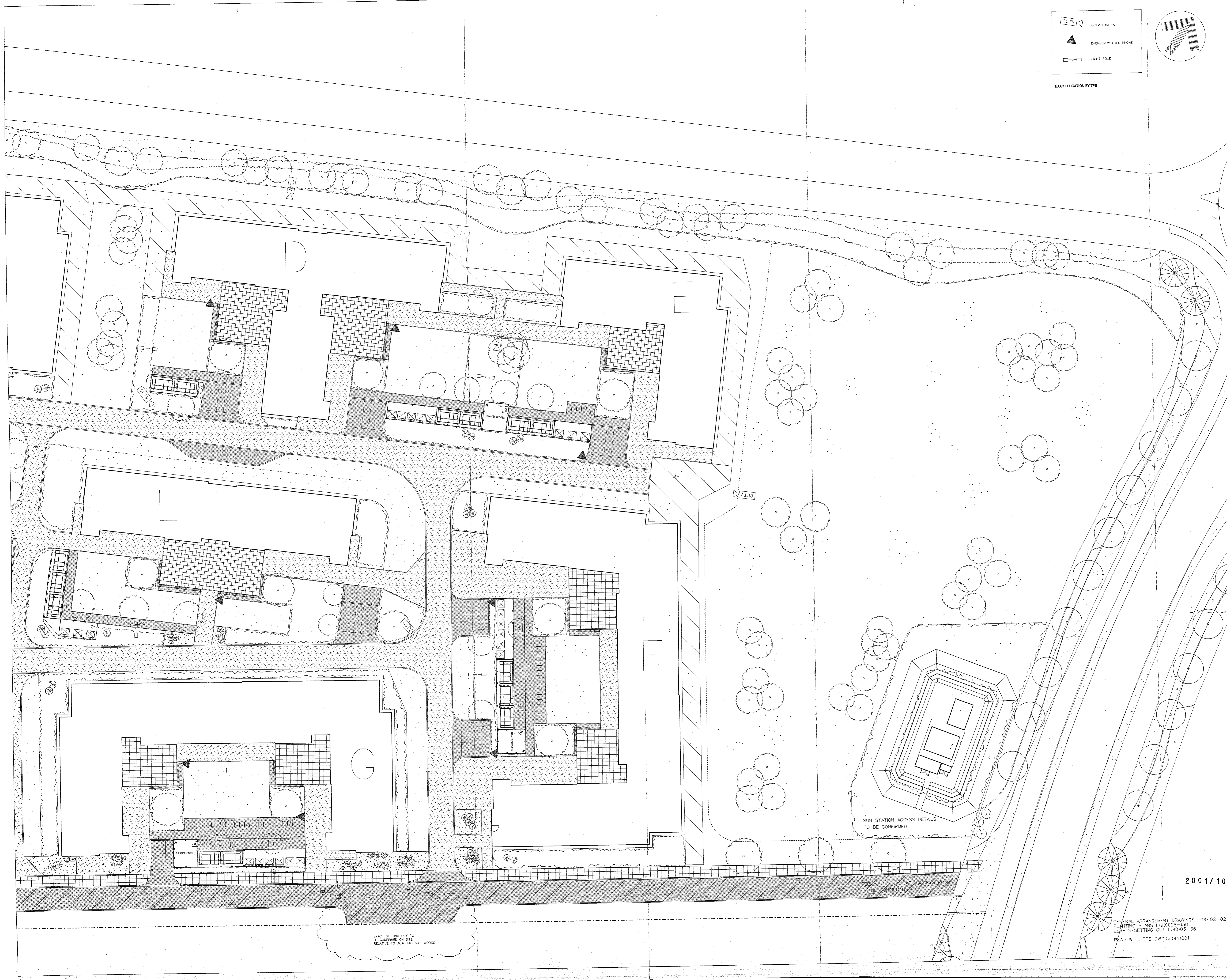
2001/10/26

L(90)022

4



- KEY**
- RESIN BOUND GRAVEL WEARING COURSE ON MACADAM BASE TO ENGINEER'S SPEC. PAVEMENT TYPE 1 DWG.100
 - PCC SLAB PAVING MARSHALLS' TEST 4 COLOUR PENNANT GREY COLOUR NATURAL ON 20MM COMPACTED SAND BED REF:025.60-00MM THICK PAVEMENT TYPE 2
 - PCC SETT PAVING MARSHALLS' TEST 4 COLOUR PENNANT GREY ON 20MM COMPACTED SAND BED REF:025.60-00MM THICK PAVEMENT TYPE 3
 - PCC SETT PAVING MARSHALLS' TEST 4 COLOUR PENNANT GREY ON 20MM COMPACTED SAND BED REF:025.60-00MM THICK PAVEMENT TYPE 4
 - MACADAM ACCESS ROAD TO ENGINEER'S SPEC. PAVEMENT TYPE 5
 - BLIND GRAVEL WITH SPECIMEN PLANTING IN PITS
 - PCC KERBS REF:010.10
 - PCC FRAMES REF:010.10
 - MOWING TRM 500 WIDE TRM REF:023.100 DWG.100/043
 - STEEL BINCH DWG.100/048 REF:020.210
 - CYCLE RACK SHEFFIELD STYLE 1000P REF:020.41 DWG.100/041
 - BOLLARD REF:020.190 L100/043 REMOVABLE BOLLARD REF:020.191
 - COVERED CYCLE STORE REF:020.45 DWG.100/054 .052 1800MM HIGH TUBES SCREEN FENCE TO BEAR CONCRETE BASE SLAB
 - BN STORE WITH 1800MM HIGH TUBES SCREEN FENCE TO BEAR CONCRETE BASE SLAB REF:020.45 DWG.100/052
 - TREE GRILLE IN PAVED AREA REF:020.45 DWG.100/051 URBAN TREE SOIL REF:021.036
 - SHRUB PLANTING IN 400MM TOPSOIL REF:031
 - TREE PLANTING REF:031
 - PLASTIC GRID REINFORCEMENT TO GRASS FOR CHERRY PICKER ACCESS STAND (CONCRETE TO BE ADDED) REF:030.355
 - GRASS SEEDING AREA ON 100MM TOPSOIL REF:030 REF:030 TURF TO BOUNDARY STRUCTURE LANDSCAPE
 - WILDFLOWER MEADOW GRASS SEEDING REF:030
 - PAVING FOR DISABLED DWG.100/040

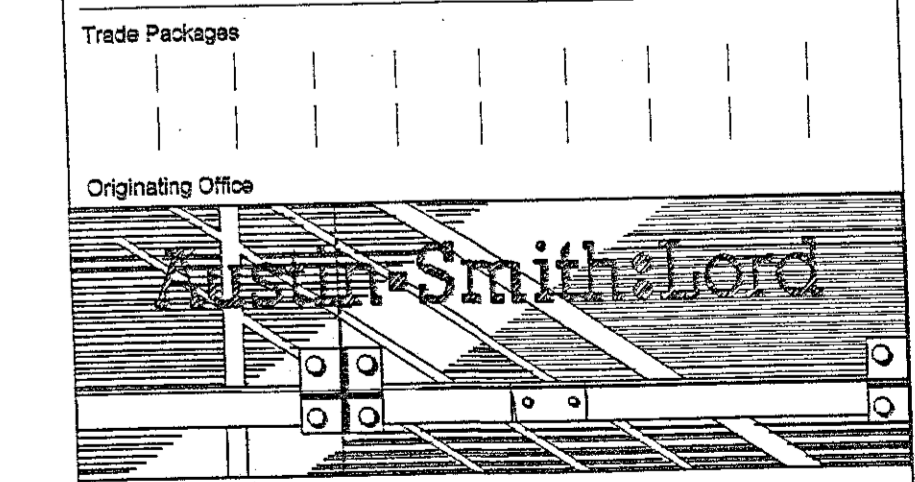


- SITE BOUNDARY
- PAVING ACCESS TO ADJOINING SITE INTERFACE
- CCTV LOCATION POINTS AMENDED
- COLLIMATION POINTS AMENDED
- KEY AMENDMENTS TO FIRE ACCESS GRASS OMITTED
- TENSER ISSUE
- COURTYARD DETAILS AMENDED
- AMENDED TO LATEST FLOOR PLANS
- KERB REINFORCEMENT SCALE AMENDED
- AMENDMENTS TO FIRE ACCESS
- BICYCLE STORES AMENDED
- AMENDED IN LINE WITH PLANNERS COMMENTS
- AMENDMENT TO PRINCIPAL DRAWING



Project
UNIVERSITY OF HERTFORDSHIRE CAMPUS REDEVELOPMENT P.F.1

Drawing Title
EXTERNAL WORKS LAYOUT MATERIALS 1 OF 3



17 Bowling Green Lane London EC1R 0QA London ●
 Telephone: 0207 231 8161 Cardiff ○
 Facsimile: 0207 636 9429 Glasgow ○
 E-mail: astlondon@smithandlord.com Warrington ○

Originating Manager/Responsible P. LYON
 QA System - Checks Signature Date
 Drawn By: CM
 Checked:
 Authorised:

Project No: 101214
 Drawing No: 101214
 Scale: 1:200
 Revision: 4

2001/1026

GENERAL ARRANGEMENT DRAWINGS L(90)021-02.3
 PLANTING PLANS L(90)025-030
 LEVELS/SETTING OUT L(90)031-36
 READ WITH TFS DWG.CD(94)1001

EXACT SETTING OUT TO BE CONFIRMED ON SITE RELATIVE TO ACADEMIC SITE WORKS

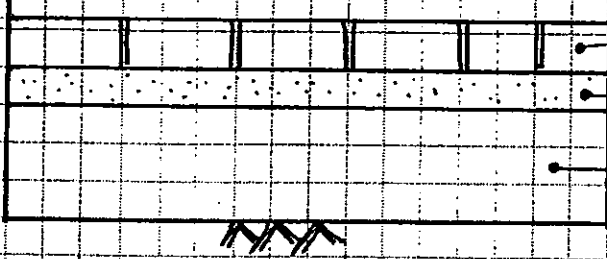
SUB STATION ACCESS DETAILS TO BE CONFIRMED

TERMINATION OF PATH ACCESS ROAD TO BE CONFIRMED



Project: UoH
 Number: 107640
 Element: _____

Sheet No: 1 of 1
 Prepared/Calculations by: J(PAY) Date: 2/6/03
 Arithmetic check by: _____ Date: _____

| Data | Calculation | Results |
|------|--|---------|
| | <p style="text-align: center;"><u>UNIVERSITY OF HERTS</u></p> <p style="text-align: center;"><u>FOOTPATH PAVEMENT DETAIL</u></p>  <p style="text-align: right;">PAVING (thickness varies) 50 THK SHARP SAND 150 THK TYPE 1</p> <p style="text-align: center;"># SEE ATTACHED EXTRACT FROM THE SPECIFICATION FOR PAVING THICKNESSES</p> <p style="text-align: center;"><i>Plans & particulars referred to in TPS letter of 3 June 2003</i></p> | |

2.0 Paved Area Schedules

Paved Area 1

| Surfacing | Clause | Material | Grade of Binder | Thickness (mm) | Special requirements |
|--|--------|--|-------------------------|----------------|---|
| Surface Dressing | | Resin Coated Gravel | N/A | 20 | Colourpave 'Naturatex' Aggregate: 6mm |
| | | Or Resin Bound Gravel | | 6 | Addastone – Addagrip surface treatments. 2-5mm Golden Pea Gravel in Buff PU Addastone Resin. |
| Wearing Course | 912 | DBM with 6mm aggregate | 100 Pen Bitumen. Binder | 50mm | BS 4987: Pt1 Aggregate type: Crushed rock Nominal size: 6mm for Resin Bound Gravel 14mm for Resin Coated Gravel |
| Basecourse | 906 | DBM with 20mm aggregate | 100 Pen Bitumen. Binder | 65 | BS 4987: Pt1 Aggregate type: Crushed rock Nominal size: 20mm |
| Sub-base | 803 | MOT Type 1 Granular Material or similar approved | N/A | 150 | Minimum CBR: 30% |
| Note: Total depth of pavement = 265mm + Surface Dressing Overall depth to sub-formation = 265mm | | | | | |

Paved Area 2

| Surfacing | Clause | Material | Grade of Binder | Thickness (mm) | Special requirements |
|---|--------|--|-----------------|----------------|----------------------------|
| Concrete Paving Flags | | 450x450x70mm Marshalls Trafica Saxon | N/A | 70 | Marshalls Colour - Natural |
| Bedding | | Sharp Sand: | N/A | 50 | Compacted |
| Sub-base | 803 | MOT Type 1 Granular Material or similar approved | N/A | 150 | Minimum CBR: 30% |
| Note: Total depth of pavement = 270mm Overall depth to sub-formation = 270mm | | | | | |

Paved Area 3

| Surfacing | Clause | Material | Grade of Binder | Thickness (mm) | Special requirements |
|---|--------|--|-----------------|----------------|---------------------------------|
| Concrete Paving Setts | | 65mm Marshalls Tegula | N/A | 65 | Marshalls Colour - Pennant Grey |
| Bedding | | Sharp Sand | N/A | 50 | Compacted |
| Sub-base | 803 | MOT Type 1 Granular Material or similar approved | N/A | 150 | Minimum CBR: 30% |
| Note: Total depth of pavement = 265mm Overall depth to sub-formation =2650mm | | | | | |

Paved Area 4

| Surfacing | Clause | Material | Grade of Binder | Thickness (mm) | Special requirements |
|--|--------|--|-----------------|----------------|---------------------------------|
| Concrete Sett Paving | | 80mm Marshalls Tegula | N/A | 80 | Marshalls Colour - Pennant Grey |
| Bedding | | Sharp Sand | N/A | 50 | Compacted |
| Sub-base | 803 | MOT Type 1 Granular Material or similar approved | N/A | 150 | Minimum CBR: 30% |
| Note: Total depth of pavement = 280mm Overall depth to sub-formation =280mm | | | | | |

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169
Direct fax: +44 (0)20 8256 4121

02 June 2003

Your ref: fax S6/01/1026/FP of 30.05.03
Our ref: 107640/c-8/1/AR-33

Dear David

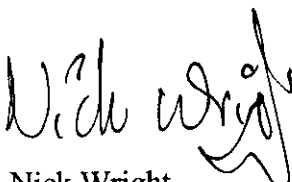
**HERTFORDSHIRE UNIVERSITY POST FC
CONDITION 1b OF PLANNING PERMISSION S6/2001/1026/DE (CCTV & Lights)**

Please find enclosed copies of Technical submissions 013 and 015A, plus covering letter 107640/c-8/1/AR-12 dated 26th April 2003, as requested in your fax S6/01/1026/FP of 30.05.03.

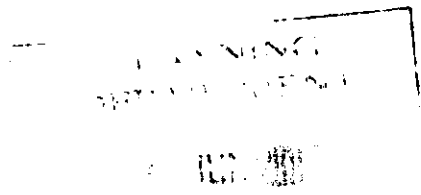


*6m high - light poles.
luminaire coord.*

Yours sincerely



Nick Wright
Design Team Leader



Copy: Mr N Dickens - Carillion Building Special Projects
Mr M Philips - Carillion Building Special Projects
Mr S Webb - Carillion Building Special Projects Project Office



ISO 9001 - FS 00581



ISO 14001 - EMS 57306

Head Office
Centre Tower
Whitgift Centre
Croydon
CR9 0AU

Offices at Birmingham, Croydon, Edinburgh, Glasgow

File Ref: j:\107640\CORRESPONDENCE\8-1-AR-33.DOC
TPS Consult is the trading name of TPS Consult Limited
Registered in England No 2574820

Registered Office:
Birch Street Wolverhampton WV1 4HY

a Carillion company

Total Professional Solutions for the built environment



Mrs M Reynolds
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

26 February 2003

Your ref: MR/S6/2001/1026/DE

Our ref: 107640/c-8/1/AR-12

Dear Melissa

**HERTFORDSHIRE UNIVERSITY POST FC
CONDITION 1b OF PLANNING PERMISSION S6/2001/1026/DE (CCTV & Lights)**

Further to your letter of the above reference, please find enclosed copies of the Building Services Engineers Technical Submissions, which contain the required details.

Yours sincerely

Nick Wright
Design Team Leader

Copy: Mr S Webb - Carillion Building Special Projects Project Office
Mr N Dickens - Carillion Building Special Project

Enc: Lorne Stewart Technical Submissions E013, & E015A

TPS Consult is the trading name of
TPS Consult Limited
Registered in England No 2574820
Registered Office
Birch Street Wolverhampton WV1 4HY
File Ref: j:\107640\CORRESP\ARIC-8-1-AR-12-000



TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU



T 020 8256 4000
www.tpsconsult.co.uk

UNIVERSITY OF HERTFORDSHIRE
TECHNICAL SUBMISSION

ISSUE TO: CBSP
 CARILLION FACILITIES
 ASL
 TPS

DATE OF ISSUE: 18-03-02

FROM: ALAN MCGOFF

JOB REF: 1284/2

ITEM: E013

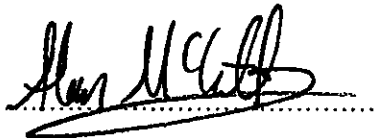
DATE TO BE RETURNED BY: 1/04/02

WORKS CHANGE YES/NO

DATE RETURNED:

PLEASE FIND ATTACHED A COPY OF THE EXTERNAL LIGHTING THAT WILL BE USED WITHIN THE EXTERNAL LAYOUT OF THE ABOVE PROJECT.

SIGNED



POSITION

EST. ENGINEER.

APPROVED / COMMENTS

SIGNED

.....

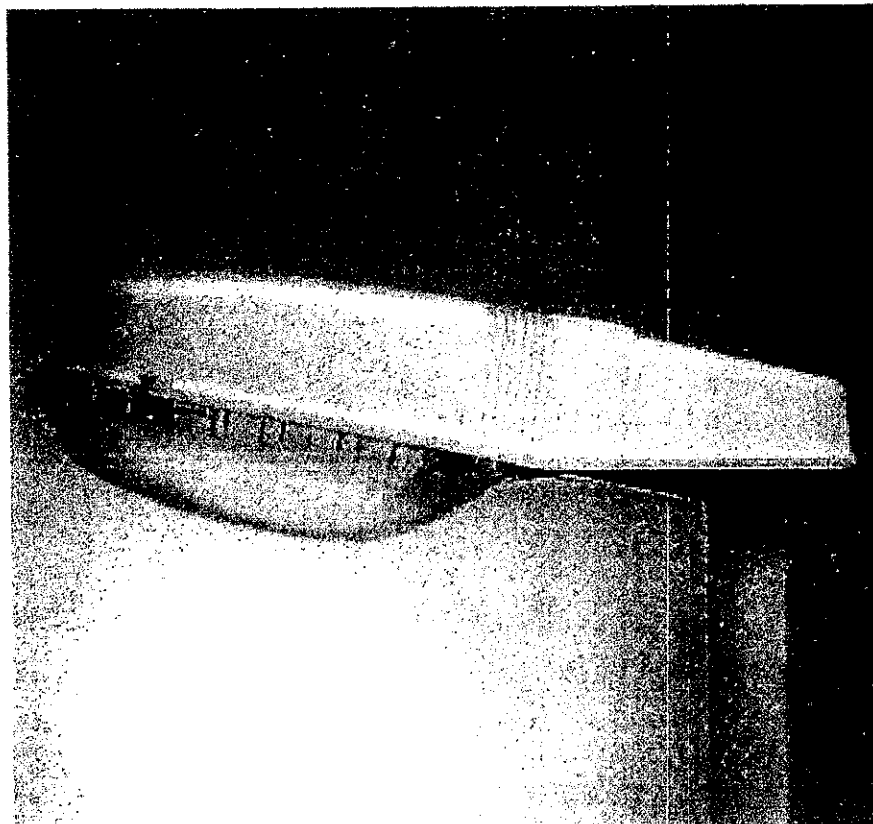
POSITION

.....

LSBF 72

ASTRA2[®]

STREET LIGHTING LANTERN



Wirefield

L I G H T I N G

Wirefield Limited
Unit 1, Barton Farm Industrial Estate
Chickenhall Lane, Eastleigh
Southampton Hampshire SO50 6RP

Tel: 02380 650030 Fax: 02380 650031

Internet: www.wirefield.com
E-mail: sales@wirefield.co.uk

ASTRA2[®]

STREET LIGHTING LANTERN



RANGE

ASTRA 2[®] can accommodate 150/250W HPS-T, 150/250W MBI-E and 125W MBF lamps

APPLICATIONS

ASTRA 2[®] is suitable for residential car parks as well as main traffic routes

CONSTRUCTION

Body: is made of pressure die-cast aluminium.

Canopy: injected moulded high quality impact and heat resistant UV stabilized grey colour (RAL 7035) Polycarbonate. The canopy has a top quality silicon rubber gasket which beds into a deep protected channel, this ensures a high sealing degree.

Diffuser: The diffusers are available in UV stabilized Acrylic or Polycarbonate, the latter giving added vandal resistance at low mounting heights. The diffuser has a reinforced lip to prevent bowing and hereby ensuring constant gasket pressure and excellent sealing throughout life. To ensure a firm fix to the lantern, the diffuser is hinged in two corners, and two stainless screws at the other two corners clamp the diffuser securely to the canopy. Flat glass options are available and are hinged and latched in the same way as the diffusers.

Optics: high purity one piece aluminium reflector.

ELECTRICAL

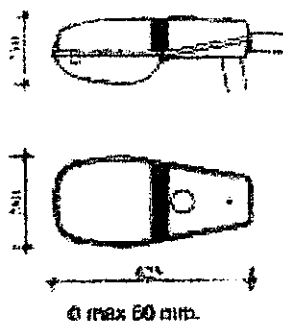
The control gear box is provided with a 3-way terminal block. High temperature silicon insulated conductors are used throughout. Electrical connections are made quickly via a plug and socket system.

MECHANICAL

The ASTRA 2[®] has been designed for ease of installation and maintenance. Both post top and side entry is possible by reversing the mounting bracket. The canopy and lamp compartment are hinged to the body and are fixed by a stainless steel screw. The canopy hinges up to the body to access to the gear compartment. The quick release gear tray can be removed for maintenance without disturbing the lamp or lampholder. Once in position the diffuser or glass cannot be accidentally detached as a screw driver is required to release them. After lamp insertion, the bowl or glass is hinged up and fixed into its sealed position by means of two stainless steel screws. Hinging down the diffuser (opening the lamp compartment) is equally simple, by just removing the two un-loosable screws and diffuser hinges down.

SPECIFICATION

Designed in accordance with relevant European Standards: CEI 34-21 / EN 60598-1



IP65 
LAMP COMPARTMENT

IP23 
ELECTRIC COMPARTMENT



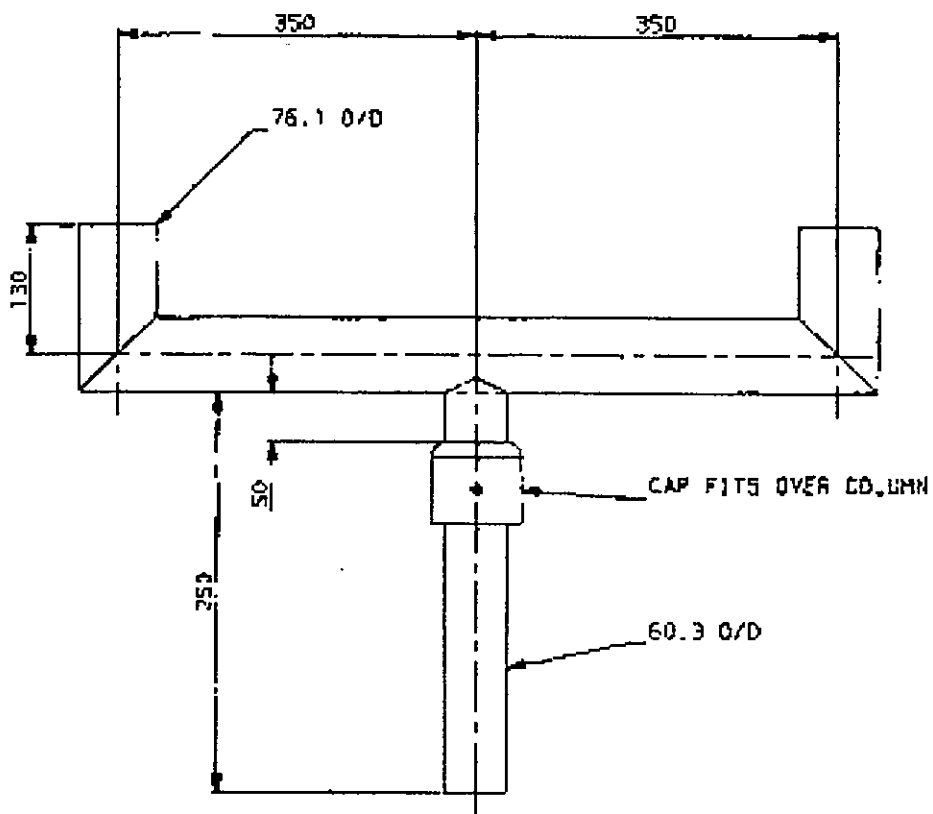
Wirefield
LIGHTING

Wirefield Limited
Unit 1, Barton Farm Industrial Estate
Chickenhall Lane, Eastleigh
Southampton Hampshire SO50 6RP

Tel: 02380 650030 Fax: 02380 650031

Internet: www.wirefield.com
E-mail: sales@wirefield.co.uk

WIREFIELD TWIN BRACKET SPECIFICATION - SPIGOT FIXING



WIREFIELD COLUMN SPECIFICATION

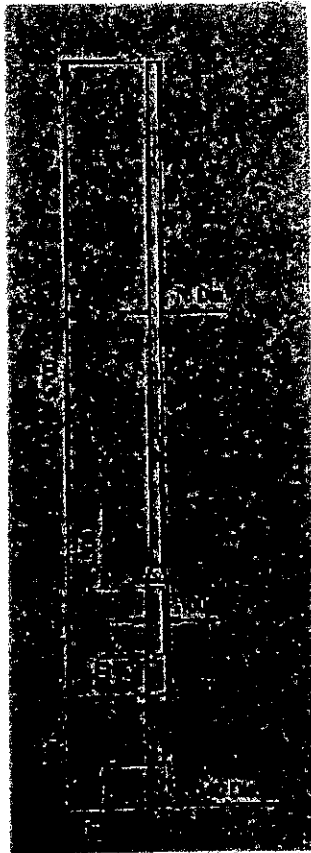
WFLCOL/6

6m parallel sided steel column for post top luminaire or with separate bracket for side entry luminaire. Finish hot dip galvanised. Rooted base.

Options: Side entry bracket 0.30m-0.75m, baseplate fixing, 'T' wash, floodlight bracket, period style decoration.

| | Max. Weight kg | Max. wind area | |
|---------------|-------------------|------------------------|------------------------|
| | | k1.5 m ² | k1.8 m ² |
| Post top | 40 | 0.40 | 0.30 |
| 0.30m bracket | 20 | 0.35 | 0.26 |
| 0.50m bracket | 20 | 0.33 | 0.24 |
| 0.75m bracket | 18 | 0.28 | 0.22 |

Column weight: 44.5kg BS5649



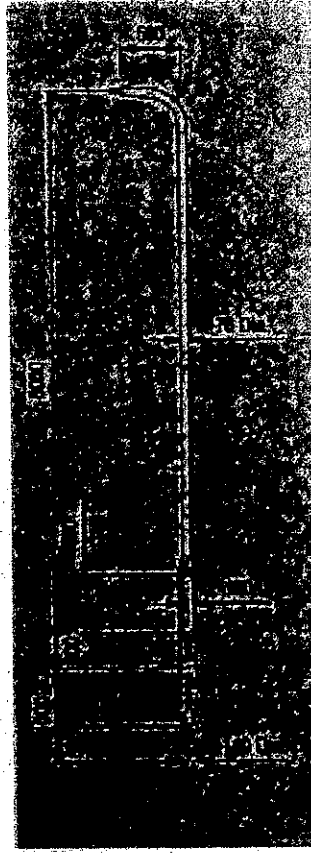
WFLCOL/6/500/OS

6m parallel sided steel column with 0.50m integral bracket for side entry luminaire. Finish hot dip galvanised. Rooted base.

Options: Baseplate fixing, 'T' wash.

| | Max. Weight kg | Max. wind area | |
|---------------|-------------------|------------------------|------------------------|
| | | k1.5 m ² | k1.8 m ² |
| 0.50m bracket | 20 | 0.30 | 0.21 |

Column weight: 48kg BS5649



Wirefield
LIGHTING

Wirefield Limited
Unit 1, Barton Farm Industrial Estate
Chickenhall Lane, Eastleigh
Southampton Hampshire SO50 6RP

Tel: 02380 650030 Fax: 02380 650031

Internet: www.wirefield.com
E-mail: sales@wirefield.co.uk

UNIVERSITY OF HERTFORDSHIRE
TECHNICAL SUBMISSION

ISSUE TO: CBSP
CARILLION FACILITIES
ASL
TPS

DATE OF ISSUE: 7.6.02

FROM: ALAN MCGOFF

JOB REF: 12842

ITEM: E015A

DATE TO BE RETURNED BY: 20.6.02

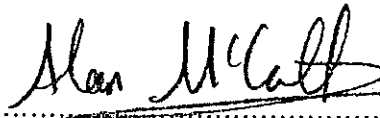
WORKS CHANGE YES/NO

DATE RETURNED:

PLEASE FIND ATTACHED, ADT CCTV SYSTEM THAT WILL BE USED THROUGHOUT THE EXTERNAL AREA OF THE UNIVERSITY OF HERTFORDSHIRE RESIDENTIAL SITE. Also including sports Centre internal TV Camera system
sports Centre public address system

FULL SUBMITTAL IN ADT. FILE.

SIGNED



POSITION

ELECTRICAL ENGINEER

APPROVED / COMMENTS

SIGNED

POSITION

Business Profile

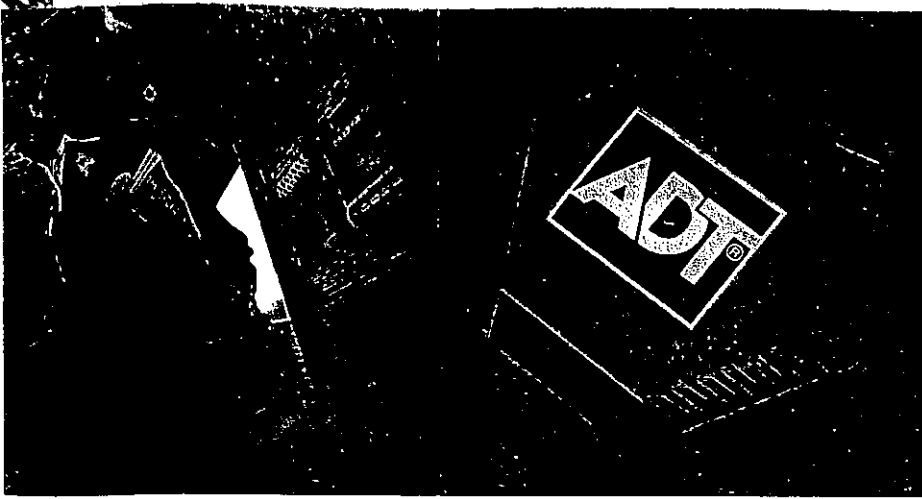


Total solution capabilities in fire and security

tyco

Fire &
Security

ADT Fire and
Security



ADT Fire and Security

the U.K.'s No.1 solution provider for fire and security

The strength behind our name

ADT Fire and Security is built on over a century's

worth of experience in the fire detection and security systems market.

In 1997, ADT Security Systems, Thorn Security, and Modern Security

Systems merged to form ADT Fire and Security plc. And in 1999, the

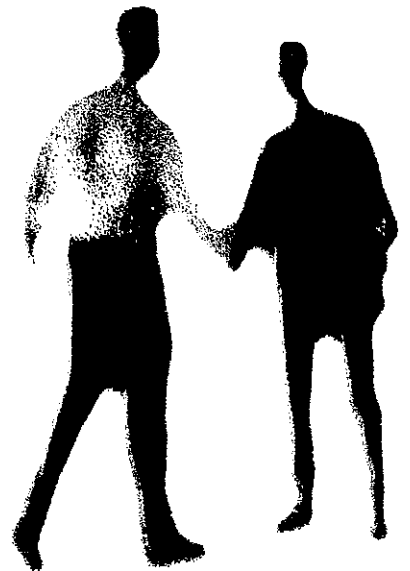
company integrated Telecom Security into its business structure. Today

ADT Fire and Security is the undisputed market leader, combining the

strengths of its four founder companies into one, dynamic,

customer focused company, which can offer unparalleled

service throughout the UK.





A customer focused service

ADT Fire and Security recognises that different customers have different requirements and has structured its business to reflect this. We have developed distinct customer channels, with experienced people all working to ensure you receive products and services appropriate to your needs.

Investing in people and technology

Our greatest asset is its employees, all of whom are encouraged to attend training courses to enhance their skills in order that they carry out their jobs efficiently and professionally.

Large investments have also been made in product technology and we are leaders in our field having introduced such products as the MX Technology range of fire panels and the Millennium Award winning Carbon Monoxide Fire Detector.

Our commitment to quality

A commitment to the highest standards of quality assurance underpins everything that we do.

We have a full range of certifications and approvals from bodies such as the National Approval Council for Security Systems (NACOSS) and the Loss Prevention Certification Board (LPCB) and we comply with the Association of Chief Police Officers (ACPO), and the fire authority operating procedures.



Providing a complete range

of fire and security systems

Protecting people and property

ADT's business is protecting people and property and we are able

to provide a full range of electronic systems to combat almost any security or fire risk.

With the buying power of the UK's largest fire and security

organisation, we are able to offer the widest range of security

solutions at a price to suit your budget.

Fire Detection and Alarm

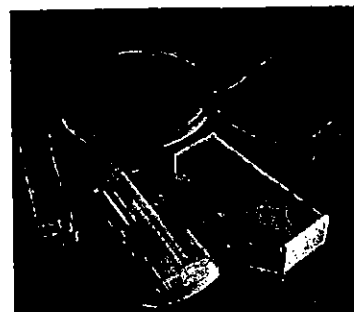
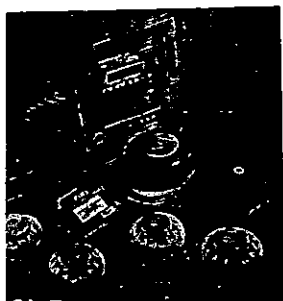
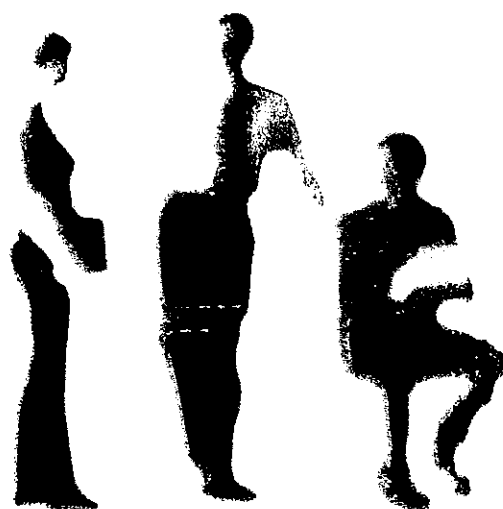
ADT can provide a full array of fire alarm systems from our Minerva range. From a simple conventional system to a fully analogue addressable networked system, all ADT's fire alarm installations are fully compliant with BS5839.

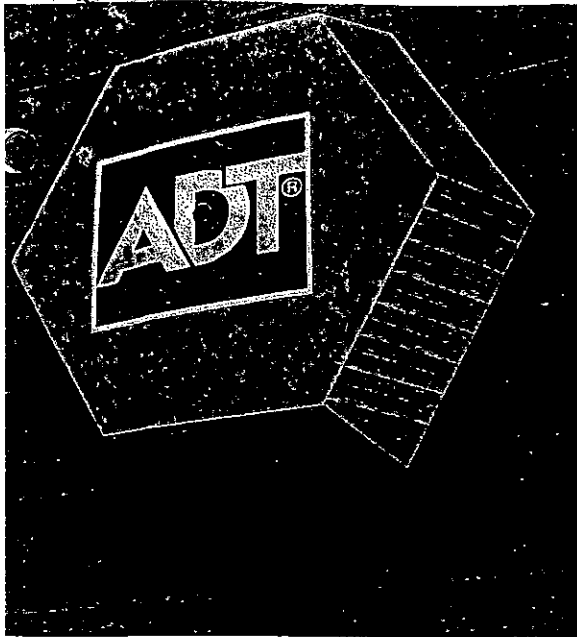
Gaseous Extinguishing

Gaseous extinguishing systems offer extra peace of mind where buildings contain valuable equipment such as computers or data storage. Should a fire be detected, then gas is emitted into the room, extinguishing the fire, causing no damage to the contents of the room. The range of gaseous extinguishing systems ADT provides includes INERGEN®, FM200® and Carbon Dioxide.

Emergency Lighting

Should a fire break out in an occupied building the main lighting supply is often the first thing to fail, which means that those inside need help to guide them to the nearest exit. ADT installs and services a range of emergency luminaires and exit signage.





Intruder Alarm

The ADT hexagonal yellow bell box is a familiar feature of most high streets, business parks and industrial sites. The symbol means that the system has been designed and installed by trained engineers using specialist products. ADT will advise you on the best system for your property from our wide range of detectors and control units. Connection to our Alarm Receiving Centre means that in the event of an alarm, police and keyholders will be summoned.



CCTV

In recent years CCTV has done much to deter crime and anti-social behaviour. ADT is leading the way in the design and installation of CCTV systems. Our expertise across all types of electronic security means that we are also able to integrate CCTV into our other security systems, such as access control and intruder alarm verification.

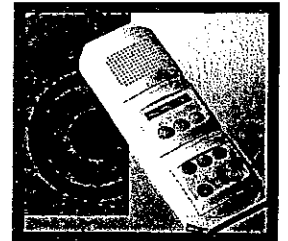
Access Control

Access control systems are designed to permit the free flow of authorised movement into any site, whilst denying entry to unwanted visitors. With access control technology developing so rapidly, ADT is well positioned to invest the required resources to bring leading edge access control solutions to our customers.



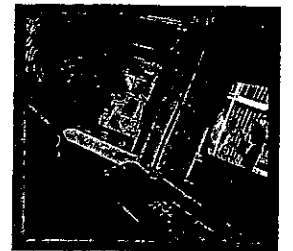
Nursecall

We supply a range of Nursecall and care communication systems to the healthcare sector. Nursecall systems help to prioritise staff response to emergency and non-emergency situations, so that staff resources are used in the most efficient way.



Building Management Systems

Building Management Systems (BMS) create and maintain controlled, energy-efficient environments for all types of premises. Building management facilities can be interfaced with fire, intruder, CCTV and access control systems. By using BMS, you can benefit from simpler contract management and more convenient maintenance scheduling.



Our specialist expertise

is dedicated to specific market sectors

From the smallest family home to the largest business ADT Fire and Security can protect every kind of

building. No-matter how large or small, we will provide individual solutions to individual fire and security needs.



Solutions to meet the applications

-
- Commercial – Industrial
- Retail/Shopping Centres
- Public Sector
- Financial Sector
- Transport Industry
- Defence
- Small Businesses
- Residential
-

High Security

The financial sector of the marketplace has specific security requirements and no-one understands this better than our High Security Group.

A product range has been developed to cater to the specific requirements of Banks and Building Societies. In addition to this we have dedicated sales people and engineers who are highly trained in dealing with this specialised sector of the market.

National Accounts

Our National Accounts division provides single source fire and security solutions for our multi-site customers, of whom we are proud to include a wide variety of household names, indeed, ADT's customer base includes 89 of the UK's top 100 companies as customers.

Our national branch network allows us to provide a local service to all our National Accounts whilst this is co-ordinated centrally by one dedicated account manager.

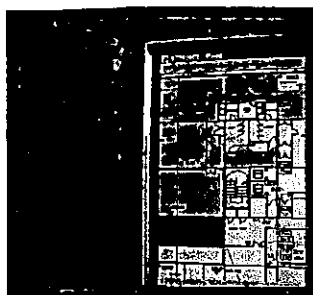
Total capability

in fire and security, for the protection of people and property

ADT Fire and Security the one stop choice

Operating across the UK and Ireland, ADT Fire and Security has the commitment, resources and experience needed when protecting people and property. Our business is based on the concept of total capability; we provide a complete range of fire and security solutions, and we take responsibility for all stages of the work.





System Design

Cost effective design is a priority. Our design teams are involved from the outset, and are accustomed to working alongside architects, engineers, approval authorities and other specialists. Extensive use is made of our own CAD/CAM programmes, which allow us to design, rapidly and with great flexibility, systems precisely tailored to the requirements of each project.

System Integration

A particular strength of ADT Fire and Security is our ability to integrate different types of systems, whether they be linked security systems (e.g. CCTV monitoring for Access control purposes) or whether they be combined fire and security systems interfaced to a Building Management System.

Total solution capabilities

-
- Design
- Installation/Commissioning
- Remote Monitoring
- Service and Maintenance
- 24 Hour Emergency Call-Out
-

Project Management Capabilities

ADT has a wealth of experience in managing fire and security installations in large complexes and our project managers have worked on a range of applications; from shopping centres to MOD sites; and university campuses to hospitals. ADT can boast an impressive range of clients across all types of private and public sector buildings.

Installation and Commissioning

We maintain control over the installation of all our systems, in order to ensure quality and on-time completion. At the final commissioning of a project our engineers rigorously check the systems. Customers can also be trained in how to use the system.

Monitoring and service

strives for customer satisfaction first time, every time

Monitoring – a fast response service

Many intruder and fire alarm systems rely on ringing bells or flashing lights to attract attention and they are reliant on someone being around to call the police or fire brigade. With a monitored system you can guarantee that someone will be watching over your premises 24 hours a day every day, ready to call out the emergency services within seconds of an activation being detected.

24 hour Alarm Receiving Centre

Within seconds of your intruder or fire alarm system sending a message to our ARC, the alarm signal is checked, and then where appropriate the Police or Fire Brigade are called.

Your alarm signal will be directed into one of our two ARC's, each centre backing the other one up, so giving extra resilience to your alarm signalling.

RESOLVE

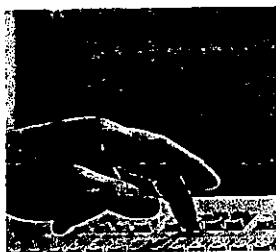
Our latest range of intruder alarm systems can now be provided with Remote Engineering Support, which uses an interactive telephone link between alarm control panels and our 24 hour RESOLVE helpdesk. More than 70 per cent of calls to the RESOLVE team are dealt with successfully by telephone, removing the need for customers to wait for an engineer. If a personal visit is needed, the RESOLVE team can often save time and expense by pinpointing the fault before the engineer arrives.

Remote Reset

Remote reset is a facility for resetting intruder alarms by telephone after an activation. Remote reset can save the time and expense of calling out an engineer.

Security Information Database

Organisations with multiple sites can subscribe to our Security Information Database (SID) programme. SID provides a complete daily download of information relating to the operation and servicing records of all the customer's alarm systems.





24 hour National Service Bureau

A single telephone number gives instant access to operators who can help with all your engineering requirements, whether they are urgent or routine.

With the industry's largest team of over 1200 trained service engineers, we can ensure that emergency assistance is always nearby, anywhere in the country. Teams of operators are on duty around the clock to arrange a convenient appointment when your next regular inspection visit is due, or to make a new appointment if your plans change.

We can also despatch an engineer at any time of the day or night if you need emergency help. We aim to attend emergency call-outs within four hours and often arrive sooner.

National Network of Engineers

One of the keys to our success is the combination of a nationwide resource, and localised support through our regional bases. Every ADT Fire and Security installation is backed up by a service network of more than 1200 engineers, providing maintenance and emergency repair, 24 hours a day, 365 days a year.

Planned Preventative Maintenance

A programme of regular inspections and routine maintenance can be arranged, to meet the differing technical standards and regulations for a wide range of fire and security systems.

Servicing of Non-ADT Systems

Trained to service all types of security technology, our engineers can also maintain and service non-ADT systems. We will arrange for an experienced and qualified engineer to attend to your system.



**ADT Fire and Security:
National and Local**

| | |
|---|---|
| Aberdeen Tel: 01224 891999 | Leicester Tel: 0116 260 3792 |
| Belfast Tel: 02890 883500 | Liverpool Tel: 0151 551 4000 |
| Birmingham Tel: 0121 255 6000 | London (City) Tel: 0207 941 8700 |
| Bournemouth Tel: 01202 554253 | Londonderry Tel: 02871 263626 |
| Brighton Tel: 01273 423999 | Loughton Tel: 0208 272 4700 |
| Bristol Tel: 0145 484 3434 | Magherafelt Tel: 02879 633949 |
| Cardiff Tel: 02920 422700 | Manchester Tel: 0161 252 5500 |
| Carlisle Tel: 01228 819909 | Newcastle Tel: 0191 451 5000 |
| Cork Tel: 00 353 21 27 5757 | Northampton Tel: 01604 630314 |
| Dartford Tel: 01322 397999 | North West London Tel: 01923 823600 |
| Dublin Tel: 00 353 1 830 5888 | Norwich Tel: 01603 625138 |
| Dundee Tel: 01382 561061 | Nottingham Tel: 0115 921 6121 |
| Edinburgh Tel: 01506 482200 | Plymouth Tel: 01752 738499 |
| Galway Tel: 00 353 91 568 966 | Portsmouth Tel: 02392 304444 |
| Glasgow Tel: 01698 486000 | Sheffield Tel: 0114 253 6999 |
| Hemel Hempstead Tel: 01442 426400 | Sunbury Tel: 01932 743456 |
| Hull Tel: 01482 627999 | Swansea Tel: 01792 794544 |
| Inverness Tel: 01463 234418 | Telford Tel: 01952 210011 |
| Isle of Man Tel: 01624 676573 | Thames Valley Tel: 01635 871775 |
| Leeds Tel: 0113 291 1000 | |

ADT Fire and Security is the UK's largest provider of electronic fire, security and associated building management systems and services.

We provide a wide range of systems and services, including:

- Intruder Alarm
- Access Control
- Closed Circuit Television (CCTV)
- Fire Detection
- Gaseous Extinguishing
- Emergency Lighting
- Nursecall
- Building and Energy Management
- Alarm Monitoring
- Routine Maintenance
- Emergency Call-Out
-

Or call free on 0800 010 999

Our Commitment to Quality

A commitment to the highest standards of quality assurance underpins everything that we do. Set out below are some of our current accreditations and trade association memberships.



INTRUDER ALARMS
ACCESS CONTROL
CCTV



QUALITY ASSURED
MONITORING OF
INTRUDER ALARMS



QUALITY SYSTEM
ASSESSED
TO ISO 9002



Contact your local
ADT Fire and Security office or
phone free on: 0800 010 999

Head Office: ADT Fire and Security plc,
Security House, The Summit, Hanworth Road,
Sunbury-on-Thames, Middlesex TW16 5DB.
www.adt.co.uk

ADT 103 Issue 5 Aug 00

tyco
*Fire &
Security*

ADT Fire and
Security



HUMAN RESOURCES POLICY

Human Resources Value Statement

Achievement of the ADT Fire and Security's mission will require the Company's operations to be profitable, customer-focused, performance-orientated, quality-driven, innovative, flexible, change seeking, responsive and will need the joint efforts of all employees.

Organisation Capability

The Company will regularly review its human resources in terms of numbers and competencies to meet its plans and will adapt its organisational structure to meet changing needs. Every employee will be given the opportunity to acquire the competencies necessary to continue to make a positive contribution.

The Company values the capability derived from effective teamworking focused towards serving the needs of internal and external customers.

These values will require consistent policy in the areas of manpower planning, recruitment, training and deployment.

The Company will be caring and supportive in its dealings with people who may be adversely affected by changing Company or personal circumstances.

Equality of Status and Opportunity

Decisions concerning the employment, career progression, development and terms and conditions of people will only be based on individual knowledge, experience, capability, commitment, skill, conduct and conformity with Company values.

Achievement of Potential

- encourage all individuals to take responsibility for their own development and provide them with the necessary guidance, resource and support.
- set agreed performance criteria and ensure that there is a regular, objective feedback against these standards.
- to maintain a bias towards internal promotion.
- recognise that the achievement of individual career potential may include learning experiences not obviously related to their current job.

Reward Systems and Practices

The Company will operate fair and competitive terms and conditions of employment which attract and retain the skill base essential for growth and the ongoing improvement of performance. In particular, the Company aims to ensure that pay systems and related conditions are sufficiently flexible to recognise individual performance and genuine differences in responsibilities.

Communications and Consultation

The Company values the feelings, attitudes and knowledge of employees in improving the quality of decision making, and communication and consultation systems will reflect this. The Company believes that only through open, honest, accurate and timely communications can individual people genuinely be involved in the business.

Integrity

The Company will not expect any employee to act contrary to generally accepted standards of ethics or decency and will observe all statutory requirements placed upon it.

Community Relations

The Company will strive to be a 'good neighbour' and responsible partner in the local community and will actively support initiatives which create a positive image for the Company and enhance the benefit of the Company to the community.

Training and Development

Competition for scarce skills is increasing and our ambitions for growth and performance improvement will place demands on both individual and organisation capability.

The continuous improvement of current capability will be satisfied primarily by systematic training and development of all categories of employees. Special emphasis will be placed on those key capabilities which differentiate us from our competitors.

Performance Improvement

The Company is targeted to grow and improve the relationship of profit to sales through ongoing performance improvement.



Overall performance improvement will be realised through the combined improvement in performance of individuals. The Company's culture and processes will be continuously developed to deliver this.

Health & Safety

The Company is committed to the promotion of safe and healthy working systems and environments. Individual establishments will encompass statutory requirements as a minimum standard and actively promote safer and healthier working practices and conditions including the elimination, where practicable, of the processes or substances creating hazard.

Recruitment and Selection

The Company is committed to ensuring that its human resources, in terms of numbers and competencies, will adapt to changing circumstances and the needs of the business. The need for new skills or knowledge, replacement of natural losses, and/or resourcing for growth will necessitate ongoing recruitment. The aim will be to attract and secure suitable candidates, as quickly and as cost-effectively as possible.

The level of professionalism displayed during recruitment and selection activities has a major impact on how the Company is perceived. External and internal advertising especially provides an opportunity to promote the Company name and identity. Consistent quality and visual image conformity is required.

Relocation

To achieve its growth and performance objectives the organisation must ensure the effective utilisation and deployment of the skills and capabilities of its people. As a result, key staff may be required to relocate, both nationally and internationally. The movement (whether of a temporary or permanent nature) may arise for a variety of reasons, viz. operational requirements, career development or through external recruitment where individuals need to relocate to take up the new appointment. To ensure the equitable treatment of employees it is essential that the relocation process is governed by clear and consistent policy.

Termination of Employment

When the employment of individuals is being terminated, this can be a stressful time, most obviously for the individuals affected, but also, depending on the circumstances, for other people and the managers responsible. The potential difficulty can be minimised and business

needs realised by applying rigorous procedures and consistent values, including firmness and fairness in cases of misconduct, constructive support where capability is an issue, and compassionate help and objectivity in redundancy situations. Legal complications, damage to employee relations and falling morale can affect the Company's image externally as well as image and performance internally. ADT Fire and Security, through its existing approach, has established a good reputation for dealing with severance and the consistent approach required by this policy will build on this.

Remuneration and Benefits

To meet the Company's growth and profitability objectives continuous improvement in the performance of its employees will be required. The primary aim of the remuneration and benefits system is to encourage and support this drive to enhance organisational performance. The achievement of excellence depends on attracting and retaining the right calibre of staff and providing an optimum mix of both financial and non-financial incentives and rewards which will maintain and increase their performance.

Communication and Consultation

The primary purpose of effective communication and consultation is to gain COMMITMENT and to achieve ACTION.

The Company values the feelings, attitudes and knowledge of employees in improving the quality of decision making and communication and consultation systems will reflect this. The Company believes that only through open, honest, accurate and timely communications can individual people genuinely be involved in the business.

Most successful organisation invariably display an ability to manage effective formal and informal communication and consultation systems to the extent that they gain competitive advantage. ADT fire and Security is committed to an ongoing programme aimed at improving the effectiveness of our communication and consultation arrangements.

Equality of Status and Opportunity

The Company will not condone inequality of opportunity or discrimination which derive from a person's colour, ethnic or racial origin, nationality, sex or marital status.

The Company requires that all employees, at whatever level of responsibility, observe its policy in this matter and will regard non-



observance of the principles of equality of opportunity as a serious breach of conduct.

It is recognised that equality of status and opportunity are matters often regulated in statute in individual countries in which we have operations.

A handwritten signature in black ink, appearing to read 'Alex McNutt'. The signature is fluid and cursive, written over a light background.

Alex McNutt
Managing Director
ADT Fire and Security plc

May 1999

tyco / *Fire &
Security* / **ADT Fire and Security**

HEALTH AND SAFETY MANUAL

Intranet Address: www.adt.co.uk/Quality

Email: quality@adt.co.uk

ISSUED AND CONTROLLED BY THE QUALITY ASSURANCE DEPARTMENT,
HALESOWEN.

| Contents & Issue Status | |
|-------------------------|--------|
| Ref: | HS 11 |
| Issue: | 7 |
| Page: | 1 of 2 |

**TITLE: HEALTH AND SAFETY MANUAL
CONTENTS AND ISSUE STATUS**

| | | | |
|--------------|---------------|---------------------|----------|
| Approved by: | Steve Lampett | National QA Manager | 11/09/01 |
|--------------|---------------|---------------------|----------|

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| CONTROLLED COPY NUMBERS: | | | |
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IMPORTANT NOTE: This document is to be considered UNCONTROLLED unless either a Controlled Copy Number is present above and is not marked "uncontrolled" or the document is being viewed live on the Quality Website of the Company Intranet System. To check that this document is the latest issue and to view a full list of approvals for this document check the Quality Website of the Company Intranet System. This document is confidential and should be treated accordingly, please use confidential waste when disposing. IT IS AN INDIVIDUAL RESPONSIBILITY TO ENSURE THAT ONLY CURRENT ISSUE QUALITY DOCUMENTATION IS USED AND FOLLOWED.

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H&S Website

- QA Home**
- General Manual**
- APC Local Manual**
- ARC Manual**
- SVB Manual**
- Dublin Manual**
- Data Management**
- Site of Man Manual**
- QA Manual**

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| PART II HEALTH AND SAFETY ORGANISATION | HS 1002 |
| PART III PROCEDURES | HS 1003 |
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| COSHH ASSESSMENT | HS 1020 |
| MANUAL HANDLING ASSESSMENT | HS 1030 |
| WORKSTATION ASSESSMENT | HS 1035 |
| ACCIDENT REPORTING AND INVESTIGATION | HS 1040 |
| PERMIT TO WORK | HS 1050 |
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| PERMIT TO WORK | QS 1050 |

PERMIT TO WORK

QS 1050

| | |
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| FORK LIFT TRUCK DAILY CHECKLIST | QS 1073 |
| MONTHLY ACCIDENT RETURNS | QS 1080 |
| CAR AUDIT CHECKLIST | QS 1140 |



A **tyco** INTERNATIONAL LTD. C

Marsh UK Ltd
Victoria House
Queens Road
Norwich
NR1 3QQ
Tel: 01603 207044
Fax: 01603 207653
E-Mail: nigel.crane@marshmc.com

MARSH
An **MMC** Company

16th February, 2001

TO WHOM IT MAY CONCERN

Dear Sirs

Subject: ADT Fire and Security Plc – Airside Liability Insurance

We confirm that, as Insurance Brokers and Advisors ADT Fire and Security Plc, the following insurances have been effected on behalf of our client.

Insured: ADT Fire and Security Plc
and subsidiary companies, specified companies and
interested parties as declared to Insurers but excluding all
subsidiary companies incorporated in the United States of
America and Canada.

Interest: Third Party Airside Liability Insurance

Airports: Any Airport and/or Airfield in the UK, Isle of Man and Channel Islands

Limits of Indemnity: GBP 50,000,000 in respect of Motor Vehicle Property Damage, Motor
Vehicle Bodily Injury and General Public Liability

Certificate Number: 551/V9W233

Expiry Date: 23rd December 2001

The aforementioned information is subject to the terms, conditions, limitations, exclusions and cancellation provisions of the respective policies.

This letter is issued as a matter of information only and confers no rights upon the holder other than those provided by the policy. This letter does not amend, extend or alter the coverage afforded by the policies described herein.

Yours faithfully for and on behalf of Marsh UK Ltd


Clive Nelson

Marsh UK Ltd
Victoria House
Queens Road
Norwich
NR1 3QQ
Tel: 01603 207009
Fax: 01603 207653
E-Mail: James.Braybrook@Marsh.com



MARSH
An **MMC** Company

12th November 2001

TO WHOM IT MAY CONCERN

Dear Sirs

**Subject: ADT Fire & Security Plc
Public and Products Liability Insurance**

We confirm that, as Insurance Brokers and Advisors to the above the following insurance has been effected on behalf of our client.

Insured: ADT Fire & Security Plc
and subsidiary companies, specified companies and interested parties as declared to Insurers but excluding all subsidiary companies incorporated in the United States of America and Canada.

Cover: To indemnify the Insured for all sums that they may become legally liable to pay as compensation including claimants costs and expenses

- Loss of or damage to property not belonging to the Insured or under their care, custody or control
- Bodily injury to any person not employed under a contract of service or apprenticeship including persons engaged in work experience training, study exchange or similar schemes

As a result of carrying out their business

Cover Extensions: Indemnity to Principals Clause

Waiver of Subrogation Clause

30 Day Cancellation Clause

Cross Liabilities Clause

Limit of Indemnity: USD 25,000,000 constituted as follows:

- (a) USD 5,000,000 (Primary Layer)
- (b) USD 20,000,000 in excess of USD 5,000,000 (Excess Layer)

Per occurrence and in the aggregate any one period of Insurance

Situation: World-wide, excluding United States of America Jurisdiction and Canada

Insurers: (a) XL Wintherthur International
(b) National Union

Policy Numbers: (a) HFL 004-29-61-01
(b) BE 871 3678

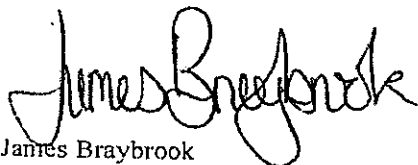
Deductible USD 250,000 each and every occurrence

Expiry Date: 30th September 2002

Notwithstanding any requirement, term or condition of any contract or other document with respect to which this letter may be issued or pertain, the insurance afforded by any policy described herein is subject to all the terms, conditions, limitations, exclusions and cancellation conditions of such policy.

This letter is issued as a matter of information only and confers no rights upon the holder other than those provided by the policy. This letter does not amend, extend or alter the coverage afforded by the policies described herein.

Yours faithfully for and on behalf of Marsh UK Ltd



James Braybrook
Client Adviser
Global Risks Division

JamesBraybrook

MarshUKLtd
GlobalRisksDivision
VictoriaHouse
QueensRoad
Norwich
NR13QQ
Tel:01603207009
Fax:01603207653
James.braybrook@marsh.com

MARSH
An *MMC* Company

2January2002

TOWHOMITMAYCONCERN

DearSirs

**Subject: ADTFire&Securityplc
ContractsWorksInsurance(InstallationFloaterandContractor'sEquipment)**

Weconfirmthat,asInsuranceBrokersandAdvisorstotheabovenamedthefollowinginsuranceshavebeeneffectedon behalfofourclient.

Insured: ADTFire&Securityplc
andrelatedorsubidiarycompaniesandinterestedpartiesfortheirrespectiverightsand interests.

Cover: Unforeseenaccidentallossordamagefromanycause,otherthanthosespecifically excludedtothefollowingproperty:

- (a) The installation, whether permanent or temporary (including materials to be incorporated therein) being the property of the insured or for which the insured is responsible, at the contracts site or in transit (other than ocean transit)
- (b) Contractor's stool and equipment being the property of the insured or for which the insured is responsible, at the contracts site or in transit (other than ocean transit)

LimitofLiability: USD10,000,000eachandeveryoccurrence

Situation: AnywhereintheWorld

Deductibles: USD10,000 eachandeverylossforprojectswithacostlessthanUSD5,000,000

USD50,000 eachandeverylossforprojectswithacostgreaterthanUSD5,000,000

Insurers: NewYorkMarineandGeneralInsuranceCompany(MMO)


PolicyNumber: JP-T0701

Expiry: 30thSeptember2002

Notwithstandinganyrequirement,termorconditionofanycontractorotherdocumentwithrespecttowhichthisletter maybeissuedorpertain,theinsuranceaffordedbyanypolicydescribedhereinissubjecttoalltheterms,conditions, limitations,exclusionsandcancellationconditionsofsuchpolicy.

Thisletterisissuedasamatterofinformationonlyandconfersnorightsupontheholderotherthanthoseprovidedbythe policy.Thisletterdoesnotamend,extendoralterthecoverageaffordedbythepoliciesdescribedherein.

YoursfaithfullyforandonbehalfofMarshUKLtd



JamesBraybrook
ClientAdviser
GlobalRisksDivision

RegisteredNumber:464869England
RegisteredOfficeNo1,TheMarshCentre
LondonE18DX
ActingasagenttoMarshLtd
MarshLtdisamemberofthe
GeneralInsuranceStandardsCouncil



QUALITY POLICY

The quality of products and services that ADT Fire and Security provides is of paramount importance to the continuing prosperity of the company.

The Company recognises that to maintain its position as market and technological leader, an effective and dynamic Quality Management System is essential. This policy is intended to benefit both the customer and Company through increased customer satisfaction, leading to growth in existing markets and investments in new market areas.

The Quality Management System is designed to operate in accordance with the requirements of BS5750/ISO 9000 and other appropriate standards. In addition, through programmes of continuous improvement in which all employees are required to participate, the system is not limited by those standards.

The Company's training policy is to ensure that our people at all levels are suitably qualified and trained for the tasks they are required to undertake by providing on-going training and education programmes.

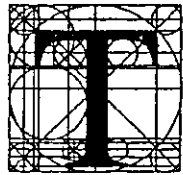
The Quality Assurance teams are responsible for providing specialist services to develop, implement, monitor and maintain the system in compliance with this quality policy statement. They have full authority to investigate quality problems ensuring that timely and effective corrective action is implemented by the departments responsible.

A handwritten signature in black ink, appearing to read 'Alex McNutt'.

Alex McNutt
Managing Director
ADT Fire and Security plc

May 1999

THE LOSS PREVENTION CERTIFICATION BOARD LIMITED
CERTIFICATE OF SUPPLIER QUALITY MANAGEMENT SYSTEM



This is to certify that

ADT FIRE AND SECURITY
Turnberry House, 100 Bunhill Row, London EC1Y 8ND.

has complied with the requirements identified in

ISO 9002 : 1994

and is authorised to use the LPCB mark on stationery and
publications related to the following products and/or services

Installation, commissioning and servicing of fire
detection and alarm systems.

Certificate No. 265 Issue 4
Issued 13 March 2000
Valid Until 25 October 2001

Signed on behalf of the LPCB

P DENTSCHUK



The use of the Accreditation Mark indicates
accreditation in respect of those activities covered
by the accreditation certificate number 007

THE LOSS PREVENTION CERTIFICATION BOARD LIMITED

Melrose Avenue, Borehamwood, Hertfordshire WD6 2BJ • Tel: 0181 236 9600 • Fax: 0181 236 9601 • E-mail: info@lpc.co.uk

This certificate remains the property of the LPCB and is issued subject to LPCB terms and conditions



ENVIRONMENTAL POLICY

Introduction

ADT Fire and Security endorses the objectives of the International Chamber of Commerce (ICC) Charter for sustainable development. This means that ADT Fire and Security seeks continuously to improve environmental policies, programmes and performance and to integrate environmental management with business operations. The four main objectives of the environmental policy are:-

- To use, wherever possible and commercially sound, earth resources which can be replaced in a lifetime.
- To prevent pollution at source whenever and wherever possible.
- To conserve natural resources by the use of energy management, recycling and other appropriate means.
- To ensure that the Company's facilities and products meet and sustain the regulations of all Governmental environmental agencies.

Scope

Applies to all operating areas of ADT Fire and Security

Operating Policy

To operate in accordance with the aims and principles of the ICC Charter:

Aims

- Provide guidance on environmental management.
- Stimulate all areas to improve environmental performance.
- Demonstrate that all aspects of the business are taking environmental responsibilities seriously.

Principles

- Put environmental management among the highest company priorities.
- Integrate environmental management with business operation.
- Continuously improve policies, programmes and performance.
- Educate, train and motivate employees.
- Assess environmental impact before action.

A handwritten signature in black ink, appearing to read 'Alex McNutt'.

Alex McNutt
Managing Director
ADT Fire and Security plc

May 1999

SPECIFICATION

Job No: 3472/0

Enquiry No:

Date: 25 February 2002

Customer:
LORNE STEWART
Stewart House
Kenton Road
Harrow
Middlesex
HA3 9TU

Installation:
University of Hertfordshire
New Student Campus
Hatfield
Hertfordshire
AL10 9AB

Sales Person: John Hickson

The following Specification is for the installation of an ADT Closed Circuit Television (CCTV) System which conforms to the NACOSS Code of Practice for CCTV ref. NACP20.

This Specification should be read in conjunction with the Specification Notes attached, further copies of which are available from your local ADT Office.

For the purposes of this Specification, front, rear, left and right are defined as standing at the front of, and facing the premises.

Camera No. One

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed in the East park land area to view the East Campus area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvanised finish 6.0Mt. Tilt Down Column.

Camera No. Two

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the corner open area of block F to view the Campus block E area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvanised finish 6.0Mt. Tilt Down Column.

Camera No. Three

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the grass verge opposite block G to view the Campus block G area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Four

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the grass verge opposite block H to view the Campus block H area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Five

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the corner open area opposite block G to view the Campus road approach.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Six

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed in the open area between block D and block M to view the Campus approach road.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Seven

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the corner open area of block N to view the Campus block N area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Eight

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the North grass verge opposite block M to view the Campus block M area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Nine

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the grass verge between blocks H and K to view the Campus block J area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Ten

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the roadway behind block K to view the Campus approach road.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Eleven

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the North grass verge opposite block C to view the Campus blocks B and C.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Twelve

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the open area opposite block J to view the Campus area between blocks J and A.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Thirteen

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the corner area of block A to view the Campus block A and B areas.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Fourteen

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed in the North/West corner of the Campus to view the block B area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvernised finish 6.0Mt. Tilt Down Column.

Camera No. Fifteen

A Dennard Type Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the West approach road near the Pool Plant building to view the approach road and Pool buildings area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Sixteen

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the edge of the South/West car park to view the South/West car park and general area.

The Camera assembly and snowdrop bracket is to be mounted on an Altron galvornised finish 6.0Mt. Tilt Down Column.

Camera No. Seventeen

A Dennard Type 2050 Colour/Mono Dome Camera with power supply unit having a resolution of 470TVL and fitted with a 18-1 optical zoom lens is to be installed on the corner of the South/West building complex to view the general area.

The Camera assembly and snowdrop bracket is to be mounted on the building by means of a corner mount bracket at a height of approximately 4.5 Mt.

Termination

Cameras One to Seventeen are to be cabled across site using cable via duct ways (provided by others) and will terminate in the new Academy Building. (Final location within the building to be advised by Lorne Stewart)

The cables carrying both video and telemetry signals will be interfaced with the site-wide optical fibre system (provided by others).

ADT will commission all cameras to the termination point only.

Exclusions

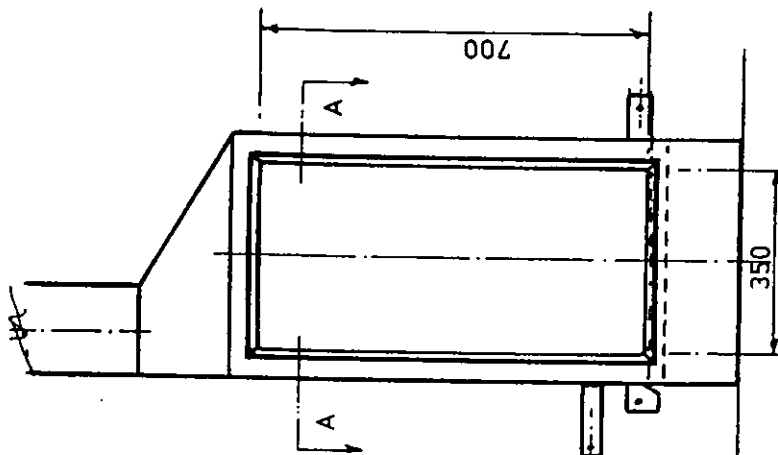
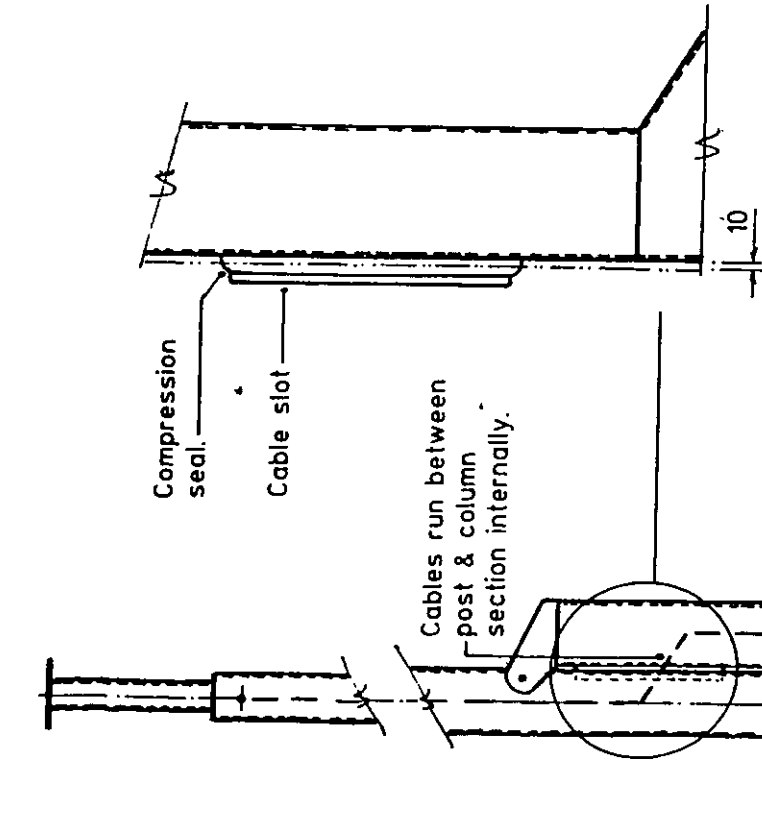
All control, monitoring and recording equipment is to be provided by others.

All final commission and presets via control and monitoring equipment will be carried out by others.

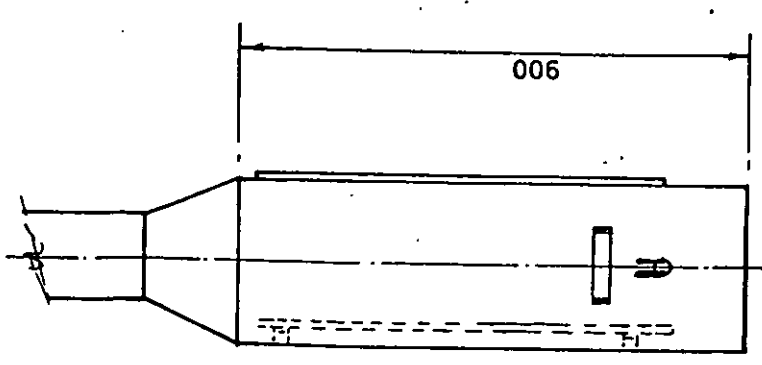
All site-wide ducting for the video/telemetry signal cable and mains power (separate ducts for signal and mains power) by others.

All camera locations are as issued by Lorne Stewart on drawing number 1284/E01 Dated April 2001.

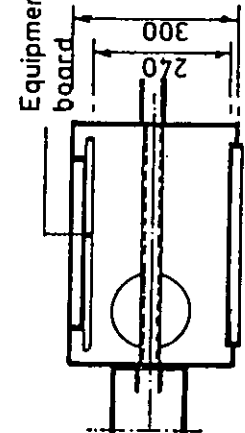
All 240Vac mains power supplies for cameras to be 'Same Phase' and provided by others.



FRONT ELEVATION



SIDE ELEVATION



PLAN ON 'A-A'

CABINET SPECIFICATION

- +LARGE CAVITY FOR MOUNTING EQUIPMENT.
- +DOOR SEALED WITH CONTINUOUS NEOPRENE GASKET.
- +EARTHING LUGS FITTED WITHIN CABINET AND ON DOOR.
- +CABINET OF SOLID VANDAL PROOF CONSTRUCTION.
- +OPTIONS INCLUDE HIGH SECURITY LOCKS & CABINET VENTING.

DIMENSIONS IN MM UNLESS OTHERWISE STATED

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ALL RIGHTS RESERVED DO NOT SCALE

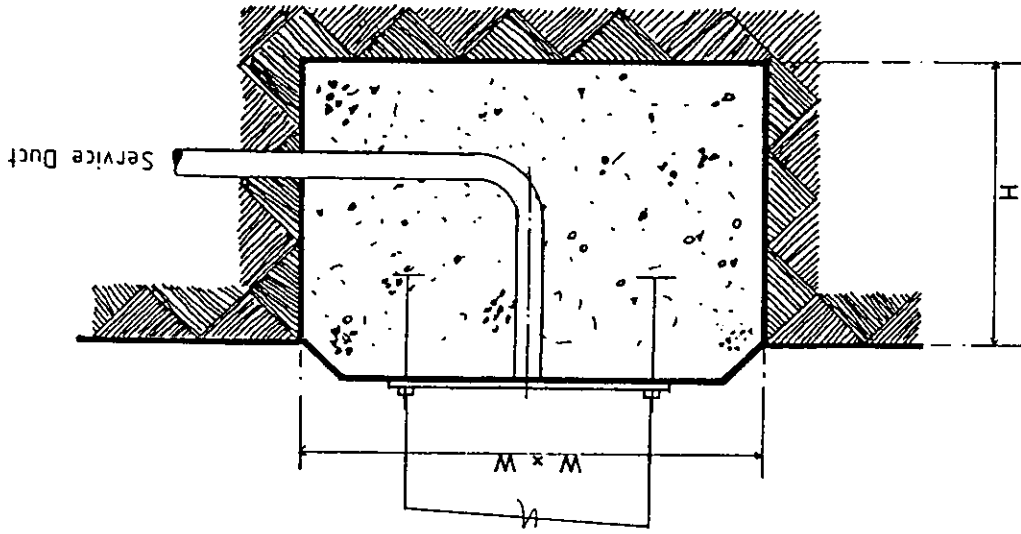
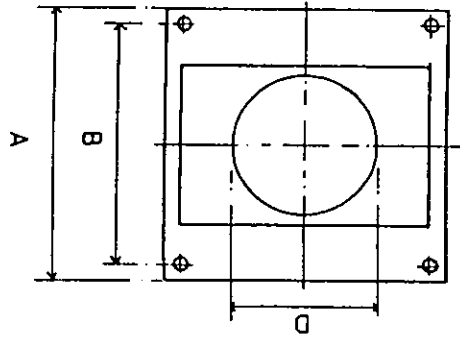
| | | | |
|---------|--------|----------|----------|
| DRAWN | P.H.J. | DATE | 13/02/97 |
| CHECKED | | APPROVED | |
| CLIENT | | | |

| | |
|--|----------------------|
| TILT-DOWN COLUMN INCORPORATING CABINET | |
| 4 - 8 METRE COLUMNS. | |
| MATERIAL | INISH |
| Mild Steel BS 4360 | Hot Dip Galv BS 729. |

ALTRON COMMUNICATIONS EQUIPMENT LTD.
 PLOT 20, HEOL PARC MAWR,
 CROSS HANDS BUSINESS PARK,
 LLANELLI, CARMS., SA14 6RT.
 TEL: 01269 831431
 FAX: 01269 845348

| | | |
|----------|-----------|-------|
| Redrawn. | AMENDMENT | ISSUE |
| | | |

| Column Height | W X W | H | Volume | A | B | D |
|---------------|-------|------|---------------------|------------------|------------------|------|
| 3 Metres | 800 | 500 | 0.32M ³ | 510 ² | 450 ² | 2500 |
| 4 Metres | 800 | 800 | 0.512M ³ | 510 ² | 450 ² | 2500 |
| 5 Metres | 1000 | 800 | 0.8M ³ | 510 ² | 450 ² | 2500 |
| 6 Metres | 1000 | 1000 | 1M ³ | 510 ² | 450 ² | 2500 |
| 7 Metres | 1200 | 1000 | 1.44M ³ | 510 ² | 450 ² | 2500 |
| 8 Metres | 1200 | 1200 | 1.728M ³ | 630 ² | 550 ² | 2500 |
| 9 Metres | 1200 | 1200 | 1.728M ³ | 630 ² | 550 ² | 2500 |
| 10 Metres | 1500 | 1200 | 2.7M ³ | 630 ² | 550 ² | 2500 |



DIMENSIONS IN MM UNLESS OTHERWISE STATED

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DO NOT SCALE

DRAWN mgr

DATE 7/04/97

CHECKED

APPROVED

CLIENT

MATERIAL

IISH

BASE DETAILS FOR AW1697.

ALTRON COMMUNICATIONS EQUIPMENT LTD.

PLOT 20, HEOL PARC MAWR,
CROSS HANDS BUSINESS PARK,
LLANELLI, CARMS., SA14 6RE.
TEL: 01269 831431
FAX: 01269 845348

Service duct & base plate added to section.

AMENDMENT

26/01/98

ISSUE

DRAWING No. AW1877/A.

CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM – SPECIFICATION NOTES

1. SYSTEM DESIGN

- a) **Customer Designed (where applicable)** The system has been designed in accordance with the Enquiry Specification Reference Number and/or Tender Drawing Number/Issue Number submitted. Where deviations are required those must be agreed in writing by the Customer.
- b) **ADT Designed (where applicable)** The system has been designed by ADT in accordance with the ADT Drawing Number/Issue Number attached to and forming part of the Proposal, based on information provided by the Customer.

2. INSTALLATION

Where applicable ADT reserves the right to employ sub-contractors.

If hazardous materials are identified on site ADT reserves the right to cease work until such materials are removed or made safe.

The proposal is based on the understanding that all work will be carried out during the Company's normal working hours and does not include for overtime, weekend or Bank Holiday working. Any alterations to these working hours will incur additional costs. ADT will endeavour to conceal cables where possible. However no allowance has been made for concealing cables under floors or in false ceiling voids. If required this work will be carried out at additional cost.

Our proposal envisages that both the installation and commissioning activities will be undertaken as a single continuous operation.

Where cables are exposed to possible mechanical damage, vandalism or tampering, or are in public areas, they should be protected by suitable conduit, trunking or armour. If required this work can be carried out at additional cost.

Our proposal assumes that the Company's engineers will have free access to all relevant areas and are afforded continuous and uninterrupted working. Whilst the Company will make all reasonable efforts to work with other suppliers, servants, trades and the customer, any interruptions or delays by the forenamed may result in additional charges being made to the customer.

Should you consider making any alterations to the building structure or layout, or changing the definition of the actual risk, please contact us at the earliest possible opportunity. This proposal relates to the installation described in the documentation, and can only be maintained if we are offered the opportunity to appraise the design following any changes to the installation or risk.

Where our proposal includes design responsibility we will undertake to attend any required consultation with interested parties. Our estimate excludes obtaining any Statutory or Local Authority approval or costs associated with any additional requirements of such approvals.

The prices included in our proposal are based on the cost of labour and materials ruling at the date hereof unless otherwise stated in this proposal.

ADT reserves the right to pass on any increase in material or labour costs incurred before completion unless otherwise stated in this proposal.

These costs will be calculated using the indices and calculation formula issued by the British Electrical and Manufacturers Association (BEAMA) which in turn are based on those issued by the Department of Trade and Industry, unless otherwise stated in this proposal.

We have not allowed for any change in the present rate of Value Added Tax or for costs arising from any statute, regulation or other instrument imposed by the government after the day of submission of this estimate. Neither does our estimate price include for any extra expenses incurred should the contract be extended as a result of our being delayed or prevented from proceeding with the contract for any reason other than our own fault.

Where necessary ADT reserve the right to supply and install alternative equipment to that detailed in the Specification.

Mains Supply

The customer shall provide a permanently live 230v AC 50Hz mains supply via unswitched fused spur points to be located adjacent to all mains operated cameras, monitors, video recorders, video switchers, multiplexers etc. in positions requested by our installation department before installation commences. All cameras and equipment must be connected to the same earth and phase of the Mains Supply. Each external camera Mains Supply should be via an ELCB unit of suitable rating. Alternatively ADT can arrange this at additional cost.

Lighting

All CCTV systems require a minimum level of lighting to operate satisfactorily. Unless specifically stated this Specification does not allow for any changes to the existing lighting and any additional lighting or other equipment required will incur additional cost.

Delivery

Where delivery time of products for incorporation into the works cannot be accurately forecast, it may be

CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM – SPECIFICATION NOTES

Necessary to make early supply arrangements in order not to delay the completion programme. If such products are then available before they are required on site, they will be placed in a Bonded Stores. In such cases, such products will be invoiced and a vesting certificate issued on receipt of settlement of invoice, indemnifying the client in case of theft, fire etc., and acknowledging the fact that we hold such products on the customer's behalf.

Services

You are asked to advise our engineers of the location of any concealed water, gas, electricity, telephone or other services, wiring or pipes, before work commences. In the absence of such advice, ADT Fire and Security cannot accept liability for damages to these services or for consequential damages.

The customer should arrange for the following services to be provided:-

- a) Any builders work, cutting away, redecorating or making good.
- b) The services of a Carpet Fitter.
- c) The removal of any stock, furniture or fixtures which may hinder the execution of our works.
- d) Such electricity as may be required for the powering of tools, plant etc.
- e) Washing and toilet facilities.
- f) A reasonable level of lighting in all working areas.
- g) A safe means of access to, and within, all working areas.
- h) Lockable Material Store.

Provision for any concrete bases necessary for masts or poles in accordance with our installation department specification.

3. EXISTING EQUIPMENT

ADT does not accept responsibility or any liability for the performance or reliability of equipment or wiring that has not been approved, supplied and/or installed by ADT or their appointed Electrical Contractor.

4. MAINTENANCE

Maintenance should be carried out wherever possible, by ADT, who will have the resources, including spare parts, system knowledge and documentation to comply with NACOSS recommendations.

The preservation of security within the maintenance company is of paramount importance and steps will be

taken to ensure safe custody of all equipment and documentation relating to installations. ADT will ensure that adequate vetting of employees is carried out and that all employees carry identification cards incorporating a photograph of the bearer, the company's name and expiry date.

- It should be recognised that not all eventualities can be foreseen and, in exceptional circumstances, a system or part of a system may be left inoperable or disconnected whilst replacement parts are obtained.

5. WARRANTY

The equipment is covered by warranty for 12 months from the date of commissioning with the exception of Monitor Tubes, InfraRed and other lamps, VTR heads and pulleys, which are specifically excluded.

6. WARNING

A prominent warning notice should be fixed to moveable camera positioning equipment indicating that sudden movement of the equipment can occur.

7. COMPLIANCE WITH DATA PROTECTION ACT

It is the *customer's responsibility* to register the CCTV System with the Data Protection Registrar (telephone number: 01625 545740), www.dataprotection.gov.uk.

The Data Protection Act requires the customer to be registered and comply with the eight Data Protection principles by 1st October 2001.

1. Personal data must be processed fairly and lawfully.
2. Data can only be obtained for one or more lawful purposes and must not be further processed for incompatible purposes.
3. Data shall be adequate, relevant and not excessive.
4. Data shall be accurate and where necessary kept up to date.
5. Data shall not be kept for longer than is necessary.
6. Data shall be processed in accordance with the rights of individuals under the Act.
7. Appropriate measures shall be taken to prevent unauthorised or unlawful processing of data against accidental loss or destruction of, or damage to, data.
8. Personal data shall not be transferred to a country outside the European Economic Area unless that country ensures an adequate level of protection for rights and freedom of individuals in relation to the processing of data.

8. REMOTE CCTV MONITORING

ADT provide a wide range of monitoring services for all CCTV Systems. Your ADT representative should have explained the benefits of a monitored system to you. If you would like a quotation or further information on remote site management, CCTV monitoring and the benefits that are available to you and your business, please contact your ADT representative.

The installation of a Remotely Monitored CCTV system can provide you with the following advantages.

- Complete local surveillance of your premises during business hours.
- 24 hour recording of all cameras on site.

Security of the site can be achieved 'after hours' utilising Remote Site Management facilities. 2-way audio is also available, where our trained operators are able to interact with staff and customers.

Electronic switching of electrical devices on site, enable the operation of gates/barriers, rising bollards and a host of other devices.

Remote Systems incorporating CCTV provide total out of hours management of your site often creating large cost savings on physical security labour.

SPECIFICATION

Job No: 3492/1

Enquiry No:

Date: 27 February 2002

Customer:
Lorne Stewart
Stewart House
Kenton Road
HARROW
Middlesex
HA3 9TU

Installation:
University of Hertfordshire
Sports & Leisure Complex
Hatfield Campus
College Lane
Hatfield
Hertfordshire
AL10 9AB

Sales Person: John Hickson

The following Specification is for the installation of an ADT Closed Circuit Television (CCTV) System which conforms to the NACOSS Code of Practice for CCTV ref. NACP20.

This Specification should be read in conjunction with the Specification Notes attached, further copies of which are available from your local ADT Office.

For the purposes of this Specification, front, rear, left and right are defined as standing at the front of, and facing the premises.

Camera No - One

A Baxall 1/3" Format 12V DC/24V AC CCD Colour Camera having a resolution of 480 TVL is to be installed in the corner above the double doors leading from the Fitness Centre at a height of 2.5 metres to view the Aerobics Studio.

To be fitted with a 3.5-8mm Auto Iris Lens.

The Camera/Lens is to be mounted in a dustproof housing.

Camera No - Two

A Baxall 1/3" Format 12V DC/24V AC CCD Colour Camera having a resolution of 480 TVL is to be installed in the corner outside office G43 opposite the Fitness Reception Desk at a height of 2.5 metres to view the Fitness Reception Desk.

To be fitted with a 3.5-8mm Auto Iris Lens.

The Camera/Lens is to be mounted in a dustproof housing.

Camera No - Three

A Baxall 1/3" Format 12V DC/24V AC CCD Colour Camera having a resolution of 480 TVL is to be installed on the wall opposite the Squash Courts Viewing Gallery at a height of 2.5 metres to view the Squash Courts and Viewing Gallery.

To be fitted with a 3.5-8mm Auto Iris Lens.

The Camera/Lens is to be mounted in a dustproof housing.

Camera No - Four

A Baxall 1/3" Format 12V DC/24V AC CCD Colour Camera having a resolution of 480 TVL is to be installed in the South/West corner of the Badminton Hall at a height of 2.5 metres to view the Badminton Hall area.

To be fitted with a 3.5-8mm Auto Iris Lens.

The Camera/Lens is to be mounted in a dustproof housing.

Camera No - Five

A Baxall 1/3" Format 12V DC/24V AC CCD Colour Camera having a resolution of 480 TVL is to be installed on the North wall of the Cricket Hall at the North/West end at a height of 2.5 metres to view the Cricket Hall area.

To be fitted with a 3.5-8mm Auto Iris Lens.

The Camera/Lens is to be mounted in a dustproof housing.

Video Switcher

Camera numbers 1,2,3,4, & 5 are connected to a Video Switcher to be located in the main Reception Desk area capable of handling 8 Cameras input(s) and providing 2 Monitors output(s). Camera outputs can be individually selected or viewed sequentially.

Monitors

The Output(s) of Camera Number(s) 1,2,3,4, & 5 to be displayed on one JVC 14" Colour Monitor(s) having a resolution of 300 TVL to be located in the main Reception Desk area.

Exclusions

All suitable cable containment between the Cameras and Main Reception Desk.

All 240Vac 'Single Phase' mains power supplies for the Cameras and Monitoring/Control equipment.

Option

No Multiplexer or Recording equipment has been included in this quotation at this time. These item/s can be provided on request at additional cost to the client.

CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM – SPECIFICATION NOTES

necessary to make early supply arrangements in order not to delay the completion programme. If such products are then available before they are required on site, they will be placed in a Bonded Stores. In such cases, such products will be invoiced and a vesting certificate issued on receipt of settlement of invoice, indemnifying the client in case of theft, fire etc., and acknowledging the fact that we hold such products on the customer's behalf.

Services

You are asked to advise our engineers of the location of any concealed water, gas, electricity, telephone or other services, wiring or pipes, before work commences. In the absence of such advice, ADT Fire and Security cannot accept liability for damages to these services or for consequential damages.

The customer should arrange for the following services to be provided:-

- a) Any builders work, cutting away, redecorating or making good.
- b) The services of a Carpet Fitter.
- c) The removal of any stock, furniture or fixtures which may hinder the execution of our works.
- d) Such electricity as may be required for the powering of tools, plant etc.
- e) Washing and toilet facilities.
- f) A reasonable level of lighting in all working areas.
- g) A safe means of access to, and within, all working areas.
- h) Lockable Material Store.

Provision for any concrete bases necessary for towers or poles in accordance with our installation department specification.

3. EXISTING EQUIPMENT

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4. MAINTENANCE

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taken to ensure safe custody of all equipment and documentation relating to installations. ADT will ensure that adequate vetting of employees is carried out and that all employees carry identification cards incorporating a photograph of the bearer, the company's name and expiry date.

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5. WARRANTY

The equipment is covered by warranty for 12 months from the date of commissioning with the exception of Monitor Tubes, InfraRed and other lamps, VTR heads and pulleys, which are specifically excluded.

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A prominent warning notice should be fixed to moveable camera positioning equipment indicating that sudden movement of the equipment can occur.

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8. Personal data shall not be transferred to a country outside the European Economic Area unless that country ensures an adequate level of protection for rights and freedom of individuals in relation to the processing of data.

CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM – SPECIFICATION NOTES

8. REMOTE CCTV MONITORING

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- 24 hour recording of all cameras on site.

Security of the site can be achieved 'after hours' utilising Remote Site Management facilities. 2-way audio is also available, where our trained operators are able to interact with staff and customers.

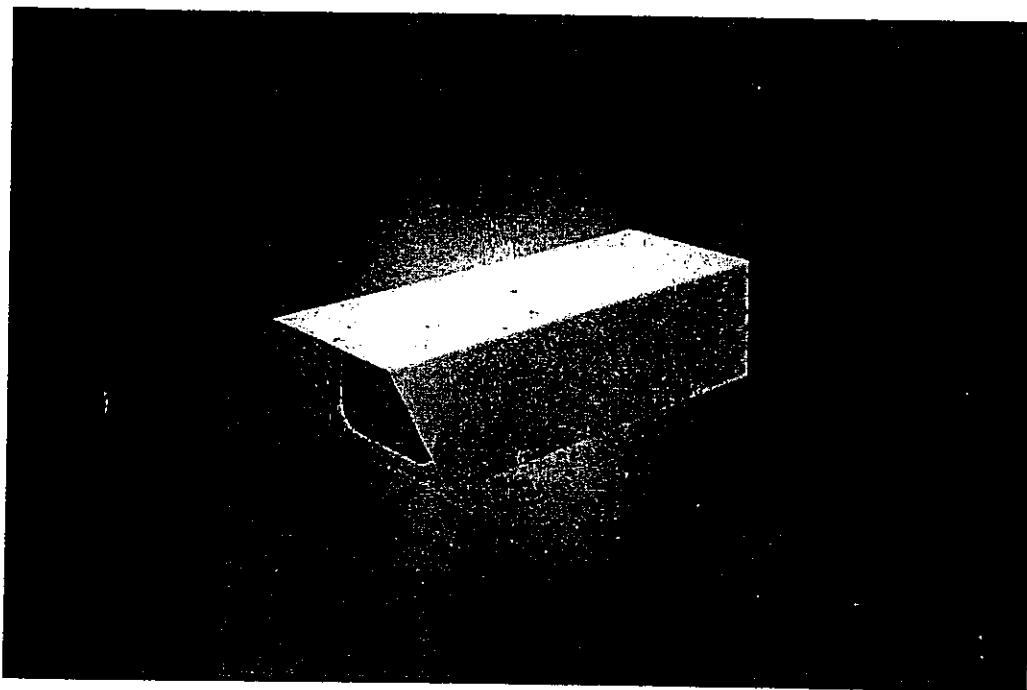
Electronic switching of electrical devices on site, enable the operation of gates/barriers, rising bollards and a host of other devices.

Remote Systems incorporating CCTV provide total out of hours management of your site often creating large cost savings on physical security labour.

**Type
507**

Housings

Dennard



Description

Type 507

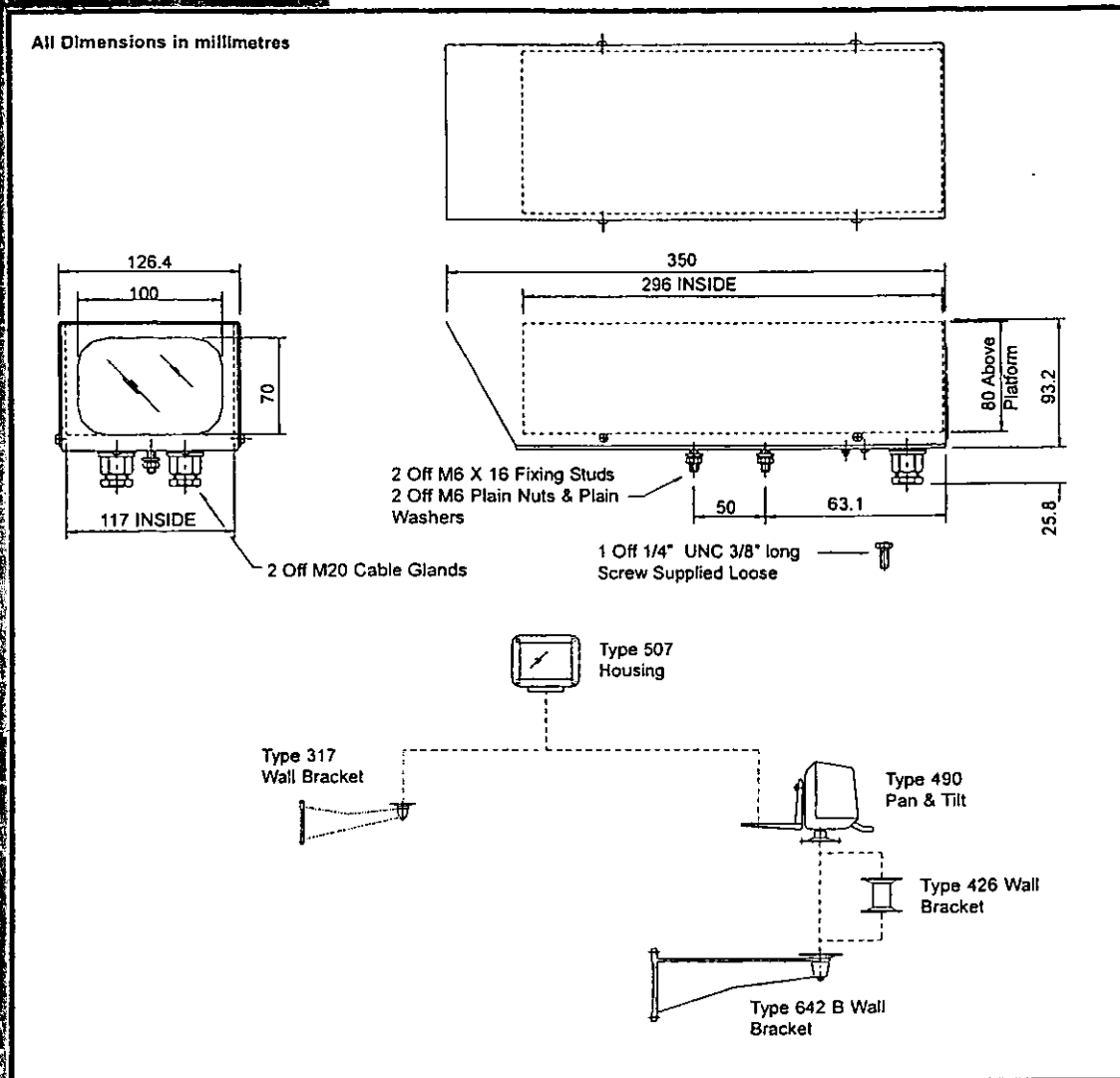
The Type 507 has been developed to meet the demand for an inexpensive dustproof camera housing for use in warehouse or sheltered areas. The unit is manufactured from powder coated aluminium alloy sheet, with glass window and zinc plated fixings. Two cable glands are provided at the rear and fixing studs allow the unit to be fitted to a type 317 wall bracket.

Features

- ❶ Simple styling.
- ❷ Ease of camera assembly.
- ❸ Cable Entry via cable glands.
- ❹ Environmental protection BS. EN 60529. level IP40

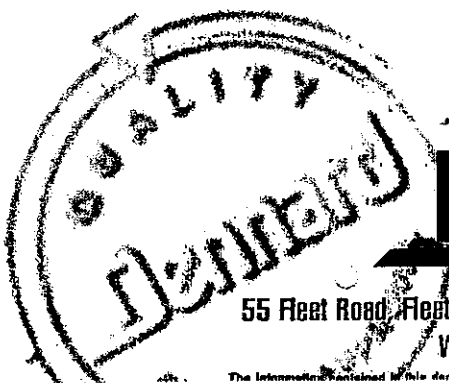
DENNARD SUPPORT LINE +44 (0) 1252 614884

Fax: 01252 826013



Specifications

Material: Aluminium alloy.
 Finish: Powder coated & stoved.
 Weight: 1.25kg.
 Environmental Protection: BS. EN 60529 level IP40.



Dennard

55 Fleet Road, Fleet, Hants, England. Tel: 01252 814884 Fax: 01252 626013
 Web Site Address: www.dennard-cctv.com



CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM – SPECIFICATION NOTES

1. SYSTEM DESIGN

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Where applicable ADT reserves the right to employ sub-contractors.

If hazardous materials are identified on site ADT reserves the right to cease work until such materials are removed or made safe.

The proposal is based on the understanding that all work will be carried out during the Company's normal working hours and does not include for overtime, weekend or Bank Holiday working. Any alterations to these working hours will incur additional costs. ADT will endeavour to conceal cables where possible. However no allowance has been made for concealing cables under floors or in false ceiling voids. If required this work will be carried out at additional cost.

Our proposal envisages that both the installation and commissioning activities will be undertaken as a single continuous operation.

Where cables are exposed to possible mechanical damage, vandalism or tampering, or are in public areas, they should be protected by suitable conduit, trunking or armour. If required this work can be carried out at additional cost.

Our proposal assumes that the Company's engineers will have free access to all relevant areas and are afforded continuous and uninterrupted working. Whilst the Company will make all reasonable efforts to work with other suppliers, servants, trades and the customer, any interruptions or delays by the forenamed may result in additional charges being made to the customer.

Should you consider making any alterations to the building structure or layout, or changing the definition of the actual risk, please contact us at the earliest possible opportunity. This proposal relates to the installation described in the documentation, and can only be maintained if we are offered the opportunity to reappraise the design following any changes to the installation or risk.

Where our proposal includes design responsibility we will undertake to attend any required consultation with interested parties. Our estimate excludes obtaining any Statutory or Local Authority approval or costs associated with any additional requirements of such approvals.

The prices included in our proposal are based on the cost of labour and materials ruling at the date hereof unless otherwise stated in this proposal.

ADT reserves the right to pass on any increase in material or labour costs incurred before completion unless otherwise stated in this proposal.

These costs will be calculated using the indices and calculation formula issued by the British Electrical and Manufacturers Association (BEAMA) which in turn are based on those issued by the Department of Trade and Industry, unless otherwise stated in this proposal.

We have not allowed for any change in the present rate of Value Added Tax or for costs arising from any statute, regulation or other instrument imposed by the government after the day of submission of this estimate. Neither does our estimate price include for any extra expenses incurred should the contract be extended as a result of our being delayed or prevented from proceeding with the contract for any reason other than our own fault.

Where necessary ADT reserve the right to supply and install alternative equipment to that detailed in the Specification.

Mains Supply

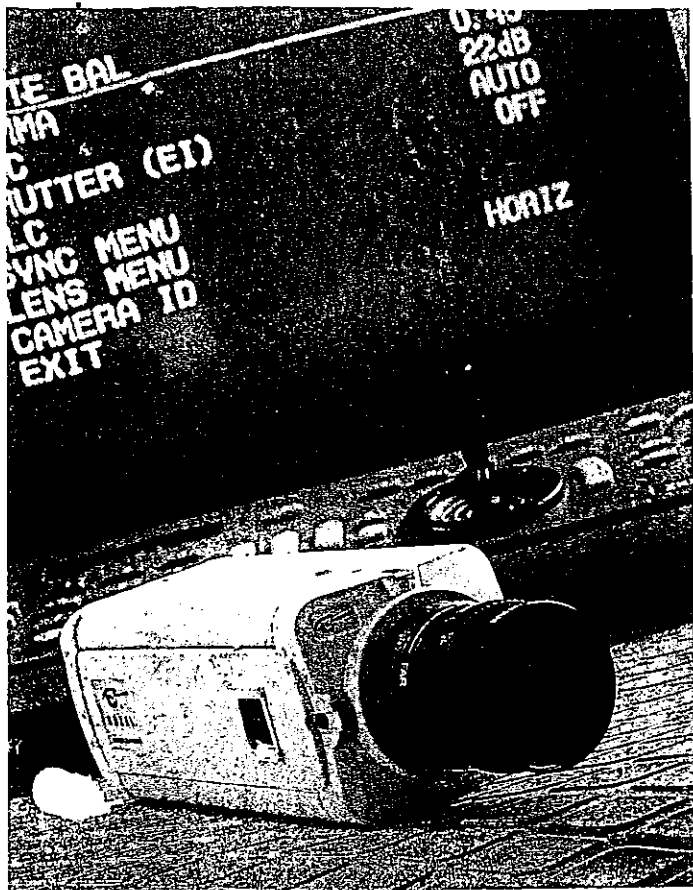
The customer shall provide a permanently live 230v AC 50Hz mains supply via unswitched fused spur points to be located adjacent to all mains operated cameras, monitors, video recorders, video switchers, multiplexers etc. in positions requested by our installation department before installation commences. All cameras and equipment must be connected to the same earth and phase of the Mains Supply. Each external camera Mains Supply should be via an ELCB unit of suitable rating. Alternatively ADT can arrange this at additional cost.

Lighting

All CCTV systems require a minimum level of lighting to operate satisfactorily. Unless specifically stated this Specification does not allow for any changes to the existing lighting and any additional lighting or other equipment required will incur additional cost.

Delivery

Where delivery time of products for incorporation into the works cannot be accurately forecast, it may be



Digital

The cameras in the systems range use Digital Signal Processing (DSP) technology. With DSP cameras the signal processing and conditioning of the image is performed using Digital Technology. This method of processing is more advanced than analogue methods and provides many benefits in terms of picture quality. The displayed image is cleaner and crisper and the edges are more defined. The picture appears to be 'harder' when compared to analogue cameras, almost as if the analogue cameras are out of focus.

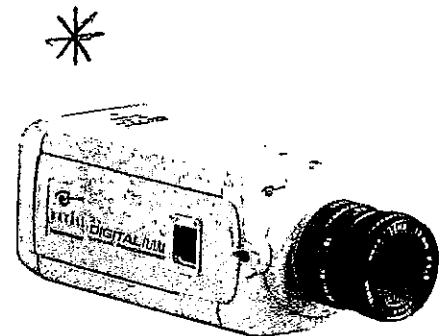
Imager Size

The imager is the part of the camera which converts the light focused in through the lens into electrical signals. We select only the very best cameras from the market that can achieve the required performance. For this reason we only use half or third inch imagers, as these larger size imagers offer greater resolution and better light gathering capability.

On-screen Remote Set-up Cameras

These cameras offer full control and configuration from the comfort of the control room via on-screen menus. Available in colour and Monochrome these cameras use the Sony half inch EXview™ HAD CCD imagers, which offer unbeatable performance, working to very low light levels.

With a host of image functions like peak white inversion, these cameras will deliver outstanding pictures in the most demanding environments.

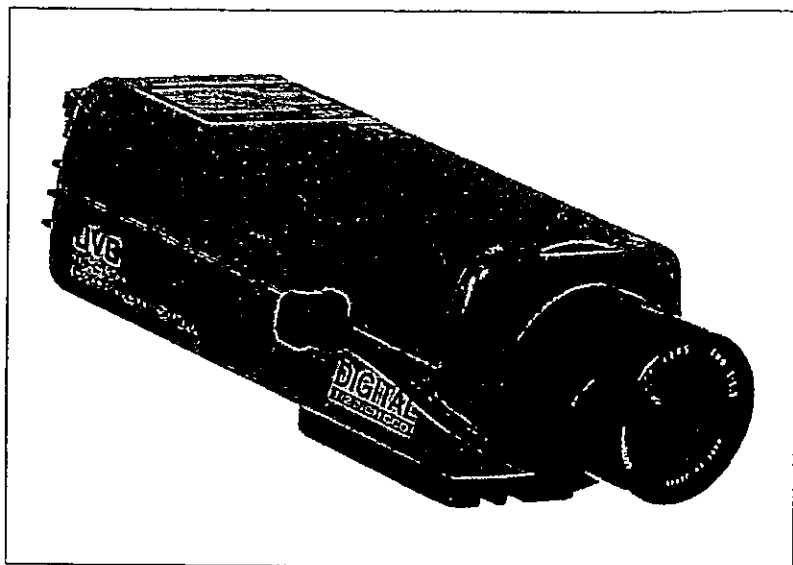


* internal camera to be used.

Siteguard CCTV - Systems Cameras

Super Dynamic Cameras

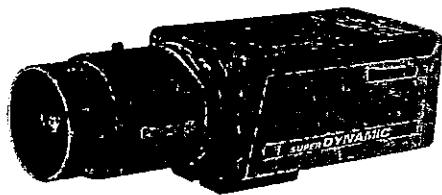
Sensitivity, Resolution and Dynamic Range are the most important factors for the surveillance camera. Over the years all manufacturers have improved both sensitivity and resolution. However, Panasonic's range of Super Dynamic cameras combat the problems experienced in environments that have bright and dark areas in the same scene, such as doorways and windows.



Colour-Mono Cameras

Cameras still have technical limitations and colour cameras still require more light than monochrome units to work effectively. However, colour images provide more information and are more desirable than black & white images.

ADT Fire & Security can offer cameras that can switch from colour to monochrome as the lighting level drops. Giving you the best of both worlds, colour by day and monochrome at night. To further enhance the pictures obtained in low light levels these cameras can also be used with infrared lamps.



Frame Integration Colour Cameras

Colour images can still be obtained from areas with extremely low light level. The SGC1360 works much like a photographic film camera when you leave the shutter open. The image is built up from successive pictures being integrated together allowing colour CCTV coverage to be obtained in previously impossible environments. This method of obtaining colour pictures does mean that scene can appear smeared when movements occur.

CCTV - Systems Cameras



Technical Specification

| Series | Format | CCD | Resolution TVL | Lux @ F1.2 | Power V | Features |
|--------|-----------|------|----------------|------------|-----------|-------------------|
| SEC300 | Standard | 1/2" | 410 | 1 | 240,24,12 | IRI |
| SEC301 | | 1/2" | 480 | 0.1 | 240,24,12 | 10x Magnification |
| SEC302 | | 1/2" | 480 | 0.1 | 240,24,12 | DSP |
| SEC303 | | 1/2" | 480 | 0.05 | 24V | 10x Magnification |
| SEC304 | | 1/2" | 480 | 0.05 | 240,24,12 | DSP |
| SEC305 | | 1/2" | 480 | 0.1 | 240,24,12 | DSP |
| SEC306 | | 1/2" | 480 | 0.1 | 240,24,12 | DSP |
| SEC307 | | 1/2" | 480 | 0.1 | 240,24,12 | DSP |
| SEC320 | Mini-Dome | 1/2" | 550 | 0.05 | 240,24,12 | Opt. Remote Setup |
| SEC342 | | 1/2" | 550 | 0.05 | 240,24,12 | DSP |
| SEC342 | | 1/2" | 550 | 0.05 | 240,24,12 | 10x Magnification |
| SEC340 | | 1/2" | 550 | 0.05 | 24V | DSP |

Our Commitment to Quality

A commitment to the highest standards of quality assurance underpins everything that we do. Set out below are some of our current accreditations and trade association memberships.



Contact your local ADT Fire and Security office or phone free on:

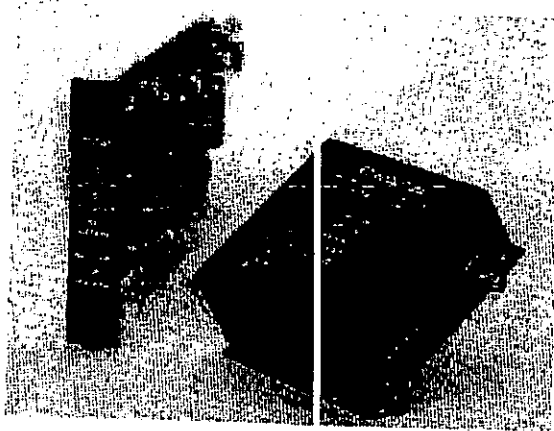
0800 010999

Head Office: ADT Fire and Security plc,
Security House, The Summit, Hanworth Road,
Sunbury-on-Thames, Middlesex, TW16 5DB.
Website: www.adt.co.uk

tyco

Fire &
Security





S730DV

Product Specification

Description: Video and Universal Data

Features

- ✓ 10-bit digital video transmission
- ✓ 560 TV lines resolution
- ✓ All-in-one data: RS232, RS422, RS485, Manchester, Biphase, TTL
- ✓ Unique data translation function
- ✓ User-configurable data format
- ✓ Meets or exceeds EIA/TIA-250C medium haul standard
- ✓ Signal-to-noise ratio ≥ 67 dB
- ✓ Maximum operating distance: 11 mi (18 km)
- ✓ Enhanced built-in diagnostics
- ✓ MTBF >100,000 hours
- ✓ 24 VAC/12-16 VDC transmitter power
- ✓ Forever Warranty™

Description

The revolutionary new S730DV fiber link takes all the guesswork out of ordering a video and data link. This one link handles all major data formats in both directions including SensorNet™ - it is not necessary to order or stock different models to support different data formats. Configure them as needed for the job and, if the installation changes data formats, just reconfigure the S730DV. Also, the forward data path (from Tx to Rx) can be set to function as a relay to transmit contact activity at the camera back to the control center. Digital transmission of the video component along with a signal-to-noise ratio of ≥ 67 dB assures clean, noise-free video at the receiver. Moreover, the S730DV supports all major video formats, including color, monochrome, NTSC, PAL, and their many variations. Resolution of greater than 560 TV lines guarantees faithful reproduction of high-resolution closed-circuit video images.

The use of state-of-the-art digital technology throughout the S730DV makes it possible to build in more diagnosis
continued

Basic Model Description

- S730DV-1** Single-fiber link uses two different wavelengths for two-way transmission.
- S730DV-2** Two-fiber link transmits using 850-nm wavelength over separate fibers for two-way communication.
- S730DV-2L** Two-fiber link for long-haul transmission using 1300-nm wavelength over separate fibers for two-way communication.

For a complete list of available models, please refer to Table 1.

www.fiberoptions.com

Fiber Options 80 Orville Drive, Bohemia NY 11716-2533
US Tel: 631-567-8320 or 800-342-3748

info@fiberoptions.com

Fax: 877-FiberFax (877-342-3732 toll free) or 631-567-8322

For international offices, see the back cover.

SERIES S730DV

Description continued

tic functions than ever before. The unit features LED displays for video, optical signal, data in, data out, and enable configuration. In addition, the integrity of the data paths can be tested with a built-in data transmission test procedure; it is not necessary to hook up a data source to test out the link.

The S730DV also features the very valuable data translation function that allows input of one data format and output of a different format. (See DATA SIGNAL section inside.)

TECHNICAL INFORMATION

ELECTRICAL

| | | | |
|-------------------------|-------------------|---------------------------|-------------|
| Input Voltage: | | Current Requirement: | 650 mA |
| Standalone transmitter: | 24 V.AC \pm 10% | Rack Module Power Factor: | 6* |
| | 12 - 6 VDC | Power Consumption: | 8 W |
| Standalone receiver: | 13.5 - 16 VDC | Heat Equivalent**: | 0.5 Btu/min |
| Rack modules: | 13.5 - 16 VDC | | 0.1 cal/min |

*For an explanation of the Power Factor, please see the product specification for the 515R or 517R racks or the Fiber Finder.™

**This represents the conversion of all input power to heat. The actual heat generated will be less.

VIDEO SIGNAL

Video performance exceeds the requirements of EIA/TIA 250C medium-haul standard.

| | | | |
|---------------------------|------------------------------------|------------------------|--|
| Number of Video Channels: | 1 | Input Impedance: | 75 Ω |
| Video Direction: | Tx \rightarrow Rx | Video Output Signal: | 1.0 V p-p composite video, unity gain, |
| Standards Supported: | EIA, C, CIR, NTSC, PAL | Output Impedance: | 75 Ω |
| Video Input Signal: | 1.0 V p-p nominal composite video. | Signal-to-Noise Ratio: | \geq 67 dB |
| | | Video Bandwidth: | 7 MHz |
| | | Video Resolution: | >560 TV lines |
| | | Differential Phase: | 0.7° |
| | | Differential Gain: | 2% |

VIDEO INTERCONNECTION

| | | | |
|------------------------------|----------------------|--------------------|--|
| Recommended Maximum Distance | | Recommended Cable: | RG59/U coaxial cable; Belden No. 9259 |
| Video Equip. to Tx: | \leq 100 f: (30 m) | | |
| Rx to Video Equip.: | \leq 100 f: (30 m) | | |

SERIES S730DV TECHNICAL INFORMATION

DATA SIGNAL

| | | | |
|--------------------------|---|----------------------|---|
| Number of Data Channels: | 1 | Baud Rate: | RS232 = 250 kbps RS422 = 512 kbps RS485 = 512 kbps Manchester = 250 kbps Biphase = 250 kbps TTL = 512 kbps |
| Data Direction: | Tx \leftrightarrow Rx | Forward Data Format: | Encoded with digital video using 8B/10B encoding |
| I/O Data Formats: | RS232 (3-wire and 5-wire), TTL, RS422, Manchester, Biphase, Sensornet™, RS485 (2-wire and 4-wire) with 200 mV, 1 and 2 V off sets & forward relay option | Reverse Data Format: | Frequency shift keyed (FSK) |
| | | Bit Error Rate: | <10 ⁻⁹ |

Data Translation: Allows translation from one format to another. Eliminates need for external translation device. Physical translation only; no protocol interpretation. Manchester and Biphase excluded.

DATA INTERCONNECTION

Maximum Recommended Distance: The maximum distance from the CCTV control system components to the fiber units is governed by the control system. Refer to the installation manual for the control system.

AGENCY COMPLIANCE AND MTBF

| | | | |
|------------|--|---------|------------------------------------|
| Emissions: | FCC Part 15, ICES-003, AS/NZS 3548, EN55022 | Safety: | UL1950, CAN/CSA 22.2, NO.950-95 |
| Immunity: | ENVS02C4 EN61000 4-2, 3, 4, 5, 6, 11 | MTBF: | >100,000 hours |

FCC PART 15
COMPLIANT



UL US LISTED



OPTICAL

| | | | |
|----------------------|---|------------------------------|---|
| Wavelength: | Refer to Table 1 | Emitter Type: | LED |
| Optical Mode: | Multimode | Fiber Type: | 62.5 μ m |
| Optical Budget: | 13 dB standard; higher budgets available | Modulation Type: | Digital time division (TDM) multiplexing |
| Operating Distance*: | | Optical Gain Control: | Optical automatic (OAGC) |
| S730DV-1: | 3.2 mi (5.2 km) | Transmitter Launch Power: | -15 dBm |
| S730DV-2: | 3.2 mi (5.2 km) | Receiver Sensitivity: | -28 dBm |
| S730DV-2L: | 11 mi (18 km) | | |

*Operating distance is approximate and assumes best fiber. It will be affected by the type and number of splices in the fiber.

DIAGNOSTIC INDICATORS

| | | | |
|--------------|-------------|-----------------------|-------------|
| Level/Loss™: | Bicolor LED | Data Input: | Bicolor LED |
| Video: | Bicolor LED | Data Output: | Bicolor LED |
| | | Enable Configuration: | Bicolor LED |

SERIES S730DV TECHNICAL INFORMATION

ENVIRONMENTAL

| | | | |
|------------------------------------|-------------------------------------|--|-------------------------------------|
| Temperature Range in Operation: | -40° to +167° F (-40° to +75° C) | Humidity Range in Operation and storage: | 0 to 95% relative, noncondensing |
| Temperature Range In Storage: | -40° to +185° F (-40° to +85° C) | | |

MECHANICAL

Standalone Transmitter

| | |
|----------------------|---|
| Dimensions: | Length: 4.0 in (102 mm) Width: 4.55 in (116 mm) Height: 1.95 in (50 mm) |
| Weight: | 0.75 lb (0.34 kg) |
| Shipping Dimensions: | Length: 5.7 in (145 mm) Width: 4.6 in (117 mm) Height: 2.2 in (56 mm) |
| Shipping Volume: | 0.033 cu ft (0.001 cu m) |
| Shipping Weight: | 0.85 lb (0.39 kg) |
| Construction: | Aluminum |
| Finish: | Black semigloss paint |
| Mounting Method: | 4 No. 6 (3 or 3.5 mm) screws |

Rack Modules

| | |
|----------------------|---|
| Module Width: | 1 slot, 1.0 in. (25.4 mm) |
| Weight: | 0.55 lb (0.25 kg) |
| Shipping Dimensions: | Length: 9.9 in (250 mm) Width: 5.4 in (140 mm) Height: 1.1 in (28 mm) |
| Shipping Volume: | 0.034 cu ft (0.001 cu m) |
| Shipping Weight: | 0.70 lb (0.32 kg) |
| Finish: | Black semigloss paint |

Standalone Receiver

| | |
|----------------------|--|
| Dimensions: | Length: 9.31 in (236 mm) Width: 6.33 in (161 mm) Height: 1.15 in (29 mm) |
| Weight: | 1.36 lb (0.61 kg) |
| Shipping Dimensions: | Length: 10.5 in (267 mm) Width: 7.0 in (178 mm) Height: 2.0 in (51 mm) |
| Shipping Volume: | 0.085 cu ft (0.002 cu m) |
| Shipping Weight: | 1.6 lb (0.73 kg) |
| Construction: | Aluminum |
| Finish: | Black textured semigloss paint |
| Mounting Method: | 4 No. 6 (3 or 3.5 mm) screws |

CONNECTORS

| | |
|---------------------|---|
| Optical: | ST type standard; others available on special order |
| Video: | BNC |
| Data: | 8-position detachable screw terminal |
| Power Input: | |
| Standalone modules: | 4-position detachable screw terminal |
| Rack modules: | plug directly into the rack |

OPTIONS

| | |
|---------------|-------------|
| Power Supply: | See Table 1 |
|---------------|-------------|

CONTROLS

| | |
|------------------|--|
| Data Format: | 16-position rotary switch |
| Alarm Disable: | Jumper allows alarm output to be disabled (rack modules) |
| Contact Closure: | Jumper enables contact closure (relay) function |

SERIES S730DV TECHNICAL INFORMATION

TABLE 1: Model Variations

| Model Number | Function | Enclosure Type* | Fiber Size | No. of Fibers | Max. Atten. | Wave-length | Power Supply Model |
|---------------------------|-------------|-----------------|------------|---------------|-------------|-------------|--------------------|
| Standalone Modules | | | | | | | |
| S730DVT-EST1 | Transmitter | 4 X 4 X 2 | 62.5 | 1 | 13 | 850/1300 | 615P or 24 VAC |
| S730DVR-EST1 | Receiver | 501R | 62.5 | 1 | 13 | 850/1300 | 615P |
| S730DVT-EST2 | Transmitter | 4 X 4 X 2 | 62.5 | 2 | 13 | 850 | 615P or 24 VAC |
| S730DVR-EST2 | Receiver | 501R | 62.5 | 2 | 13 | 850 | 615P |
| S730DVT-EST2L | Transmitter | 4 X 4 X 2 | 62.5 | 2 | 13 | 1300 | 615P or 24 VAC |
| S730DVR-EST2L | Receiver | 501R | 62.5 | 2 | 13 | 1300 | 615P |
| Rack-Mount Modules | | | | | | | |
| S730DVT-RST1 | Transmitter | 515R1, 517R1 | 62.5 | 1 | 13 | 850/1300 | Powered by rack |
| S730DVR-RST1 | Receiver | 515R1, 517R1 | 62.5 | 1 | 13 | 850/1300 | Powered by rack |
| S730DVT-RST2 | Transmitter | 515R1, 517R1 | 62.5 | 2 | 13 | 850 | Powered by rack |
| S730DVR-RST2 | Receiver | 515R1, 517R1 | 62.5 | 2 | 13 | 850 | Powered by rack |
| S730DVT-RST2L | Transmitter | 515R1, 517R1 | 62.5 | 2 | 13 | 1300 | Powered by rack |
| S730DVR-RST2L | Receiver | 515R1, 517R1 | 62.5 | 2 | 13 | 1300 | Powered by rack |

**For exact dimensions, see the MECHANICAL sections.

FIGURE 1: OUTLINE DRAWING - S730DVR-E

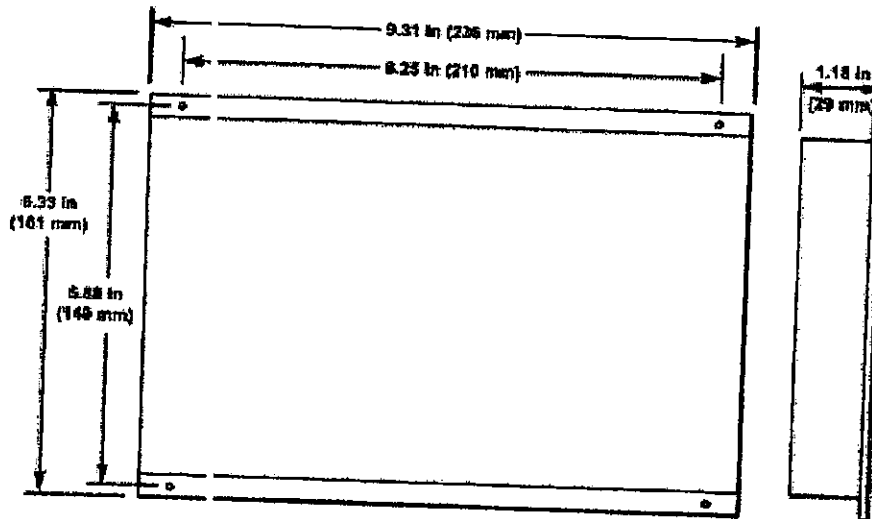
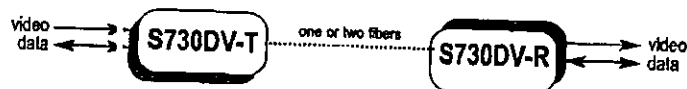


FIGURE 2: SYSTEM DIAGRAM

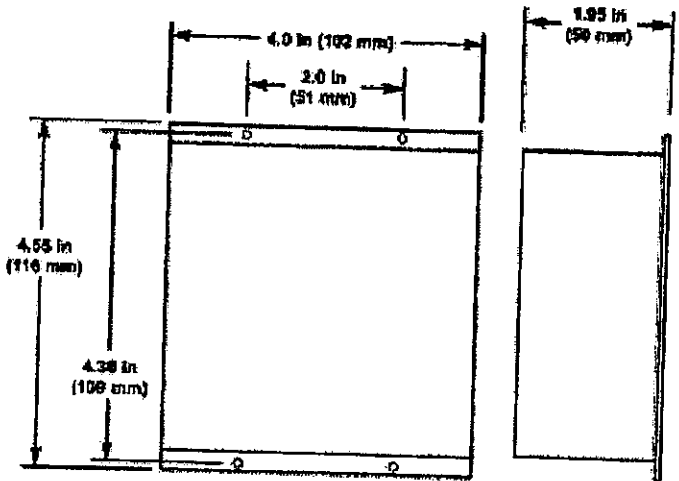




S730DV

Product Specification

FIGURE 3: OUTLINE DRAWING - S730DVT-E



THE FOREVER WARRANTY

Fiber Options, Inc. warrants that, at the time of shipment, the products manufactured by Fiber Options, Inc. will be free from defects in material and workmanship. Should any defects appear in the product, Fiber Options, Inc. shall repair or replace the product or supply an equivalent, at its sole discretion. A Return Authorization (RA) number is required to send the unit back in case return is necessary. Return shipments to Fiber Options, Inc. shall be at the buyer's expense. Fiber Options, Inc. will return said equipment prepaid via best way. THIS WARRANTY IS THE SOLE WARRANTY OF FIBER OPTIONS WITH RESPECT TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ANY AND ALL OTHER EXPRESSED OR IMPLIED WARRANTIES INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PURPOSE. THIS WARRANTY IS THE SOLE REMEDY AVAILABLE FOR ANY CLAIM BASED ON AN ALLEGED DEFECT IN MATERIAL OR WORKMANSHIP WHETHER SUCH CLAIM ARISES IN CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. FIBER OPTIONS SHALL NOT BE LIABLE IN ANY WAY FOR ANY CONSEQUENTIAL DAMAGE RESULTING FROM ANY DEFECT COVERED BY THIS WARRANTY.

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80 Orville Drive, Bohemia NY 11716-2533
 info@fiberoptions.com

| | | | |
|--------------------|--------------------|------|-----------------------------|
| US T l: | 631-567-8320 | Fax: | 631-567-8322 |
| | 800-342-3748 | | 877-FiberFax (877-342-3732) |
| UK T l: | +44 113 238 1668 | Fax: | +44 113 253 8121 |
| Australia T l: | +61 3 9370 9192 | Fax: | +61 3 9370 9936 |
| France T l: | +33 01 60 86 54 53 | Fax: | +33 01 60 86 86 04 |
| Germany T l: | +49 700 34237678 | Fax: | +49 36256 21991 |
| Hong Kong T l: | +852 2907 8108 | Fax: | +852 2142 5063 |
| Latin America T l: | 800-342-3748 | Fax: | 877-342-3732 |

Introduction

1.0 Introduction

The COE series 200 provides high quality video transmission with the option of duplex audio or data on multimode fibre. The products primary application is in single camera point-to-point links with CCTV control rooms.

1.1 Features

- Single Channel AM transmission of Video, PAL or NTSC
- 7 MHz bandwidth for full colour operation
- Optical budget is 12dB (201S and 202D), 10dB (201D) for 50/125m multimode fibre
- Optical budget is 14dB (201S and 202D), 12dB (201D) for 62.5/125m multimode fibre
- Optical AGC over full optical budget for both fibre types
- Video AGC for optimum video stability
- Video input clamp and peak white limiter for overload protection
- Eurocard and rugged box versions for both camera and control room applications
- Video only (1 fibre)
- Video with duplex Audio or Data (1 fibre or 2 fibre option)
- Choice of data formats
- 12V dc only power requirement
- Designed to utilise 3170B subrack
- Single fibre and dual fibre duplex options

1.2 Rugged Box or Card Versions

Boxed Transmitter (camera unit) and Boxed Receiver options (control room unit) - These housing options provide a useful alternative to the standard rack. Each unit is housed in a rugged extruded aluminium enclosure with wall mounting flanges. All electrical and optical connections are brought to the outside: video via 75R BNC; audio/data and power via screw terminal; optical via STII multimode connector.

Card Receiver and Transmitter - These units are standard 3U x 6HP Eurocard format and are designed for mounting in the COE 3170BV subrack. The units are powered from the internal 12V dc power supply which is supplied with the subrack. Screw terminals are provided for telemetry connections. Video is via a BNC connector and the multimode fibre is connected via ST II bayonet connector.

Single and Dual Fibre Versions - There are two different types of optics available on the series 200:

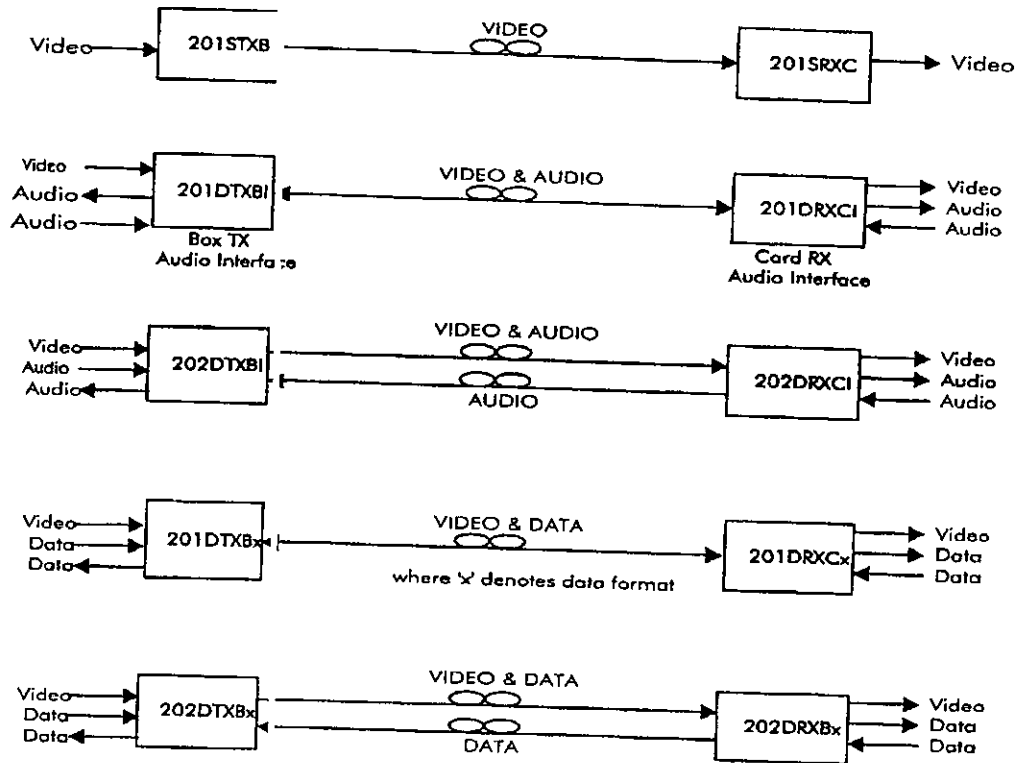
- 201S and 202D - One fibre simplex version and two fibre duplex version (850nm optics only).
- 201D - One fibre duplex version (850nm and 1300nm optics).



Introduction

1.3 Product Range

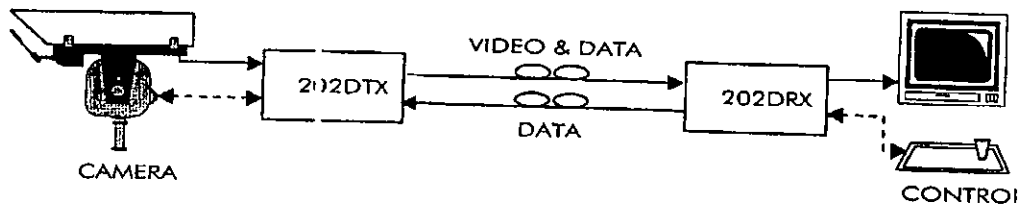
There are 5 versions available in the Series 200 product range, the diagrams below show the transmission features available with each version. Either end of the link is available as Box or Eurocard.



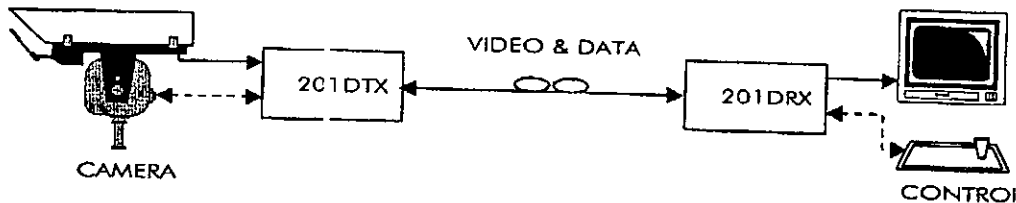
Each link is made up of a pair of products, a transmitter (TX) and a receiver (RX).

For example:

Twin Fibre System



Single Fibre System



IN LINE WITH COMPANY POLICY OF CONTINUOUS IMPROVEMENT, COE LTD. RESERVES THE RIGHT TO VARY THE DESCRIPTIONS OF ANY PRODUCTS IN THIS MANUAL.



Introduction

1.4 Typical Performance

Video

| | |
|-------------------|---------|
| Bandwidth | 71MHz |
| Video Input Level | 1.0V |
| Input / Output | 75 Ohms |
| Signal to Noise | 60dB |
| K Rating | 0.1% |
| Gain | 1 |

Audio

| | |
|------------------|--------------------------------------|
| Bandwidth | 300 - 3400Hz |
| Input Level | 2.2V p-p (0dBm) |
| Signal to Noise | 50dB unweighted |
| Input Impedance | 600 Ohms unbalanced |
| Output Impedance | 30 Ohms (set to drive 600 Ohms load) |

Data

| | |
|-----------|--|
| Format | RS232, RS422, RS485* |
| | 20mA, TTL |
| Data Rate | 2 wire, half duplex |
| | DC - 20 Kb/s (20mA limited to 4.8kb/s) |

Mechanical

| | |
|----------|------------------|
| Eurocard | 6HP x 3U x 160mm |
|----------|------------------|

Mechanical

| | Including flange | Excluding flange |
|--------|----------------------|----------------------|
| TX Box | 85mm x 60mm x 30mm | 85mm x 100mm x 30mm |
| RX Box | 165mm x 115mm x 50mm | 165mm x 145mm x 50mm |

Connections

| | |
|------------------------|-----------------------------------|
| Video | 75 Ohms BNC |
| Audio / Data | Screw terminal two part connector |
| Power (boxed versions) | Screw terminal two part connector |
| Optical | ST II Multimode |

PSU Requirements

| | |
|---------------|------------------|
| Input Voltage | 12V (11-13V) dc |
| Current TX | 250mA max |
| RX | 200mA max |

Optical (201S and 202D Versions)

| | | |
|-------------------------|--------|--------------|
| Mean Launch Power 850nm | -18dBm | 50/125 fibre |
| Mean Launch Power 850nm | -16dBm | 62/125 fibre |
| Receive Sensitivity | -30dBm | |
| Path Loss | 12dB | 50/125 fibre |
| Path Loss | 14dB | 62/125 fibre |



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Siteguard

Key features

•
Monochrome and Colour

Medium and High resolution

Advanced imaging adjustments for clearer pictures

12, 24 and 240 Volt powered alternatives

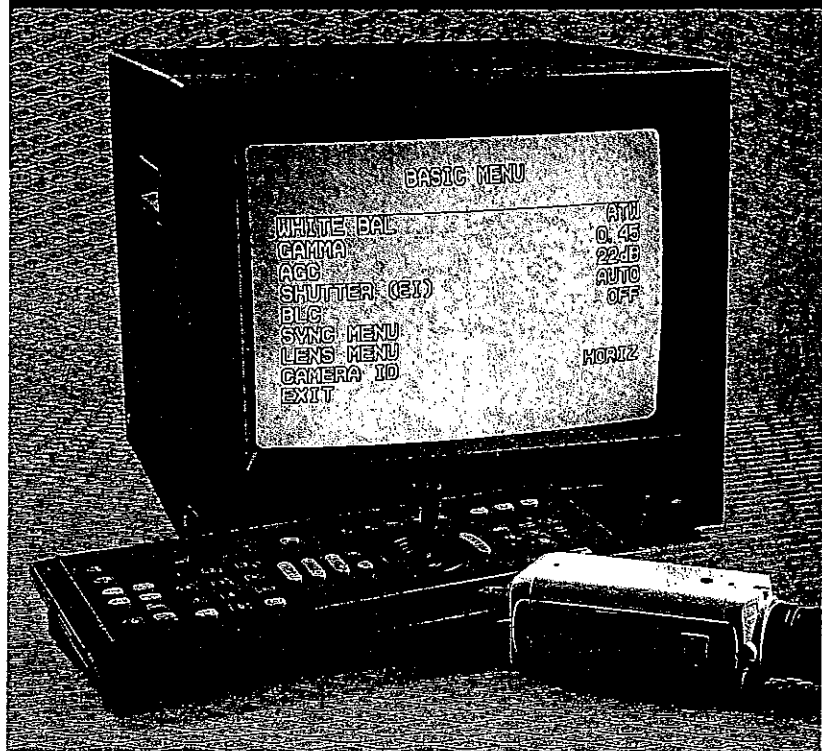
Remote On-Screen Display system cameras

State-of-the-Art, high resolution low light colour cameras

Digital Signal Processing

•

Systems Cameras



CCTV has proved to be an efficient weapon in the fight against crime. The ever watching "eye" of the system is the camera. Selection of the correct camera for the application will ensure that high quality images are provided both to the system operator and to any connected recording device. Following many years experience in CCTV engineering, we have developed a product range that consist of cameras that deliver the best performance for their given application.

tyco

Fire &
Security

ADT Fire and
Security

SPECIFICATION

Job No: 3567/0

Enquiry No:

Date: 27 February 2002

Customer:
LORNE STEWART

Stewart House
Kenton Road
Harrow
Middlesex
HA3 9TU

Installation:
University of Hertfordshire
Sports & Leisure Complex
Hatfield Campus
College Lane
Hatfield
Hertfordshire
AL10 9AB

Sales Person: John Hickson

Public Address System

The Public Address System allows paging announcements to be made from a number of positions within the Complex, to selectable areas or 'zones' as follows:

Cricket Hall, Badminton Hall, Fitness Centre, Creche, Squash Courts, Pool area, Changing Rooms and Circulation Areas.

Access to the system is by four multizone paging microphones located at the following positions:

Reception
Security Control Room
Badminton Hall
Pool Area

The System is based on a centralised 19" rack cabinet with all required blank panels, doors and vents. The 19" cabinet houses the power amplifiers necessary to serve each zone allowing for an input switching matrix that provides a priority regime for each zone.

The loudspeaker circuits are all fed from the 19" rack and the speaker level is industry standard 100 volts RMS. A number of various types and quantities of speakers are located around the building to provide ample coverage and give good intelligibility at all locations.

The speaker types are as follows:

For the Pool area two IP65 column loudspeakers.

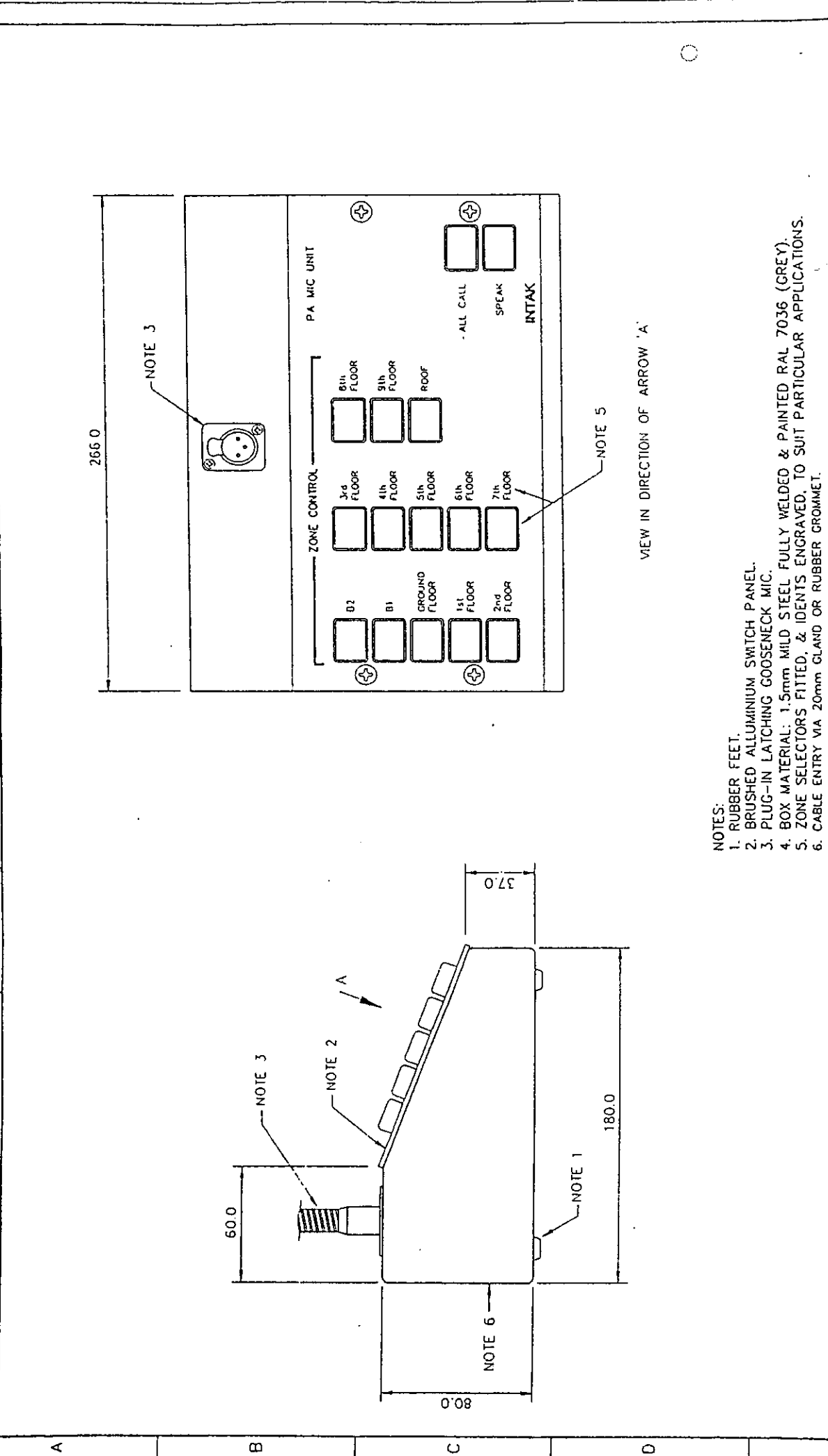
For all rooms with false or plaster ceilings - flush mounting 6watt ceiling speakers.

For areas without conventional ceilings - 20watt projector loudspeakers.

The whole system complies with all APPLICABLE British standards including BS5839.

On activation of the Fire Alarm System, the system will be muted.

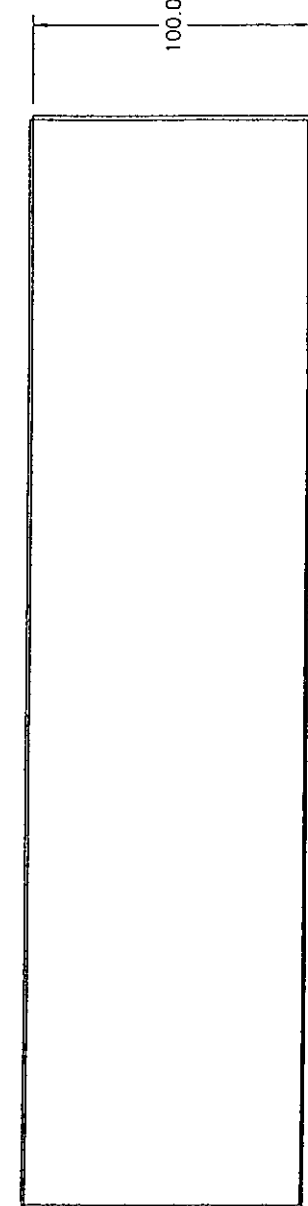
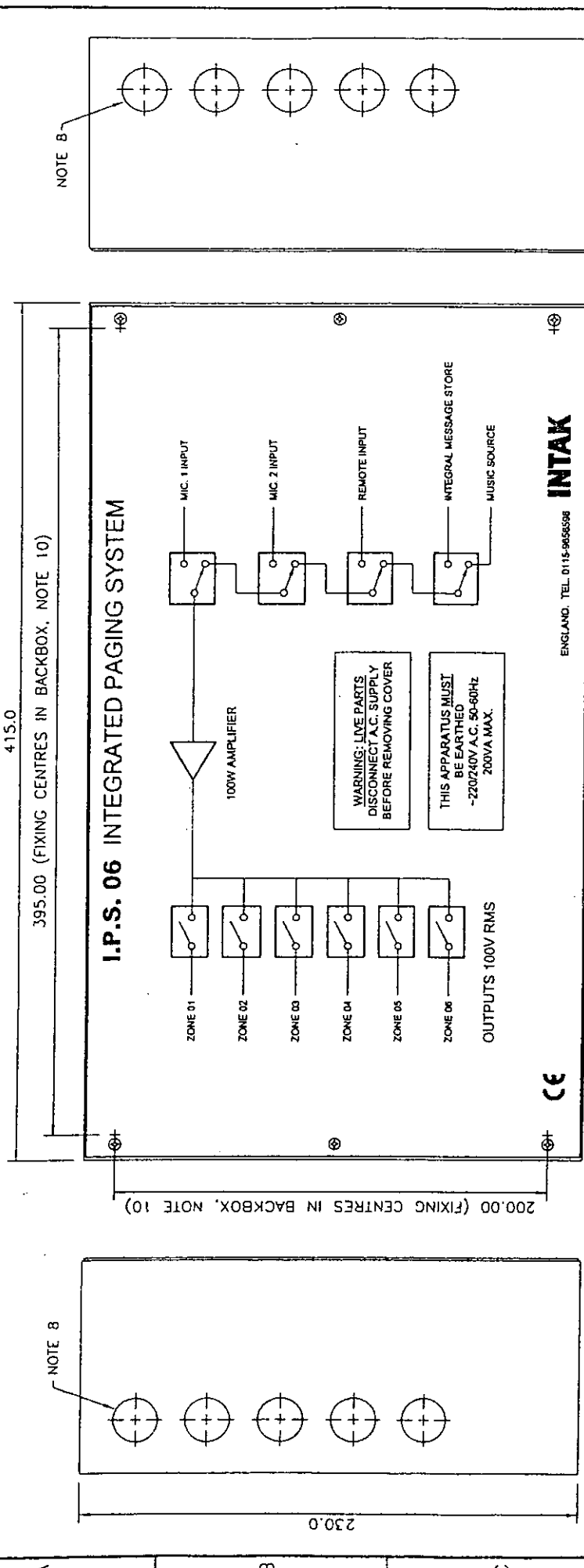
If required, music sources can be provided ie: CD/Tape Deck/DAT for broadcast in selectable areas.



VIEW IN DIRECTION OF ARROW 'A'

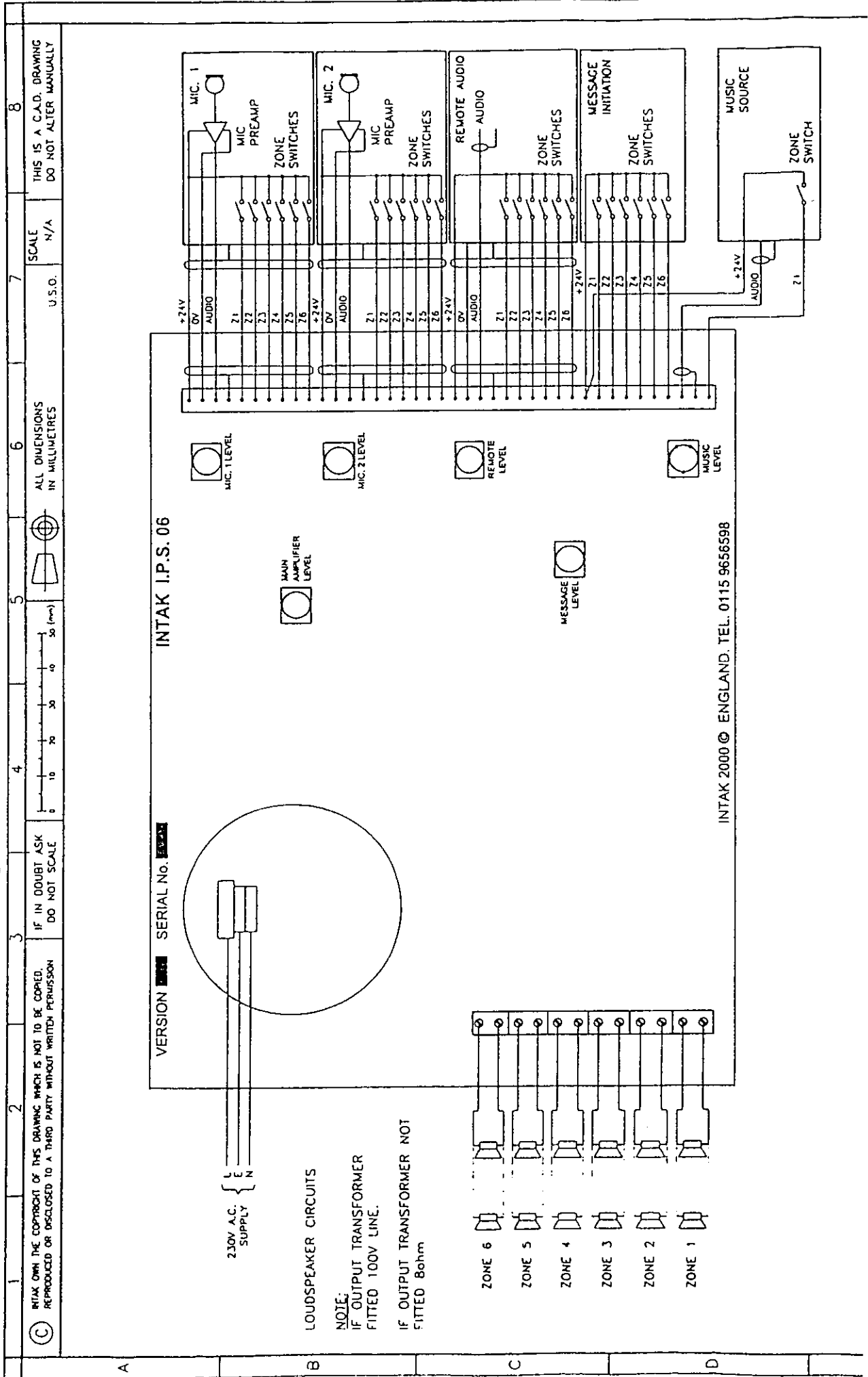
- NOTES:
1. RUBBER FEET.
 2. BRUSHED ALUMINIUM SWITCH PANEL.
 3. PLUG-IN LATCHING GOOSENECK MIC.
 4. BOX MATERIAL: 1.5mm MILD STEEL FULLY WELDED & PAINTED RAL 7036 (GREY).
 5. ZONE SELECTORS FITTED, & IDENT'S ENGRAVED, TO SUIT PARTICULAR APPLICATIONS.
 6. CABLE ENTRY VIA 20mm GLAND OR RUBBER GROMMET.

| | | | |
|-------|---|------------|------------|
| INTAK | Unit 1, Hill Crest Park, Hoye Road, Calverton, Nottinghamshire. NG14 6QJ | CLIENT | ISS. No. |
| | | P109 /oco1 | 1 |
| | DRAWN | S.E.S. | DRG. No. |
| | DATE | 14.11.99 | P109 /oco1 |
| | CAD REF | INT402 | TITLE |



- NOTES:
1. INTEGRAL MESSAGE STORE.
 2. 2 x 6 ZONE MIC. INPUTS.
 3. 100W POWER AMPLIFIER.
 4. 230V A.C. SUPPLY.
 5. 6 ZONE OUTPUTS. LOW IMPEDANCE OR 100V LINE.
 6. REMOTE 6 ZONE INPUT.
 7. EACH OUTPUT MUTED WHILST NOT SELECTED. TO AVOID BREAKTHROUGH.
 8. M20 GLAND ENTRIES.
 9. COLOUR: RAL7036 (GREY)
 10. MOUNTING HOLES Ø5.0

| | | | |
|--------------|--|--|--|
| INTAK | | Unit 1, Hill Crest Park, Hoyle Road, Calverton, Nottingham, NG14 6QJ Tel (0115) 9656598 Fax (0115) 9656546 | |
| | | DRAWN | S.E.S. |
| DATE | | 23.4.00 | CLIENT |
| CAD REF | | INT435 | TITLE |
| CHECKED | | | I.P.S. 06 INTEGRATED PAGING SYSTEM (SIX ZONE) |
| ISS | | 1 | ISS No. |
| DATE | | | DRG. No. |
| DESCRIPTION | | | IPS06/01 |



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U.S.O.

ALL DIMENSIONS IN MILLIMETRES

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INTAK I.P.S. 06

VERSION SERIAL No. 23033

INTAK 2000 © ENGLAND. TEL. 0115 9656598

230V A.C. SUPPLY { L, E, N }

LOUDSPEAKER CIRCUITS

NOTE: IF OUTPUT TRANSFORMER NOT FITTED 100V LINE.

IF OUTPUT TRANSFORMER NOT FITTED 8ohm

ZONE 6

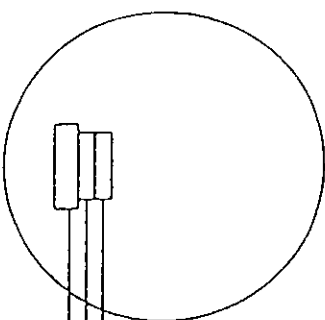
ZONE 5

ZONE 4

ZONE 3

ZONE 2

ZONE 1



MIC. 1 LEVEL

MIC. 2 LEVEL

REMOTE LEVEL

MUSIC LEVEL

MAIN AMPLIFIER LEVEL

MESSAGE LEVEL

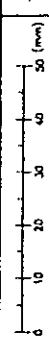
1 2 3 4 5 6 7 8

A B C D

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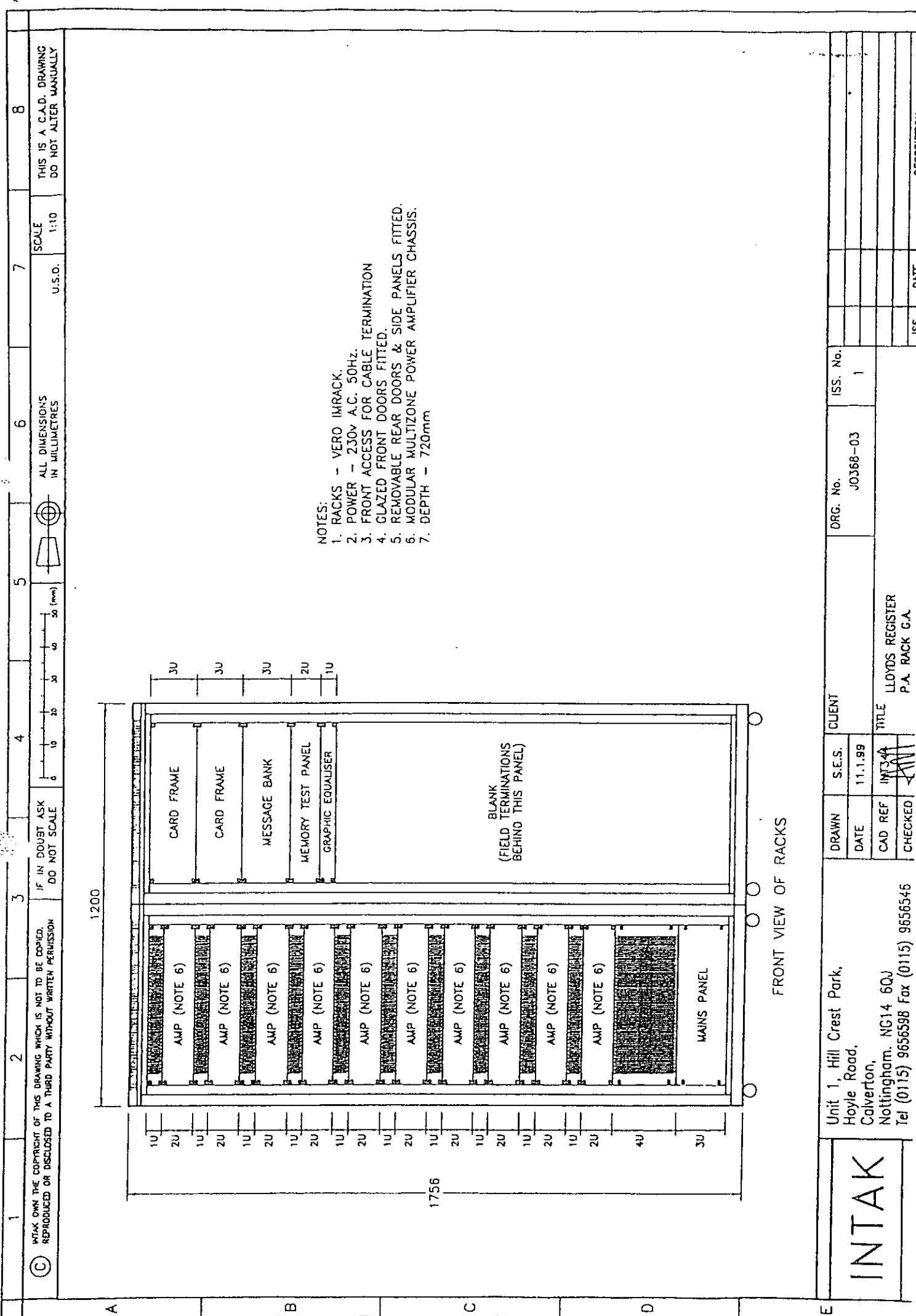
SCALE
U.S.D. 1:10

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IN MILLIMETRES



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- NOTES:
1. RACKS - VERO IMRACK.
 2. POWER - 230V A.C. 50Hz.
 3. FRONT ACCESS FOR CABLE TERMINATION
 4. GLAZED FRONT DOORS FITTED.
 5. REMOVABLE REAR DOORS & SIDE PANELS FITTED.
 6. MODULAR MULTIZONE POWER AMPLIFIER CHASSIS.
 7. DEPTH - 720mm

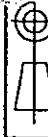
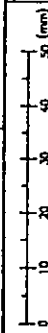
FRONT VIEW OF RACKS

| | | | | |
|---|--|---|--|------------------------|
| <p>INTAK</p> <p>Unit 1, Hill Crest Park, Hoyle Road, Calverton, Nottingham. NG14 6QJ Tel (0115) 965659B Fax (0115) 965654S</p> | | <p>DRAWN S.E.S. CLIENT</p> <p>DATE 11.1.99</p> <p>CAD REF INT34A TITLE LLOYDS REGISTER</p> <p>CHECKED <i>[Signature]</i> P.A. RACK G.A.</p> | <p>DRG. No. J0368-03</p> <p>ISS. No. 1</p> | <p>DATE</p> <p>ISS</p> |
|---|--|---|--|------------------------|

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IF IN DO

JEST ASK SCALE



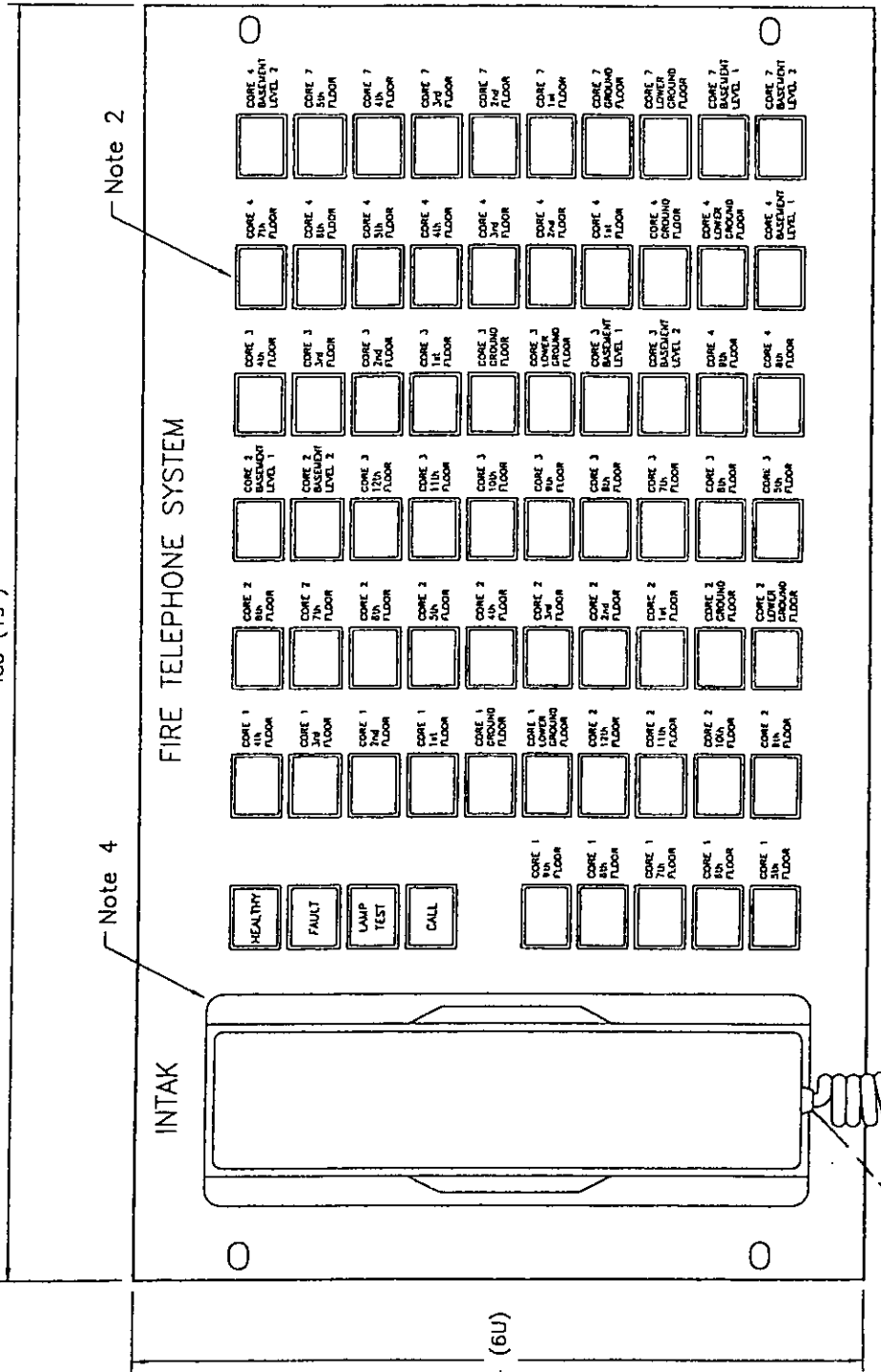
ALL DIMENSIONS IN MILLIMETRES

U.S.O.

SCALE 1:2

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483 (19")



Note 4

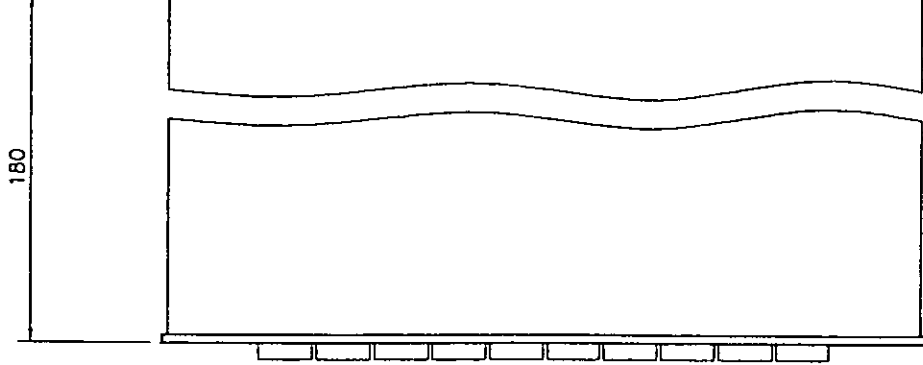
Note 2

NOTES:

1. Optional back box
2. Switches illuminated
3. Supply - 24v d.c. from Exchange & MDF unit
4. Handset
5. Colour - Red

Note 1

180



A

B

C

D

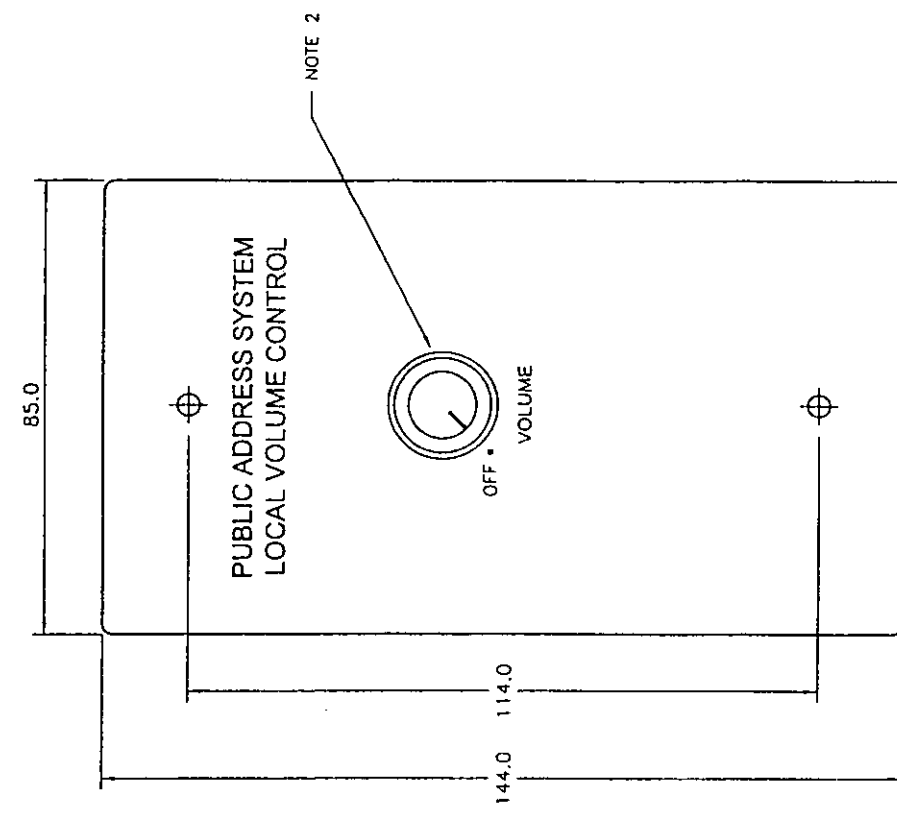
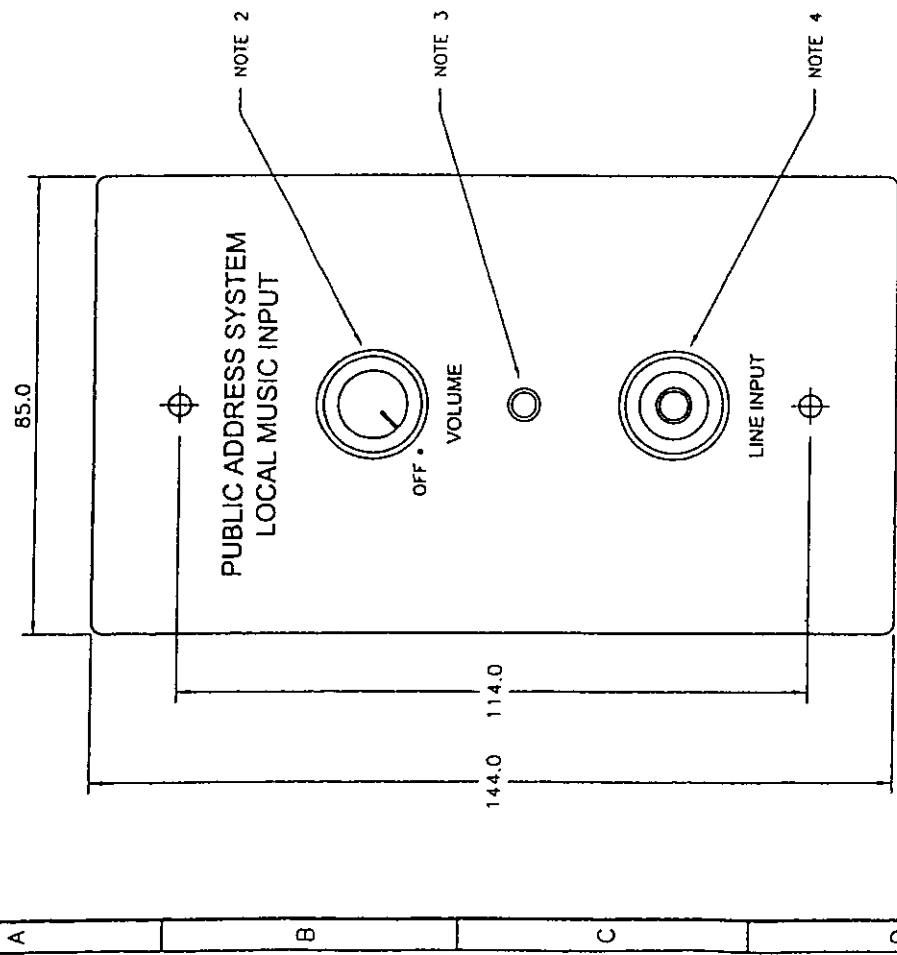
E

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| | | | |
|---------|---------|-------------------|--------------------------------------|
| DRAWN | S.E.S. | CLIENT | ISS. No. |
| DATE | 10.5.99 | DRG. No. J0368-05 | 1 |
| CAD REF | INT366 | TITLE | LLOYDS REGISTER FIRE TELEPHONE PANEL |
| CHECKED | | | |

| | | |
|-----|------|-------------|
| ISS | DATE | DESCRIPTION |
| | | |
| | | |
| | | |

INTAK



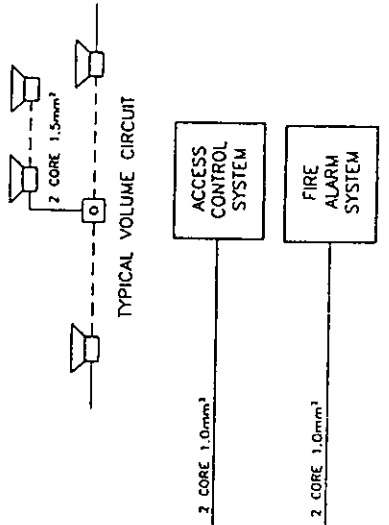
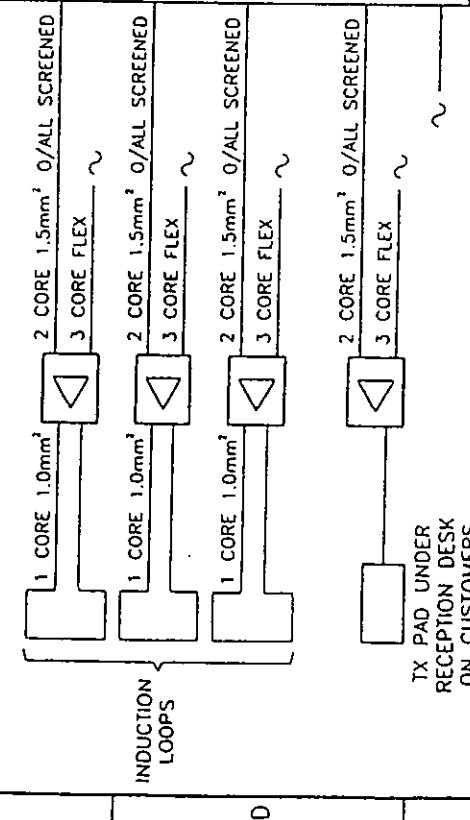
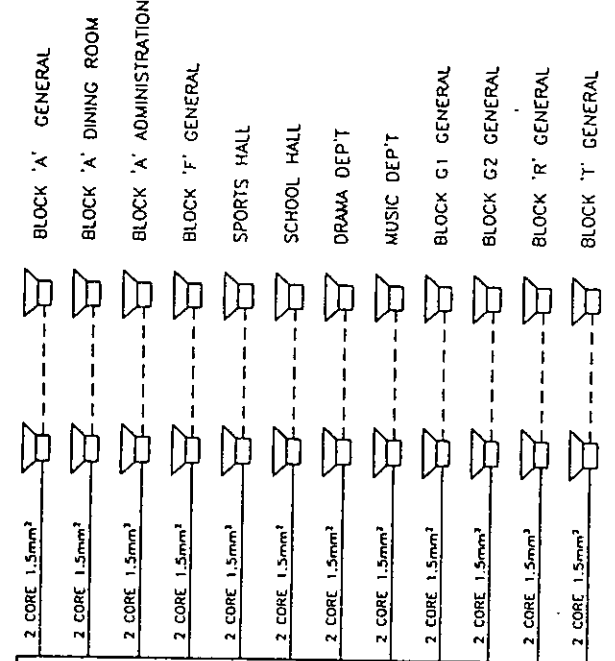
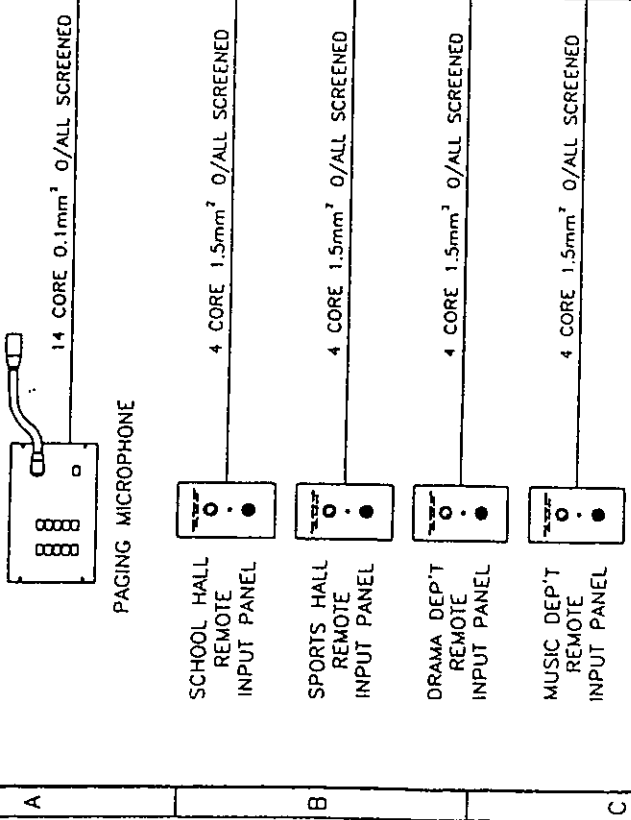
- NOTES:
1. STANDARD WHITE 2 GANG COVER.
 2. KNOBS, BLACK SKIRTED WITH GREY COVER CAP.
 3. INDICATION L.E.D.
 4. INPUT PHONE SOCKET.

INTAK

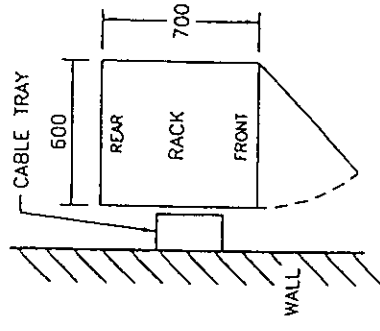
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 Nottingham, NG14 6QJ
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| | | |
|---------|--------|--------|
| DRAWN | S.E.S. | CLIENT |
| DATE | 2.4.00 | |
| CAD REF | INT431 | |
| CHECKED | | |

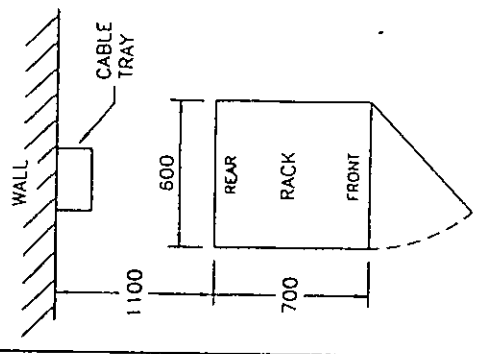
| | |
|---|----------|
| DRG. No. | ISS. No. |
| J0548/03 | 1 |
| TITLE: CARDINAL HEENAN HIGH SCHOOL, LOCAL INPUT PANEL & LOCAL VOLUME CONTROL | |



INSTALLATION POSITION

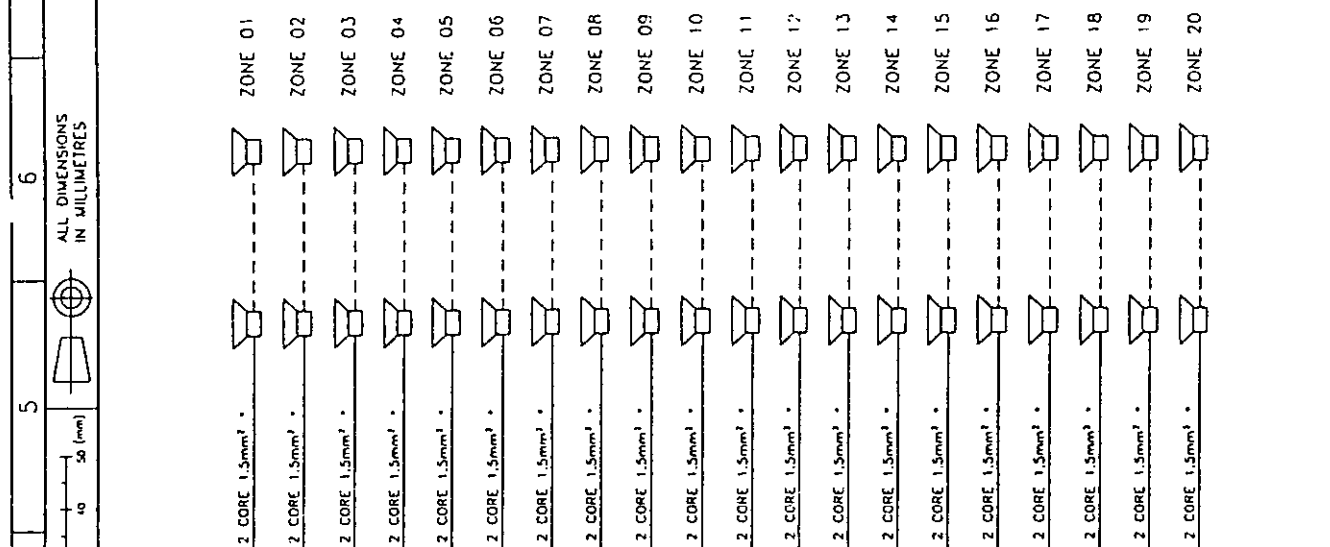
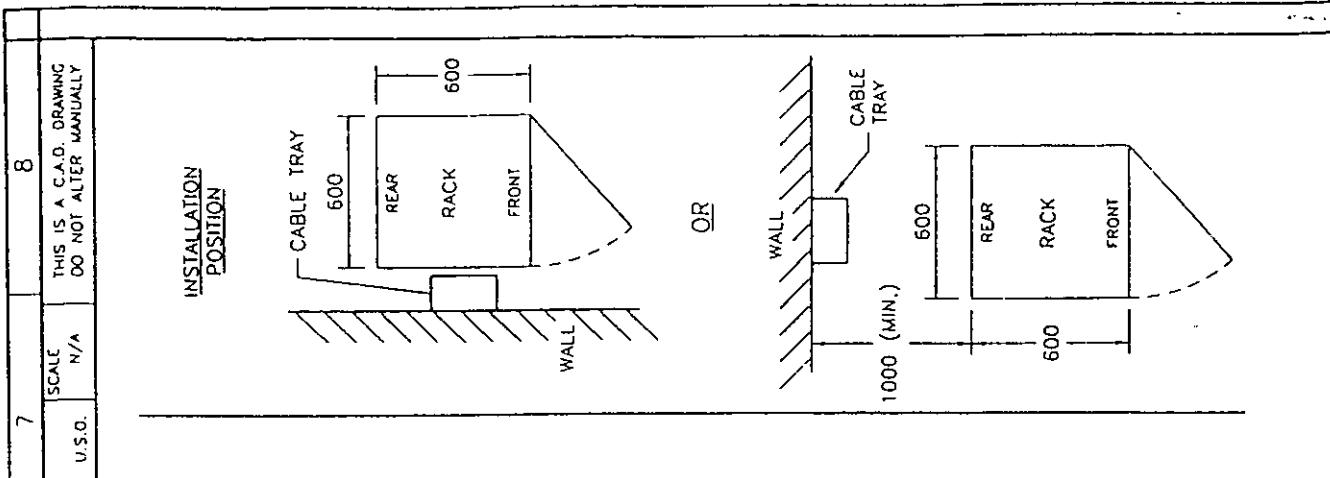


OR



- NOTES:
1. CABLES ACCESS RACK FROM UNDERNEATH.
 2. E.O.L. UNIT FITTED AT THE END OF EACH SPEAKER CIRCUIT.
 3. UNSWITCHED 1.5A SPUR REQUIRED.
 4. RACK 600mm x 700mm x 2000mm.
 5. REAR RACK ACCESS REQUIRED.
 6. ALL CABLES TO BE TESTED FOR E.O.L. UNIT AND CORRECTLY MARKED BY OTHERS, PRIOR TO COMMENCEMENT OF COMMISSIONING.

| | | | | | |
|---|--------|--------|--|------|-------------|
| DRAWN | S.E.S. | CLIENT | ISS. No. | DATE | DESCRIPTION |
| | DATE | | J054B/01 | | |
| CAD REF | INT428 | TITLE | CARDINAL HEENAN HIGH SCHOOL SYSTEM SCHEMATIC | | |
| CHECKED | | | | ISS | DATE |
| Unit 1, Hill Crest Park, Hoyle Road, Colverton, Notttingham, NG14 6QJ Tel (0115) 9656598 fax (0115) 9656546 | | | | | |
| INTAK | | | | | |



| ZONE | CABLE SPECIFICATION | SPK. TYPE |
|---------|---------------------------|-----------|
| ZONE 01 | 2 CORE 1.5mm ² | Speaker |
| ZONE 02 | 2 CORE 1.5mm ² | Speaker |
| ZONE 03 | 2 CORE 1.5mm ² | Speaker |
| ZONE 04 | 2 CORE 1.5mm ² | Speaker |
| ZONE 05 | 2 CORE 1.5mm ² | Speaker |
| ZONE 06 | 2 CORE 1.5mm ² | Speaker |
| ZONE 07 | 2 CORE 1.5mm ² | Speaker |
| ZONE 08 | 2 CORE 1.5mm ² | Speaker |
| ZONE 09 | 2 CORE 1.5mm ² | Speaker |
| ZONE 10 | 2 CORE 1.5mm ² | Speaker |
| ZONE 11 | 2 CORE 1.5mm ² | Speaker |
| ZONE 12 | 2 CORE 1.5mm ² | Speaker |
| ZONE 13 | 2 CORE 1.5mm ² | Speaker |
| ZONE 14 | 2 CORE 1.5mm ² | Speaker |
| ZONE 15 | 2 CORE 1.5mm ² | Speaker |
| ZONE 16 | 2 CORE 1.5mm ² | Speaker |
| ZONE 17 | 2 CORE 1.5mm ² | Speaker |
| ZONE 18 | 2 CORE 1.5mm ² | Speaker |
| ZONE 19 | 2 CORE 1.5mm ² | Speaker |
| ZONE 20 | 2 CORE 1.5mm ² | Speaker |

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ALL DIMENSIONS IN MILLIMETRES

U.S.D.

SCALE N/A

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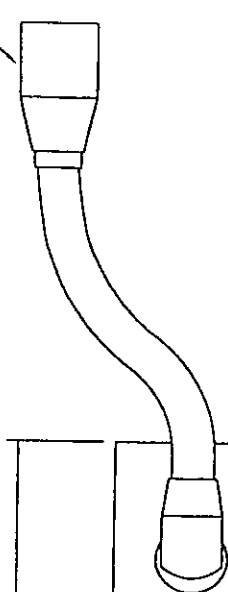
- NOTES:
1. CABLES ACCESS RACK FROM UNDERNEATH.
 2. ALL LOUSPEAKERS SHOULD BE CORRECTLY TAPPED & FITTED WITH A 2.2µf 160V CAPACITOR.
 3. E.O.L. UNIT FITTED AT THE END OF EACH SPEAKER CIRCUIT.
 4. C.D. PLAYER BY OTHERS.
 5. FIRE ALARM PANEL BY OTHERS.
 6. * DENOTES FIRE RATED CABLE.
 7. UNSWITCHED 13A SPUR REQUIRED.
 8. REAR RACK ACCESS REQUIRED.
 9. RACK 600mm x 600mm x 1100mm.
 10. ALL CABLES TO BE TESTED FOR E.O.L. UNIT AND CORRECTLY MARKED BY OTHERS, PRIOR TO COMMISSIONING.

| | | | | |
|---------|----------|--------|-----------------------------|----------|
| DRAWN | S.E.S. | CLIENT | DRG. No. | ISS. No. |
| DATE | 28.03.00 | | J0544-01 | 1 |
| CAD REF | INT423 | TITLE | FIRE ALARM SYSTEM SCHEMATIC | |

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 Nottingham, NG14 6QJ

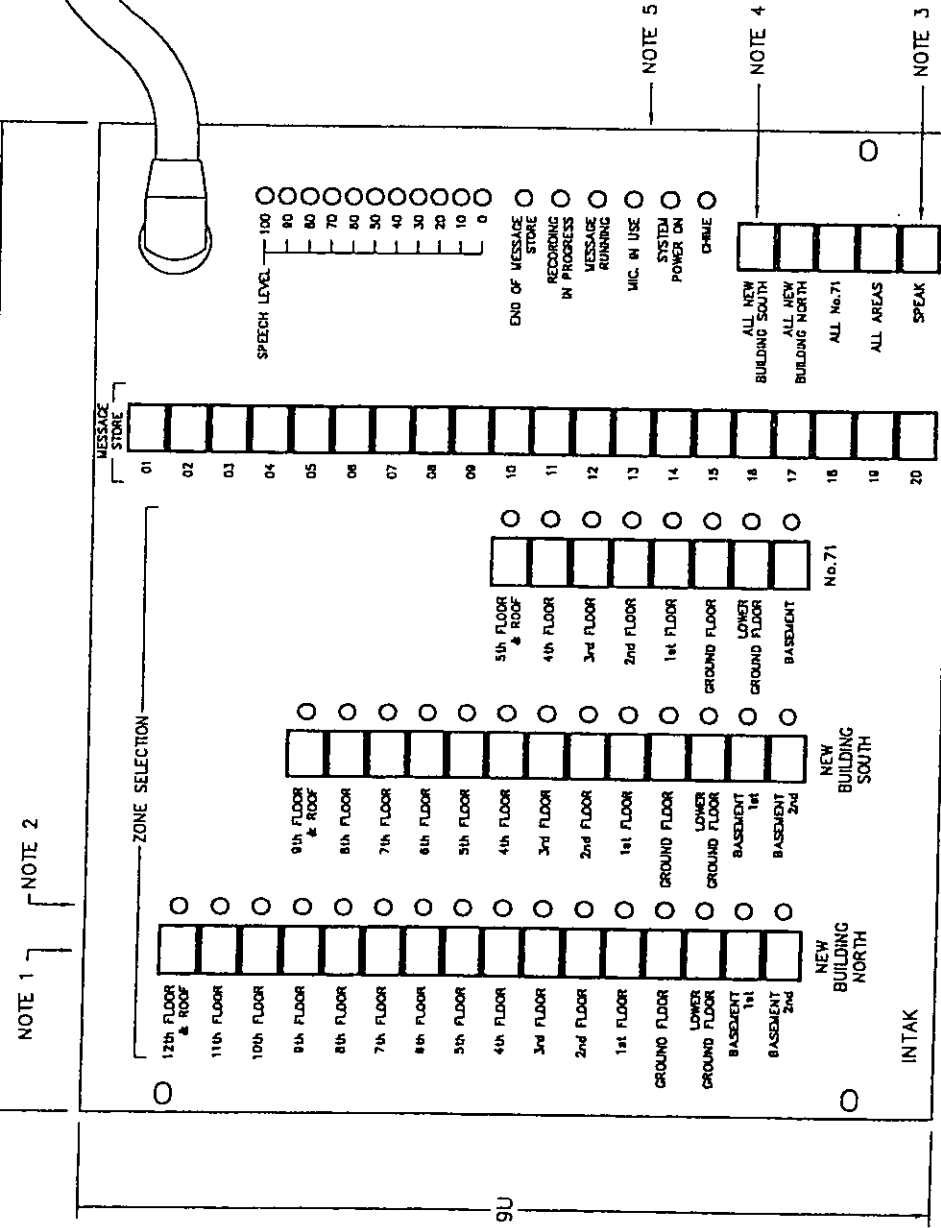
INTAK

NOTE 7

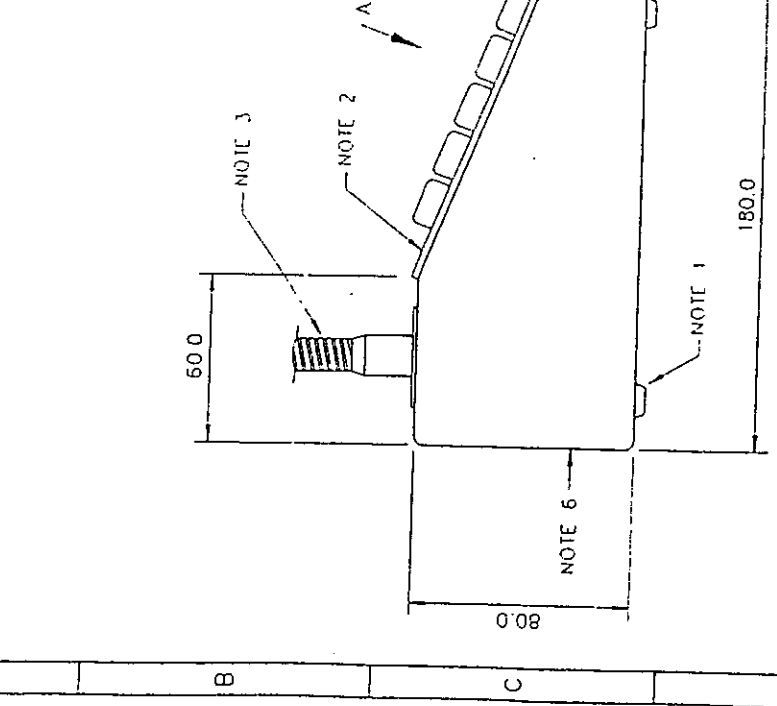
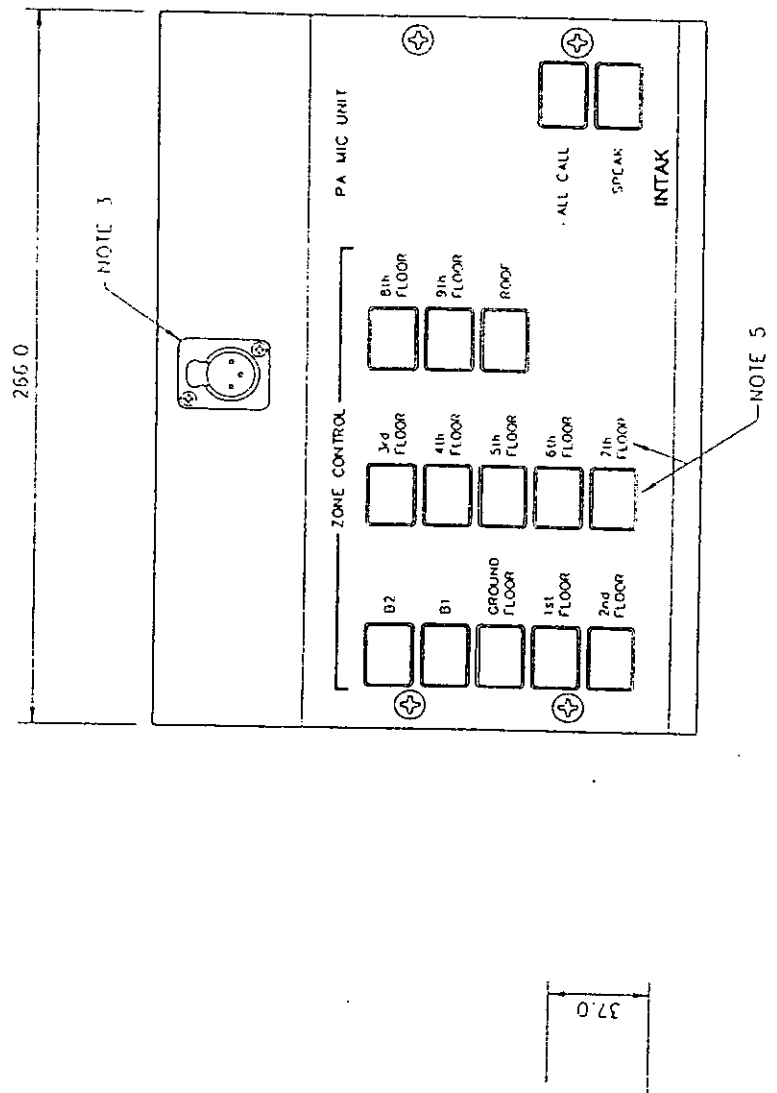


- NOTES:
1. ILLUMINATED LATCHING ZONE SELECTOR (GREEN)
 2. ZONE FAULT L.E.D. (AMBER)
 3. MOMENTARY SPEAK SELECTION
 4. ILLUMINATED LATCHING GROUP SELECTOR (GREEN)
 5. MATERIAL: BRUSHED ALUMINIUM
 6. ILLUMINATED LATCHING MESSAGE STORE SELECTOR (GREEN)
 7. HYPER CARDOID GOOSENECK MIC.

483.0



| | | | | | | |
|--|--|---------|--------------------|---|----------|-------------|
| <p>INTAK</p> <p>Unit 1, Hill Crest Park, Hoyle Road, Calverton, Nottinghamshire. NG14 6QJ Tel (0115) 9656598 Fax (0115) 9656546</p> | | DRAWN | S.E.S. | CLIENT | DRG. No. | ISS. No. |
| | | DATE | 9.1.99 | | JO368-02 | 1 |
| | | CAD REF | INT342 | TITLE | | |
| | | CHECKED | <i>[Signature]</i> | LLOYDS REGISTER SECURITY MANAGEMENT MIC. | | |
| | | | | ISS | DATE | DESCRIPTION |

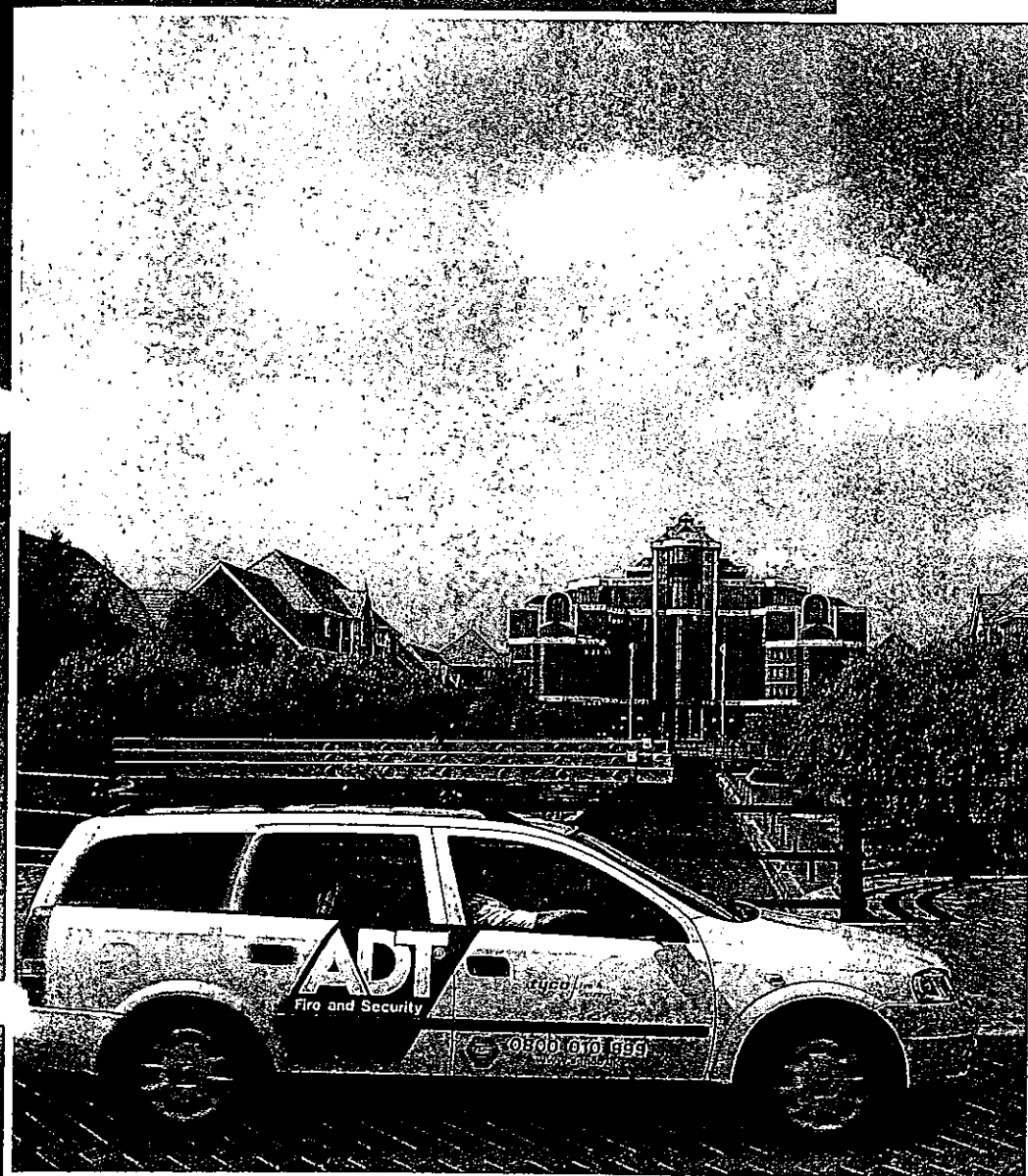


VIEW IN DIRECTION OF ARROW 'A'

- NOTES:
1. RUBBER FEET.
 2. BRUSHED ALUMINIUM SWITCH PANEL.
 3. PLUG-IN LATCHING GOOSENECK MIC.
 4. BOX MATERIAL: 1.5mm MILD STEEL FULLY WELDED & PAINTED RAL 7036 (GREY).
 5. ZONE SELECTORS FITTED, & IDENT'S ENGRAVED, TO SUIT PARTICULAR APPLICATIONS.
 6. CABLE ENTRY VIA 20mm GLAND OR RUBBER GROMMET.

| | | | | |
|---|--------|----------|----------------------------|--------|
| DRAWN | S.E.S. | CLIENT | DRG No | ISS No |
| | DATE | 14.11.99 | P2104 | 1 |
| CAD REF | INT402 | TITLE | INTAK MULTIZONE PAGING MIC | |
| CHECKED | | | ISS | DATE |
| <p>Unit 1, Hill Crest Park, Hoye Road, Calverton, Nottinghamshire, NG14 6QJ Tel (0115) 9656598 Fax (0115) 9656546</p> | | | | |
| <h1>INTAK</h1> | | | | |

Service and Maintenance



Fast response service

tyco

*Fire &
Security*

ADT Fire and
Security

A Fast Response Service

From the leaders in the field

Without effective maintenance even the best equipment will deteriorate. And without rapid response even a minor fault could cause a major problem. Fast service and regular maintenance therefore give confidence that vital fire and security systems will work when they are needed, minimise the incidence and duration of down times, preserve high levels of performance and enhance value for money by giving equipment a longer life.

Service and maintenance also ensure continuing specialist attention to the often complex and fast-changing requirements of fire regulations and health and safety legislation, as well as insurance conditions and the mandatory elements of police and fire brigade policies.



A service and maintenance agreement with ADT Fire and Security is backed by the industry's most comprehensive range of support services, designed and equipped for rapid, user-friendly solutions.

National Service Bureau

A single telephone number gives instant access to operators who can help with all your engineering requirements, whether they are urgent or routine.

Teams of operators are on duty around the clock to arrange a convenient appointment when your next regular inspection visit is due, or to make a new appointment if your plans change. They can also despatch an engineer at any time of the day or night if you need emergency help.

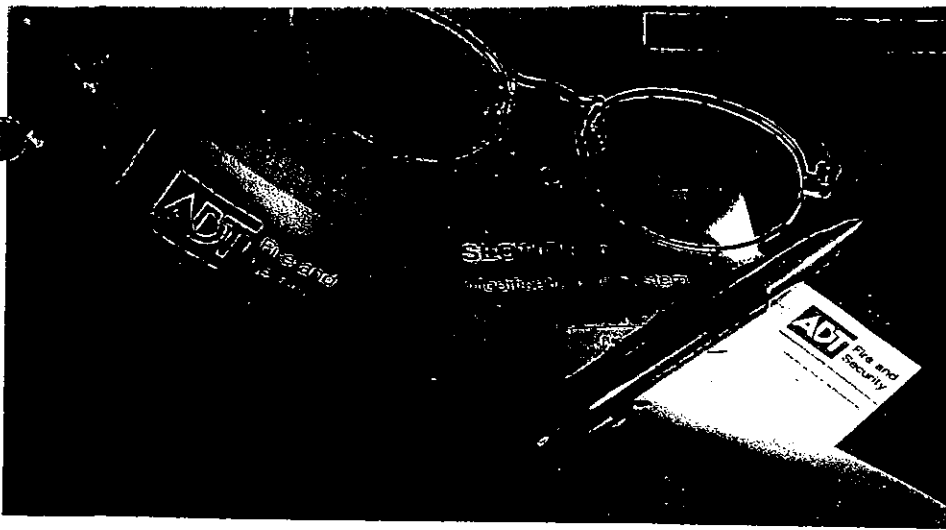


Optimum service levels are ensured by an advanced management system that tracks the location and availability of all on-duty service engineers and compares their individual skills and training with the specification of your system, matching our response to your needs.

Nationwide network of engineers

One of the keys to our success is the combination of a nationwide resource, and localised support through our regional bases. Every ADT Fire and Security installation is backed by a service network of more than 1000 engineers, providing maintenance and emergency repair 24 hours a day, 365 days a year.





Service and Maintenance Contracts

Customised to your system and your budget

ADT Fire and Security offers a choice of standard service and maintenance agreements to meet most customers' requirements. Agreements can also be tailored to meet the precise needs of individual customers – service plans that accord with any special circumstances, operating conditions and of course available budgets.

Planned Preventative Maintenance

A programme of regular inspections and routine maintenance can be arranged, to meet the differing technical standards and regulations for a wide range of fire and security systems.

Service Reports

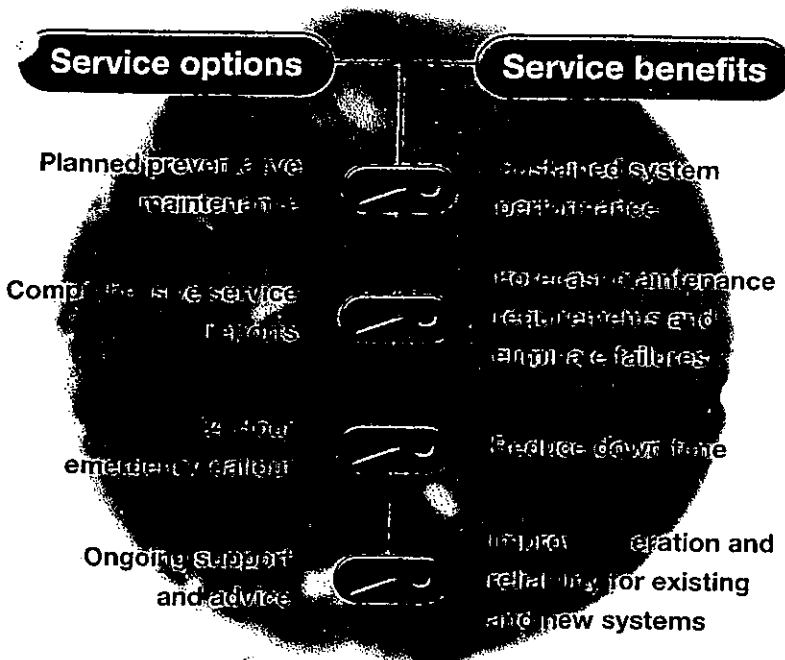
Detailed service reports can be provided, assisting customers to accurately forecast their precise maintenance requirements. This level of careful planning can virtually eliminate the risk of unforeseen failures.

24 hour Emergency Service

With the industry's largest team of over 1000 trained service engineers, we can ensure that emergency assistance is always nearby, anywhere in the country. We aim to attend emergency call-outs within four hours and often arrive sooner.

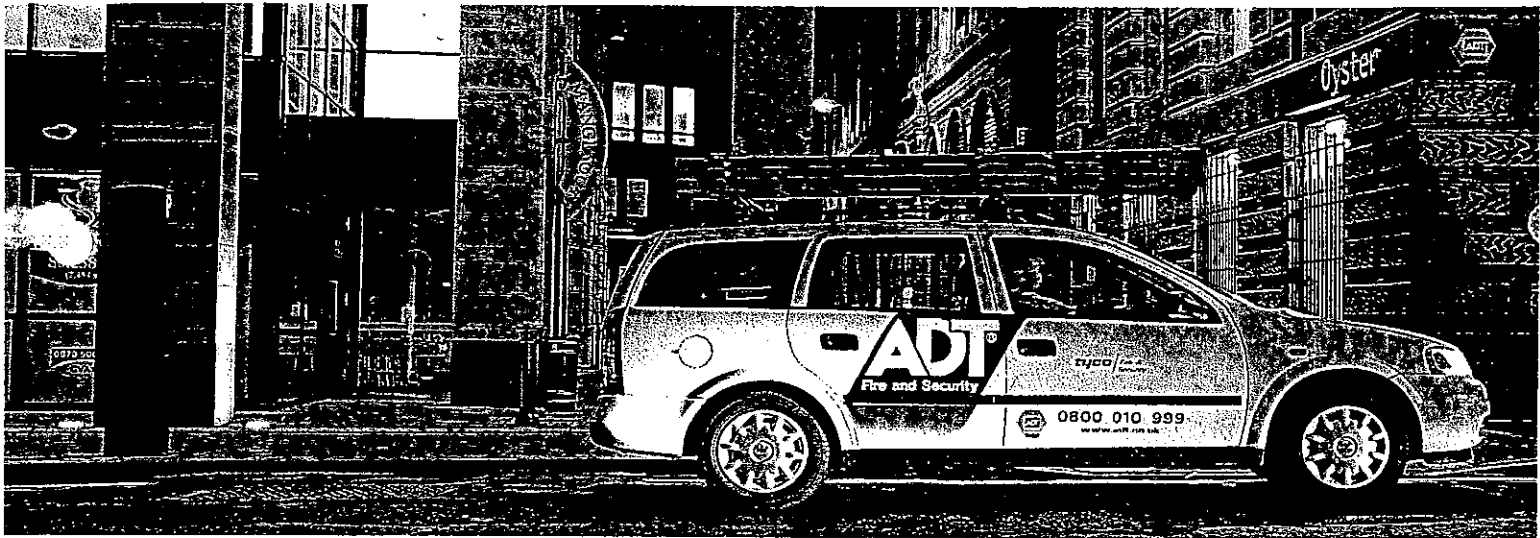
Local Advisors

Every service and maintenance agreement includes access to a range of support services provided by the staff of the nearest ADT Fire and Security office.



A Professional Team of Dedicated Engineers

Servicing and supporting all types of fire and security systems



At ADT Fire and Security we are totally committed to the electronic fire and security market. We are the country's largest installer of fire and security systems, the largest provider of alarm monitoring and the largest service organisation.

And even if your system was installed by someone else, you can still enjoy the benefits and peace of mind of engineering support from the industry leader.

Total Service Capability

ADT Fire and Security offers complete capability for the servicing of all types of fire, security and associated building management systems. If modifications or extensions are required our service engineers will be able to answer your questions, or put you in contact with specialists within our organisation.

Servicing non-ADT Systems

Trained to service all types of security technology, our engineers can also maintain and service non-ADT systems. We will arrange for an experienced and qualified engineer to attend to your system.

Systems we can service:

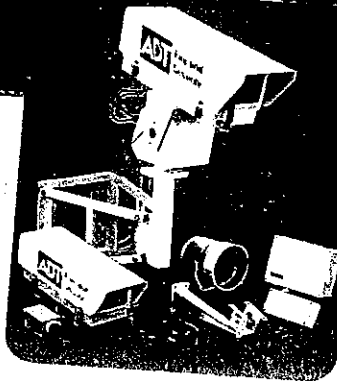
- Fire detection and protection systems
- Intruder alarms
- Access control systems
- Closed Circuit Television systems
- Integrated fire and security systems
- Emergency lighting
- Building management systems
- Nursecall systems
- Prison cell-call systems
- Personal attack alarms



Service Plans CCTV Systems

Service Plan Options

Choose from one of our three service plans which ADT Fire and Security has developed to meet our customers' specific needs. ADT has a specialist team of over 1400 service engineers operating throughout the country, who will check your system is in full working order.



| Service | Comprehensive | Standard Plus | Standard |
|--|---------------|---------------|----------|
| Support from our 24 hour Help Desk | ● | ● | ● |
| Availability of our Technicians 24 hours a day, 5 days a year | ● | ● | ● |
| Our response to all emergency call-outs (subject to contract) | ● | ● | ● |
| Quarterly inspections | ● | ● | ● |
| Minor adjustments during inspection | ● | ● | ● |
| 12 month warranty for additionally fitted equipment | ● | ● | ● |
| Annual review of your fire and security requirements | ● | ● | ● |
| Free engineer call-out charges* | ● | ● | ● |
| Free fitting of replacement parts as a result of normal wear and tear | ● | ● | ● |
| Free software upgrades on ADT installed systems | ● | ● | ● |
| Free 5 year lifetime guarantee if the system is rented or purchased by ADT Fire and Security | ● | ● | ● |

*Standard Plus plans, engineer call-out charges are included except in the event the system has been damaged by users or third parties or as a call out due to fire, storm or other causes. Please refer to the terms and conditions for further details.

†Standard Plus plans, engineer call-out charges are included except in the event the system has been damaged by users or third parties or as a call out due to fire, storm or other causes. Please refer to the terms and conditions for further details.

tyco / Fire & Security

ADT Fire and Security

Dave Walden

From: Dave Walden
Sent: 23 February 2005 11:58
To: 'mold.john@carrilionplc.com'
Subject: Uni of Herts - playing field access

Hello John

As promised confirmation of our conversation earlier. Hope the 'e' problems here don't delay it's delivery too long.

- Detailed PP (S6.2001.1026.DE) condition required submission and approval of the access road
- The PP does not withdraw PD rights
- This was approved in April 03. Approved dwg is C_L (94) 001 Rev J, dated 26.07.02
- Part 10 Schedule 2 of the GPDO allows as PD works for the maintenace or improvement of a private street or way
- I reckon what you propose to do falls within that category

BUT There has been some talk in the past of renewing the whole length of the access road. Should this be considered I'd like to see perhaps some block paving for the first stretch from the carraigeway, consistent with other crossings along this stretch and with the visual standard we are trying to achieve for Ellenbrook Park. I already made this point last August to Nick Wright of TPS Consult. If I still have a copy I'll forward it to you.

Regards

Dave Walden

Dave Walden

From: Hedger Barry (London) [barry.hedger@citex.com]
Sent: 08 July 2004 10:54
To: Dave Walden
Subject: RE: University of Herts, Hatfield -New Fencing as well

Dave,

Thanks.

I am a roving person, so it is best to send them to my home address:

23 Osprey Road
Basingstoke
Hants
RG22 5PR

Barry

-----Original Message-----

From: Dave Walden [mailto:D.Walden@welhat.gov.uk]
Sent: 08 Jul 2004 09:02
To: Hedger Barry (London)
Subject: RE: University of Herts, Hatfield -New Fencing as well

OK - but you'll need some application forms anyway. Shall I send them to the address on your letter, or is there elsewhere more convenient?

What we would need would be a plan (1,2500 minimum) showing proposed fences as a red line, with location and type of any gates shown. The written description should give

- the design (eg chain link or weldmesh, colour (I prefer black)
- type of posts (again black steel angle is the least obtrusive)
- total height, and whether it is new or raising the height of an existing one.

I guess the fee would be £110

Regards

Dave

-----Original Message-----

From: Hedger Barry (London) [mailto:barry.hedger@citex.com]
Sent: 08 July 2004 08:07
To: Dave Walden
Subject: RE: University of Herts, Hatfield -New Fencing as well

Dave,

I see what you mean. I'll check.

Thanks for spotting it.

Barry

-----Original Message-----

From: Dave Walden [mailto:D.Walden@welhat.gov.uk]
Sent: 08 Jul 2004 08:03
To: Hedger Barry (London)
Subject: RE: University of Herts, Hatfield -New Fencing as well

Yes Barry - you're quite right - pp will be needed for all of these. But I don't quite understand one of your comments - "above and joined to existing 3m fence". Are you saying they want it 6m?

Dave

-----Original Message-----

From: Hedger Barry (London)
[mailto:barry.hedger@citex.com]
Sent: 08 July 2004 07:55
To: Dave Walden
Cc: Bounton Eric (ODPM-DFT); Pritchard James
Subject: RE: University of Herts, Hatfield -New Fencing as well

Dave,

I have additionally received an request from the University for new fencing 3 metres high - see below. Reading your initial reply on the new gates, new 3 metre high fencing will definitely require Planning Permission.

The UH's requirement is:

Installation of additional 3m high fencing (above and joined to existing 3m fence) in following areas:

- a) Whole of North boundary Artificial Pitch 1
- b) North boundary (24m) behind full size goal area Artificial Pitch 2
- c) South boundary (24m) behind goal area grass pitch 1
- d) Whole of west boundary Artificial Pitch 2
- e) Whole of East boundary Artificial Pitch 2

Could you confirm that PP is required, please?

Thanks

Barry

-----Original Message-----

From: Dave Walden
[mailto:D.Walden@welhat.gov.uk]
Sent: 07 Jul 2004 09:50
To: Hedger Barry (London)
Subject: RE: University of Herts, Hatfield

Thanks Barry - I'll await your confirmation about the PP before confirming my answer

Dave

-----Original Message-----

From: Hedger Barry
(London)
[mailto:barry.hedger@citex.com]
Sent: 07 July 2004 09:49
To: Dave Walden
Cc: Bounton Eric (ODPM-DFT); Pritchard James
Subject: RE: University of Herts, Hatfield

Dave,

Thank you very much for responding so quickly.

There is no intention to increase the height of the existing fence, which was installed during the Construction phase and I presume was covered by Planning Permission granted for the whole de Havilland Campus development. The fence has been in it's present position since handover from Carillion Building last year

I will check my end that such permission included the fence (Jim - can you advise please?).

The proposed 3 gates will be personnel gates, i.e single leaf gate about 2 metres high cut into the existing fencing, matching the design of the two existing gates, with ironmongery to allow a padlock to be used.

Thanks

Regards

Barry

-----Original Message-----
From: Dave Walden

Dave Walden

From: Dave Walden
Sent: 07 July 2004 09:02
To: 'barry.hedger@citex.com'
Cc: Simon Chivers
Subject: University of Herts, Hatfield

Good morning Barry. Your letter of 5 July to Mr Conway has been passed to me for attention.

To go back to basics, the Town & Country Planning (General Permitted Development) Order (aka GPDO) allows certain PD rights for fencing. Basically a fence up to 1m high abutting a highway used by vehicular traffic, or 2m elsewhere, does not need express permission. But at 3m high 'your' fence certainly needed pp.

The GPDO also allows 'improvements and alterations' as PD provided the fence would not exceed its former height.

So if it has got planning permission, then as long as the gates you wish to insert would not increase its height, then in my view this would be PD not needing express permission.

So before I can give you a categorical answer I need to know if the fencing has a specific planning permission, or was included in the one granted for the site. If you can get this checked yourself it would be good. If not then let me have a plan showing the lengths of fence in question and I'll try to dig it out.

If you need to call me I'm on 01707-357247, but I only work 2 days pw, normally weds/thurs.

Regards

Dave Walden

DW pls
consider &
reply.

Mr C Conway
Chief Planning Officer
Welwyn Hatfield Council
The Campus
Welwyn Garden City
AL8 6AE

Ellenbrook Developments plc
c/o 28 Birch Street
Wolverhampton The Council Offices
WV1 4HY

07971 036166

5 July 2004

Dear Mr Conway

University of Hertfordshire – de Havilland Campus, Hatfield

The company I represent is Ellenbrook Development plc, who own, under a Private Finance Initiative (PFI) scheme, part of the de Havilland Campus in Hatfield.

Part of the area is sports fields, which are surrounded by mesh wire fences about three metres high. On the other side is wasteland, part of the former B Ae site, now owned by Arlington, the property company.

There are two existing gates in the fence between the sports pitches and the Arlington land. The University has requested that Ellenbrook Developments plc installs three additional gates. The reason for this request is that when footballs are kicked over the fence, players are scaling the fence rather than walking to one of the existing two gates. The result is that the fence is becoming damaged.

My query is whether the installation of three new gates in this fence, similar in style to the existing ones, would be subject to Planning Permission or not.

I would be grateful if you would respond by email, to "barry.hedger@citex.com" as the Wolverhampton address is the Registered office address only and I am rarely at that address.

If you have any queries please telephone me at the number above.

Yours sincerely

Barry Hedger

General Manager
Ellenbrook Developments plc

See e mail reply
attached.

Dave Walden

From: Dave Walden
Sent: 04 August 2004 14:00
To: 'Wright Nick @Consult'
Subject: RE: Ellenbrook Crossing/Access road to sports pitches

Hi Nick. Interesting word 'upgrade'!! Of course to achieve the operational 'upgrade' the Uni are seeking could actually mean a 'downgrade' in planning and environmental terms. And what is meant by 'the crossing'? Are you talking about the whole length of the 'failed' surface? I wouldn't rule the acceptability of a changed surface provided it is of the right environmental quality. It seems clear there is a determination to move away from the grids, which are not grasscrete as stated - the latter would, I'm sure, still be OK. Visually the most critical section is from the road carriage way up to, say, the 40m point on the plan. This needs to be constructed from pavers, consistent with the other crossings along here. The remainder is less critical, and though my preference would be for pavers throughout, I might consider a lesser quality of surface and would be open to suggestions - but preferably not concrete or black top. I'm open to suggestions.

I do not anticipate the need for a fresh application

Look forward to a response
Dave

PS Pleased to see the old lorry has gone!!

-----Original Message-----

From: Wright Nick @Consult [mailto:Wright.Nick@tpsconsult.co.uk]
Sent: 28 July 2004 11:07
To: Dave Walden
Cc: Parker George @Consult; Phillips Martin (Special Projects)
Subject: Ellenbrook Crossing/Access road to sports pitches

Dave,

Further to your letter S6/01/1026/DE we have received a communication reiterating the Universities desire to 'upgrade' the crossing to a pavement surface (see Access Road to Pitches below).

Whilst your letter addresses the planning departments concern with the present condition of the crossing, it is not explicit in answering the primary question in my original email to Simon Chivers i.e. "What is the Planning Departments view of changing the crossing from reinforced grass rings to a pavement surface?"

In light of this latest development would you please provide a written determination on whether or not a pavement surface is acceptable to the Planning Department and the Environmental Agency.

Access Road to Pitches

1. The strategic bus route is coming to fruition and I have been shown detailed plans by Glen Cashmore of Baynham & Meikle. The siting of the retractable bollards near to the St Albans Road roundabout will require the access road to be re-located closer to the point where the culvert enters the underground pipe. i.e. about 15 metres north. Arlington will pay for the re-location of the access road.
2. As you know the access road was laid with grasscrete, but this had to be ripped up because it was incorrectly laid and turned to mud, i.e. a Defect
3. The UH has said that it does not want grasscrete to be re-laid, but wants a higher grade of surface.
4. The UH is willing to pay for the difference between the cost of an upgraded surface and the cost to re-lay with Grasscrete

Regards,

Nick Wright
Senior Architect
Interior Designer

TPS Consult
Centre Tower
Whitgift Centre
CROYDON CR9 0AU

Tel: 020 8256 4169
Fax: 020 8256 4121
Tgt: 7001 4169
Email: wright.nick@tpsconsult.co.uk
WebSite: www.tpsconsult.co.uk

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**WELWYN
HATFIELD
COUNCIL**

**Kevin Steptoe
Head of Development Control**

Nick Wright
TPS Consult
18th floor
Centre Tower
Whitgift Centre
CROYDON
CR9 0AU

FILE COPY

Reply To: Dave Walden at
the address below
Our Ref: S6/01/1026/DE
Your Ref: 107640/cro-8/1/AR-44
Date: 19 May 2004
Direct Tel: 01707 357247
Fax: 01707 357255
Email: d.walden@welhat.gov.uk

Dear Mr Wright

HERTFORDSHIRE UNIVERSITY NEW CAMPUS – ELLENBROOK CROSSING

Firstly could I apologise for the delay in replying to your letter of 5 March.

It seems to me that the problem you refer to is caused not by the design itself being defective, but more by the fact it has been incorrectly constructed, maintained, or used. The evidence suggests that use of the access from where it leaves the tarmac surface up to the changing rooms has been quite intensive, involving perhaps construction traffic. It is entirely unmade, rutted. Other than a few fragments of grassing on the surface there is little evidence it was ever constructed as approved. If it was then it is quite clear that the lightweight rings used are not up to the job. This whole length needs reconstructing. There are some heavy weight interlocking square grids on the market that are far more likely to be effective. I am trying to find the manufacturer and will give you this information asap.

Whilst the rings are actually in situ in front of the changing rooms and in the turning head, they are not, as they should be, surface level. Perhaps either the turf was inadequately rolled in or the rings were over full. The result is that the grids cannot provide the intended wheel grip and firm surface in wet weather. This could be remedied quite easily – perhaps when the ground is less dry re-rolling might even suffice.

On a more general point I was disappointed when I visited the area to find it very much resembling a building site. As far as I could see there is no reason why it could not be completed and tidied up as per the planning permission. As well as laying of the road this could include the removal of temporary fences, heaps of material and the lorry body parked there. As far as I can see the 'compound style' fence across the access road, though shown on the plan, has never been approved, and I believe is inappropriate in this location. These actions would, in total help to create more of the ambience normally associated with a university campus, and more in character with the Green Belt and the setting of Ellenbrook Park

Yours sincerely,


Dave Walden
Planning Officer

Council Offices, Campus East, Welwyn Garden City, Hertfordshire, AL8 6AE
DX 30075, Welwyn Garden City 1
Tel: 01707 357 000
www.welhat.gov.uk

Simon Chivers

From: Council Services
Sent: 07 June 2004 14:32
To: Simon Chivers
Subject: FW: University of Hertfordshire New Campus - Ellenbrook Crossing

-----Original Message-----

From: Wright Nick @Consult [mailto:Nick.W.Wright@TPSconsult.co.uk]
Sent: 07 June 2004 09:32
To: Simon Chivers
Cc: Council Services
Subject: University of Hertfordshire New Campus - Ellenbrook Crossing

ORIGINALLY SENT 02.03.04 - I still do not appear to have received a reply
D

ear Simon,

I have been asked by the client to investigate changing the access route to the sports
fields from reinforced grass rings to a pavement surface.

My letter to David Ames (Planning officer for the project at the time) ref 107640/c-
8/1/AR-24 dated 08 April 2003 with attached drawing C_L(94)001 rev J refers.

Can you tell me what is the Planning Departments view of this change?

The Client is complaining that emergency vehicles (ambulances) are experiencing
difficulties traversing the crossing.

Regards,

Nick Wright
Senior Architect
Interior Designer

TPS Consult
Centre Tower
Whitgift Centre
CROYDON CR9 0AU

Tel: 020 8256 4169
Fax: 020 8256 4121
Tgt: 7001 4169
Email: wright.nick@tpsconsult.co.uk
WebSite: www.tpsconsult.co.uk

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www.tpsconsult.co.uk
info@tpsconsult.co.uk

Fax

| | | | |
|------------------|-----------------------------------|---|---------------------------------------|
| To | Mr S Chivers Planning Officer | Fax No. | 01707 357255 |
| Company | Welwyn Hatfield Council | Date | 05 March 2004 Resent 14 April 2004 |
| From | Nick Wright Design Team Leader | Our Ref. | 107640/cro-8/1/AR-44 |
| Your Ref. | | No. of pages (Incl. front cover) | 1 |
| CC | | | |

CROMWELL HOSPITAL HERTFORDSHIRE UNIVERSITY POST FC ELLENBROOK CROSSING

This is a copy of an email sent 02.03.04, which the tracking function indicates has not been delivered – could you please email your correct 'e' address to wright.nick@tpsconsult.co.uk

Simon,

I have been asked by the client to investigate changing the access route to the sports fields from reinforced grass rings to a pavement surface.

My letter to David Ames (Planning officer for the project at the time) ref 107640/c-8/1/AR-24 dated 08 April 2003 with attached drawing C_L(94)001 rev J refers. *in folder behind our letter*

Can you tell me what is the Planning Departments view of this change? *dated 16 April 2003*

The Client is complaining that emergency vehicles (ambulances) are experiencing difficulties traversing the crossing.

*Simon - this is the matter
that I emailed a note to
you about yesterday.
KJS 14 April 04*

File Ref: j:\107640\CORRESP\AR\Cro-8-1-AR-44.DOC

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1P00661



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Croydon
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Welwyn Hatfield Access Group
Hazel Grove Community Centre
Welwyn Garden City
Hertfordshire AL7 2DG

Tel: 01707-323884
Fax: 01707-323884
Email: brian@whag84.fsnet.co.uk



facsimile transmittal

To: Simon Chivers

Fax: 01707 357255

From: Brian Wilson
Secretary

Date: 04/12/03

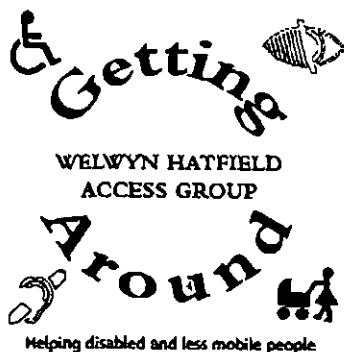
Re: Planning Permission S6/2001/1026/DE

Pages: 2

Please pass the attached letter to Simon Chivers.

Regards


Brian Wilson
Secretary
Welwyn Hatfield Access Group



Please reply to:

Hazel Grove Community Centre
Hazel Grove
Welwyn Garden City
Hertfordshire
AL7 2DG

☎ 01707-323884

e-mail: brian@whag84.fsnet.co.uk

4th December 2003

Mr. S. Chivers
Planning Officer
Welwyn Hatfield Council
Welwyn Garden City
Hertfordshire
AL8 6AE

Dear Mr. Chivers

re: Sports Village, University of Hertfordshire

Further to our previous correspondence, please note that a dropped kerb providing access from the car park to the walkway leading to the main entrance has now been provided.

Following my visit last night, I have this morning sent an e-mail to Frank Benton, Estates Director concerning two items. First, there are no disabled parking bays anywhere close to the main entrance to the Sports Village. Second, parked cars routinely block access to the dropped kerb.

Following our own site visits, we are again requesting the provision and locating of disabled parking bays adjacent to the dropped kerbs. This would, we believe, go along way towards safeguarding access to the dropped kerb.

Yours sincerely,

Brian Wilson
Secretary
Welwyn Hatfield Access Group



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POSITION 1/7/03

Nick Wright
TPS Consult
Centre Tower
Whitgift Centre
CROYDON
CR9 0AU

Please ask for : Patsy Dell
Ext : 2239
E-mail : p.dell@welhat.gov.uk
Our Ref : Pd/s6/01/1026/DE

17 December 2002

Dear Nick,

**UNIVERSITY OF HERTFORDSHIRE – PLANNING CONDITIONS PURSUANT TO
PLANNING PERMISSION FOR UNIVERSITY RESIDENTIAL DEVELOPMENT
AND SPORTS PITCHES REF S6/01/1026/DE**

When we met on 10 December we identified the information that is still outstanding and I promised to follow up with a letter confirming this.

I will deal with the planning permission requirements in the order the conditions appear on the decision notice:

| Condition No. | Matters covered | Comments |
|---------------|--|---|
| 1 | 1 – 50 scale details | a) – agreed b) – details awaited ✓ agreed 5/6/03 c) – agreed d) – to be submitted for the residential, agreed for the sports centre ✓ agreed 17/6/03 e) - submitted ✓ agreed 5/6/03 |
| 2 | Submission of parking details and management | Need to be submitted and agreed before occupation not agreed - see letter 3/5/03 |
| 3 | Details of link to sports pitches. | Need to be submitted and agreed before first use. ✓ agreed 9/5/03 |
| 4 | Hours of usage | On going requirement. |
| 5 | Ventilation and plant | Submitted and agreed |
| 6 | Public announcement system | No details supplied, these must be agreed before commencement takes place if any system is to be provided. |
| 7 | Pastoral supervision statement | Submitted and agreed. |

16/7/03

The s.106 obligation that accompanies this planning permission also has a number of requirements which your attention is drawn to in relation to management of the sports pitches and occupancy of the student accommodation. These requirements will also need resolution and approval before you commence use of the sports pitches and residential accommodation.

My colleague David Ames will be maintaining an overview of this site from now on. Please contact him on 01707 357516 if you have any queries.

I hope this is helpful.

Yours sincerely



Patsy Dell
Head of Development Control

Mr N Wright
TPS Consult
Centre Tower
Whitgift
Croydon
CR9 0AU.

Please ask for: David Ames
Our Ref: S6/01/1026/FP

1st July 2003

Dear Mr Wright

Hertfordshire University Residential

I refer to the above.

Following a site meeting with Nigel Adkins of Carillion, I can confirm that the unstained natural red cedar wood fencing of the various compounds and enclosures is acceptable.

This replaces the previous agreement of the stained wood.

I trust that this is acceptable.

Yours sincerely

David Ames
Principal Development Control Officer

Mr N Wright
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU.

Please ask for: David Ames
Extension: 2509
Our Ref: S6/01/1026/FP

17th June 2003

Dear Mr Wright

University of Hertfordshire, Hatfield

Thank you for your letter dated 6th June 2003 regarding the above.

I can confirm that the proposed signage as set out in drawing nos: A-L-811 rev E, 811 rev C, 812 rev B are acceptable under the terms of Condition 1d of the above permission reference S6/01/1026/DE. This is on the understanding that none of the signage is illuminated, as this may lead to the requirement for an application for Advertisement Consent.

I trust that this is acceptable

Yours sincerely

David Ames
Principal Development Control Officer

DDA

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

06 June 2003

Your ref: S6/01/1026/DE 1d

Our ref: 107640/c-8/1/AR-35

Dear David,

**HERTFORDSHIRE UNIVERSITY POST FC
CONDITION 1d OF PLANNING PERMISSION S6/2001/1026/DE (Residential signage)**

We submit drawings A--L-810 rev E, A--L-811 rev C, & A--D-812 rev B, for your consideration of discharging condition 1d.

Yours sincerely



Nick Wright
Design Team Leader



Copy: Mr N Dickens – Carillion Building Special Projects
Mr M Phillips – Carillion Building Special Projects
Mr S Webb – Carillion Building Special Projects

Enc: A3 copy drawings A--L-810 rev E, A--L-811 rev C, & A--D-812 rev B



ISO 9001 - FS 00531



ISO 14001 - E143 57223

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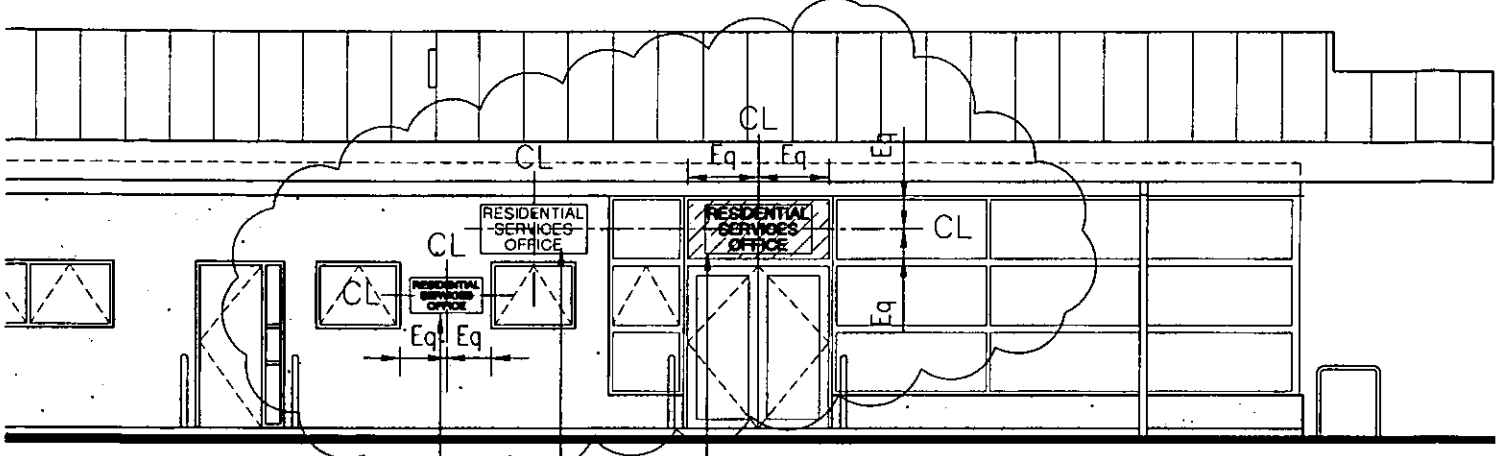
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File Ref: j:\107640\CORRESP\AR-8-1-AR-35.DOC

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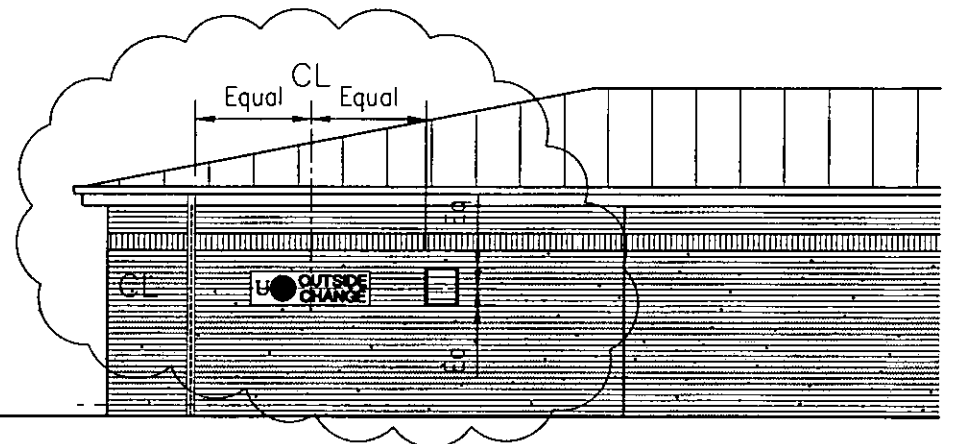
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ADMINISTRATION BUILDING SIGN 3

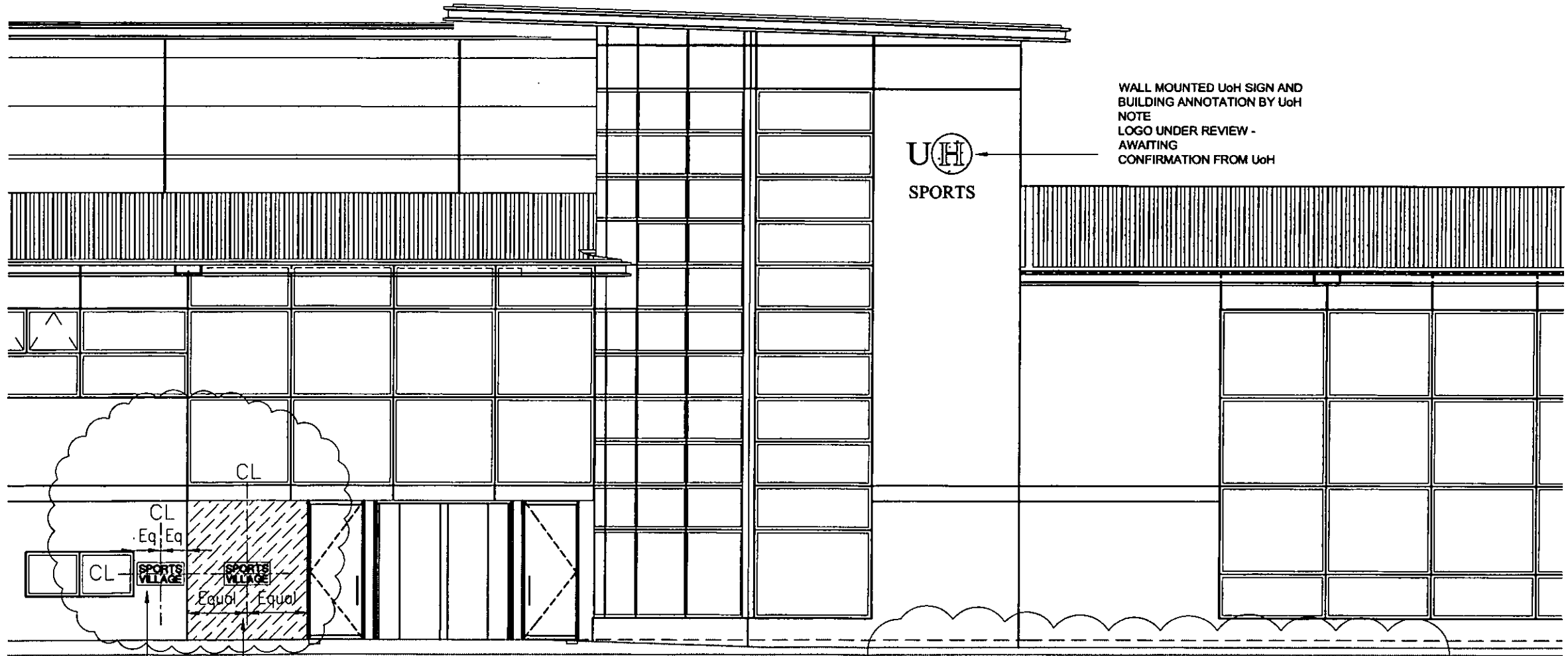
- Possible location option 1 - Mounted behind glass - Hung in accordance with manufactures recommendations. NOTE - Extent of glazed panel shown hatched.
 - Possible location option 2 - Wall mounted (Above window)
 - Possible location option 3 - Wall mounted (Between window. NOTE - Sign lettering to be reduced to 100mm, other sign details as A-D-812)
- Final location to be agreed between CBSP and UoH



OUTSIDE CHANGE SIGN 5 - WALL MOUNTED

LOCATIONS = Sign's 3,4 & 5 as shown on this drawing and A-L-810
TEXT STYLE, HEIGHT AND CONSTRUCTION = As detailed on A-D-812

2001/1026



SPORTS CENTRE SIGN 4

- Possible location option 1 - Mounted behind glass - Hung in accordance with manufactures recommendations. NOTE - Extent of glass panel shown hatched
 - Possible location option 2 - Wall mounted
- Final location to be agreed on site between CBSP and UoH

SPORTS CENTRE SIGN 6 - WALL MOUNTED

WALL MOUNTED UoH SIGN AND BUILDING ANNOTATION BY UoH
NOTE
LOGO UNDER REVIEW - AWAITING CONFIRMATION FROM UoH

| | | | | |
|---|------------|------------|------------|------------|
| C | S. Afford | 08.05.2003 | N. Wright | 08.05.2003 |
| Sign setting out options added and reference to sign 5 added in accordance with comments from ITH dated 23.04.03 | | | | |
| B | S. Afford | 24.04.2003 | N. Wright | 24.04.2003 |
| Amendments in accordance with CBSP DCS 278 - External signage lettering changed to 'Helvetica', Sports Pavilion altered to Outdoor Change with Hertford Sports Village logo, Sports Centre Reception altered to Sports Village. | | | | |
| A | S. Afford | 24.03.2003 | N. Wright | 24.03.2003 |
| Administration building sign changed from glass mounted to wall mounted and renamed 'Residential Service Office', Building name text changed to 'Times New Roman'. | | | | |
| Rev | Revised By | Date | Checked By | Date |



Project
**UNIVERSITY OF HERTFORDSHIRE
CAMPUS REDEVELOPMENT P.F.I.**

Drawing Title
**SITE SIGNAGE
BUILDING SIGNS**

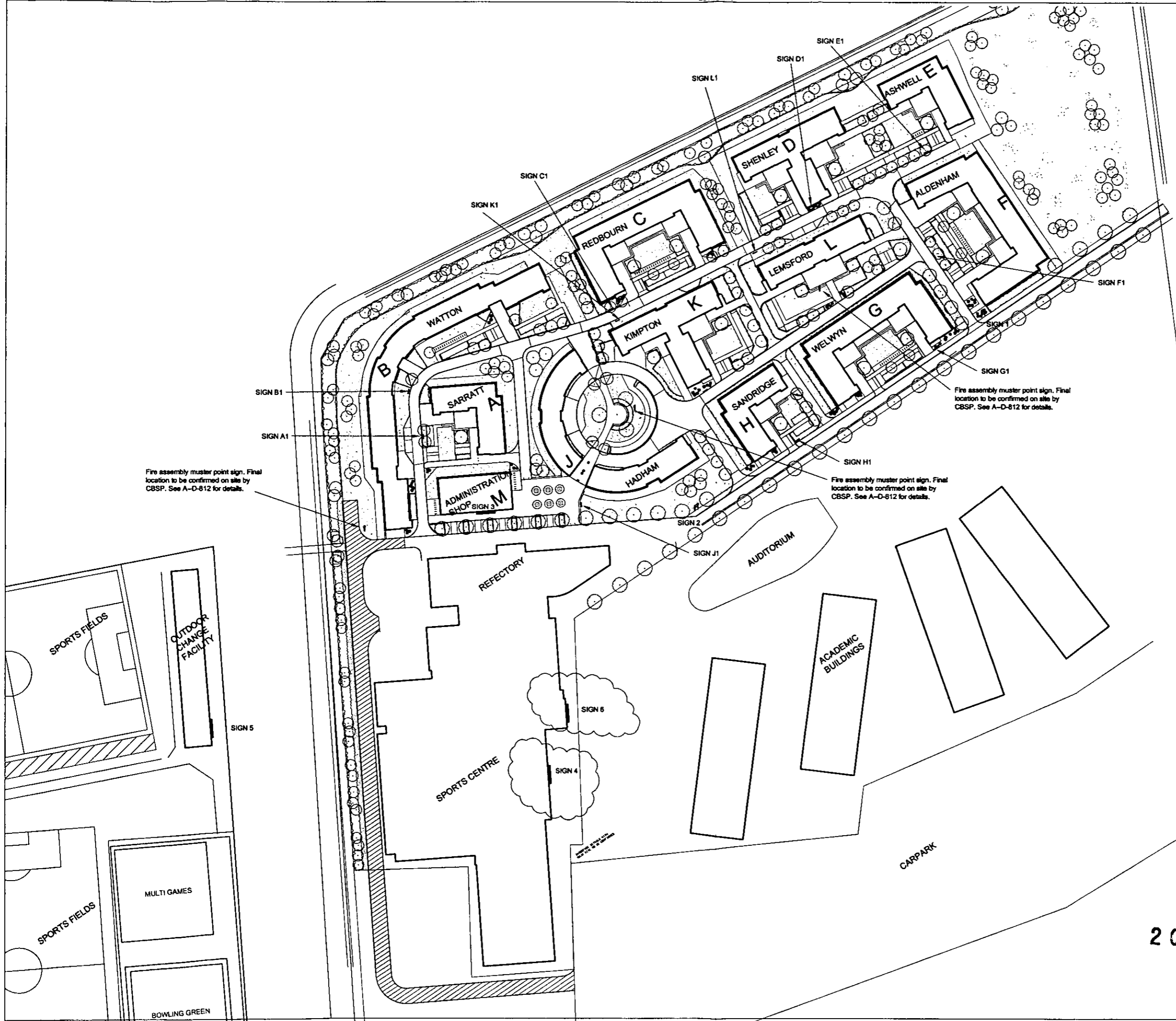
Trade Packages

Originating Office
Centre Tower
Whitgift Centre
Croydon, Surrey, UK
CR9 0AU
Tel: +44) 020 8256 4000
Fax: 020 8256 4121 Arch
Fax: 020 8256 4127 M&E
Fax: 020 8256 4122 C.Eng
Fax: 020 8256 4066 S.Eng

Originating Manager Responsible: Ken Martin
 QA System - Checks: Signature Date
 Drawn By: B DEHNERT 24/01/2003
 Checked: N WRIGHT
 Authorised: F WALLER

| | | | |
|-------------|-------------|----------------|------|
| Project No: | 107640 | Scale (of A1): | 1:50 |
| Status: | PRELIMINARY | Sheet No.: | 1 |

A-L-811 C



KEY TO BUILDING NAME SIGNS
 See A-D-812 for details
 (Spec. Clause N15.125)
 Note: Signs located in soft landscaping in accordance with client requirements. See Landscape drawings for soft landscaping details

SIGN REF. & NAME
 A1 = SARRATT
 B1 = WATTON
 C1 = REDBOURN
 D1 = SHENLEY
 E1 = ASHWELL
 F1 = ALDENHAM
 G1 = WELWYN
 H1 = SANDRIDGE
 J1 = HADHAM
 K1 = KIMPTON
 L1 = LEMSFOUR

Fire assembly muster point sign. Final location to be confirmed on site by CBSP. See A-D-812 for details.

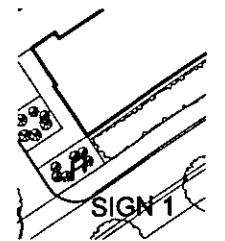
Fire assembly muster point sign. Final location to be confirmed on site by CBSP. See A-D-812 for details.

Fire assembly muster point sign. Final location to be confirmed on site by CBSP. See A-D-812 for details.

Copyright in all documents and drawings prepared by TPS Consult Ltd. and in any works created from these documents and drawings shall remain the property of TPS Consult Ltd. (Unless otherwise agreed at project inception).

| Drawing Compliance Check List: | | Rev # |
|---|--|-------|
| 1/ Signed Design Board Drawings | | |
| 2/ Signed Room Data Sheets | | |
| 3/ Co-ordination of all discipline input | | |
| 4/ Technical co-ordination/inter-disciplinary co-ordination | | |
| 5/ Building Regulations | | |
| 6/ Environmental Issues | | |
| 7/ CDM | | |
| 8/ Town Planning Issues | | |

NOTES:
SITE SIGNAGE



SIGN 1
 COMPONENTS:
 TO RESIDENCES
 TO RESIDENTIAL SERVICES OFFICE
 TO REFECTORY AND SPORTS VILLAGE
 See A-D-812 for typical details.
 (Spec. Clause N15.280)

SIGN 2
 COMPONENTS:
 TO RESIDENTIAL SERVICES OFFICE
 TO REFECTORY AND SPORTS VILLAGE
 TO SPORTS FIELD
 See A-D-812 for typical details
 (Spec. Clause N15.280)

SIGN 3
 WALL MOUNTED:
 RESIDENTIAL SERVICES OFFICE
 See A-L-811 & A-D-812 for typical details
 (Spec. Clause N15.125)

SIGN 4
 WALL MOUNTED:
 SPORTS VILLAGE
 See A-L-811 & A-D-812 for typical details
 (Spec. Clause N15.125)

SIGN 5
 WALL MOUNTED:
 OUTSIDE CHANGE with Hatfield Sports Village logo - See A-L-811 & A-D-812 for typical details
 (Spec. Clause N15.125)

SIGN 6
 WALL MOUNTED:
 SPORTS with Hatfield Sports Village logo
 See A-L-811 & A-D-812 for typical details
 (Spec. Clause N15.125)

| Item | Description | Quantity | Unit Price | Total |
|-----------|-------------|----------|------------|-----------|
| 1 | Sign 1 | 1 | 10,000.00 | 10,000.00 |
| 2 | Sign 2 | 1 | 15,000.00 | 15,000.00 |
| 3 | Sign 3 | 1 | 12,000.00 | 12,000.00 |
| 4 | Sign 4 | 1 | 10,000.00 | 10,000.00 |
| 5 | Sign 5 | 1 | 10,000.00 | 10,000.00 |
| 6 | Sign 6 | 1 | 10,000.00 | 10,000.00 |
| Subtotal | | | | 67,000.00 |
| VAT @ 20% | | | | 13,400.00 |
| Total | | | | 80,400.00 |



UNIVERSITY OF HERTFORDSHIRE
 CAMPUS REDEVELOPMENT P.F.L.

SITE LAYOUT SIGNAGE

| | |
|-----------------------|-----------------------------|
| Client: | Centre Tower |
| Project: | University of Hertfordshire |
| Location: | Croydon, Surrey, UK |
| Contract Ref: | CRS DAU |
| Contract Value: | £10,000,000 |
| Contract Start: | 17/01/2001 |
| Contract End: | 31/12/2001 |
| Contract Status: | Completed |
| Contract Reference: | 107840 |
| Contract Description: | PRELIMINARY |
| Contract Scale: | 1:500 |
| Contract Date: | 2001/10/26 |

A--L-810 E

Mr N Wright
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU.

Please ask for: David Ames
Extension: 2509
Our Ref: S6/01/1026/DE

5th June 2003

Dear Mr Wright

**Footpaths/Cycleways, CCTV and Lighting – University of Herts
(Residential), Hatfield**

Thank you for your recent letters regarding the above.

I can confirm that the lighting details are acceptable under the terms of Condition 1b, of the above permission, reference S6/01/1026/DE, subject to the luminance complying with the conditions set out in Technical Report No5 of the Association of Public Lighting Engineers, or Chapter 11 of the Traffic Signs Manual.

The CCTV details are acceptable under the terms of Condition 1b.

The surfacing details of the footpaths and cycleways are acceptable under the terms of Condition 1e.

I trust that this is acceptable.

Yours sincerely

Plans in pocket

David Ames
Principal Development Control Officer

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

03 June 2003

Your ref: S6/01/1026/FP 30.05.03

Our ref: 107640/c-8/1/AR-34

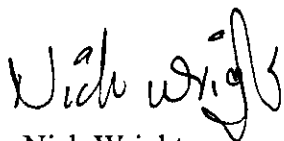
Dear David

HERTFORDSHIRE UNIVERSITY POST FC

RESERVED MATTERS S6/2001/1026/DE - Condition 1e footpaths/cycleways

Further to your letter referenced above I enclose details of the footpath construction, and materials layout plans locating the four pavement types used throughout the site.

Yours sincerely



Nick Wright
Design Team Leader

Plans in pocket

Copy: Mr N Dickens - Carillion Building Special Projects
Mr M Philips - Carillion Building Special Projects
Mr S Webb - Carillion Building Special Projects Project Office

Enc: Drawings L(90)021 rev 4, L(90)022 rev 4, L(90)023 rev 5,
Detail sketch & schedules



ISO 9001 - FS 00581



ISO 14001 - EMS 57308

Head Office
Centre Tower
Whitgift Centre
Croydon
CR9 0AU

Offices at Birmingham, Croydon, Edinburgh, Glasgow

File Ref: j:\107640\CORRESPARIC-8-1-AR-34.DOC

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Registered Office:
Birch Street Wolverhampton WV1 4HY

a Carillion company

Mr N Wright
TPS Consult
Centre Tower
Whitgift
Croydon
CR9 0AU.

Please ask for: David Ames
Our Ref: S6/01/1026/FP

30th May 2003

Dear Mr Wright

Hertfordshire University Residential

I refer to your various letters and e mails regarding the above.

Condition 1b

I cannot trace your letter from 26th February 2003. I apologise for the inconvenience, but please can you provide this additional information, for consideration.

Condition 1e

I have read Patsy Dell's letter of 19th March 2003, and it is my opinion that she was seeking some details of the construction of the paths, to ascertain as to whether they are suitable for this purpose.

Condition 2

I have checked my letter dated 3rd April 2003 and do not feel that the points raised have been addressed, particularly with regard to the sports club. We still need to be informed of the number of passes for the fitness centre. We would be particularly concerned if passes were such that students in the nearby accommodation, who were also members of the sports facility, could use them in breach of the parking restrictions placed upon them. It is suggested that these students should not be able to obtain a pass and all passes have a time limit placed upon them.

We wait to hear from you.

Yours sincerely

David Ames
Principal Development Control Officer

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

21 May 2003

Your ref: S6/01/1026/FP 03 April 03

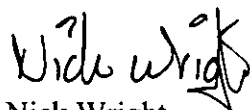
Our ref: 107640/c-8/1/AR-30

Dear David

HERTFORDSHIRE UNIVERSITY POST FC PERMISSION S6/01/1026/DE CONDITION 2

Further to your letter of 3rd April 2003 I enclose copy letter PM11299 from Mark Jones of Turner & Townsend, which I believe clarifies the restrictions on student use of the car park, hopefully allowing the discharge of this condition.

Yours sincerely



Nick Wright
Design Team Leader

Copy: Mr S Webb- Carillion Building Special Projects
Mr M Philips - Carillion Building Special Projects
Mr N Dickens - Carillion Building Special Projects

Enc: Turner & Townsend letter PM11299



ISO 9001 - FS 00581



ISO 14001 - EMS 57306

Head Office
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Croydon
CR9 0AU

Offices at Birmingham, Croydon, Edinburgh, Glasgow

File Ref: j:\107640\CORRES\AR\C-8-1-AR-30.DOC
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a Carillion company



Turner & Townsend

25th April 2003

RECEIVED
UoH Residential & Sports Project Management
Received 29 APR 2003

| | | |
|-----------------------|--------|-------------|
| Pkg No | Action | Information |
| Project Director | | |
| Local Project Manager | | |
| Commercial Manager | | |
| Manager | | |

Edford Street London W9 2HE
Tel: 020 7544 4000 Fax: 020 7544 4020

Our Ref: PM11299

Mr Jim Pritchard
Carillion Building Special Projects
University of Hertfordshire
Residential & Sports Facilities
Project Office
Old Aerodrome
Hatfield
Hertfordshire
AL10 0TA

FAX
URGENT
F.A.O.
OF
NICK WAISH
21-05-2003

Dear Jim

University of Hertfordshire

In response to the letter issued to TPS Consult from Welwyn Hatfield Council dated 3rd April 2003 regarding the car parking strategy we confirm that we have discussed this matter with the University and their response is as follows:

It is the University's intention to endeavour to restrict access to the car park to all student unless special mitigating circumstances can be proved.

Access passes will be issued to those student residents who have been allocated a disabled car parking space within the campus. Currently 22 such spaces have been provided for residents of the campus.

All full Sports Village members will be issued with a car parking access pass.

Casual Sports Village users will be allowed into the car park for a maximum of three hours.

We trust that the aforementioned is acceptable however should you wish to discuss this matter further please do not hesitate to contact Dominic or myself at the above address.

Yours sincerely
for and on behalf of
Turner & Townsend Project Management

Mark Jones
Senior Project Manager
F:\LON\PM\PM11299 - UOH\700 CONSTRUCTION\750 CORRESPONDENCE TO CARILLION SPECIAL PROJECTS
(PFI)\LT_JPRITCHARD250403B.DOC

cc

F Benton - UoH
N Brooking - UoH



APM Project of the Year - Awarded 2000



Building Awards 1997 - Project Manager of the Year

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London · Lusaka · Maputo · Milan · Perth · Petermaritzburg · Singapore · Shanghai
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Approved to BS EN ISO 9001 in the UK. Registration Certificates are available in relevant offices

DA



Total Professional Solutions for the built environment

Centre Tower
Whitgift Centre
Croydon CR9 0AU

T 020 8256 4000
F 020 8256 4116

www.tpsconsult.co.uk
info@tpsconsult.co.uk

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

22 May 2003

Your ref: MR/S6/2001/1026/DE/17.02.03

Our ref: 107640/c-8/1/AR-32

Dear David

**HERTFORDSHIRE UNIVERSITY POST FC
RESERVED MATTERS S6/2001/1026/DE CONDITION 1b**

Further to my email of 7th May 2003 (resent 22nd May 2003)

"Additional details were requested in your letter MR/S6/2001/1026/DE dated 17.02.03, these (Technical submissions E013 & E015A) were submitted with letter 107640/c-8/1/AR-12 dated 26.02.03.

Are you now able to discharge this condition?"

Should I deduce, from the absence of a response, that this condition has already been discharged?

Yours sincerely

Nick Wright
Design Team Leader

Copy: Mr N Dickens - Carillion Building Special Projects
Mr S Webb - Carillion Building Special Projects Project Office



ISO 9001 - FS 00581



ISO 14001 - EMS 57306

Head Office
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Croydon
CR9 0AU

Offices at Birmingham, Croydon, Edinburgh, Glasgow

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Registered Office:
Birch Street Wolverhampton WV1 4HY

a Carillion company

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

22 May 2003

Your ref: PdS6/2001/1026/DE/19.03.03

Our ref: 107640/c-8/1/AR-31

Dear David

**HERTFORDSHIRE UNIVERSITY POST FC
RESERVED MATTERS S6/2001/1026/DE CONDITION 1e**

Further to my email of 7th May 2003 (resent 22nd May 2003)

"Patsy Dell's letter Pd/S6/2001/1026/DE dated 19.03.02 approved location but requested "Precise engineering details". Can you please explain what it is exactly that will satisfy the requirement?"

Should I deduce, from the absence of a response, that this condition has already been discharged?

Yours sincerely



Nick Wright
Design Team Leader

Copy: Mr N Dickens - Carillion Building Special Projects
Mr S Webb - Carillion Building Special Projects Project Office



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ISO 14001 - EMS 57306

Head Office
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Croydon
CR9 0AU

Offices at Birmingham, Croydon, Edinburgh, Glasgow

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Registered Office:
Birch Street Wolverhampton WV14HY

a Carillion company

File Copy

Mr N Wright
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU.

Please ask for: David Ames
Extension: 2509
Our Ref: S6/01/1026/FP

9th May 2003

Dear Mr Wright

University of Hertfordshire, Hatfield

Cycle Parking

Thank you for the details dated 30th April 2003.

I can confirm that the cycle parking, stands and Sheffield Hoops as set out in drawing nos L (90) 054 Rev 1, 041 Rev and 024 Rev E, are acceptable under the terms of Condition 3 of the outline permission, reference S6/99/1026/OP and Condition 1 of reserved matters S6/02/1026/DE.

Landscaping of Plant Area

Thank you for the amended details dated 30th April 2003.

The proposed planting of this area, as set out in drawing nos: L990) 028 Rev 6 and 028 Rev 6, are acceptable.

I trust that this is of assistance.

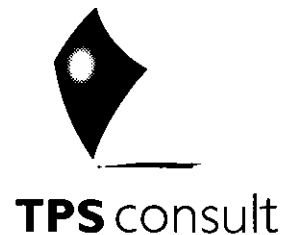
Yours sincerely



David Ames
Principal Development Control Officer

DAK

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Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

30 April 2003

Your ref: S6/2000/1471/DE

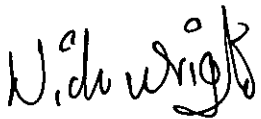
Our ref: 107640/c-8/1/AR-27

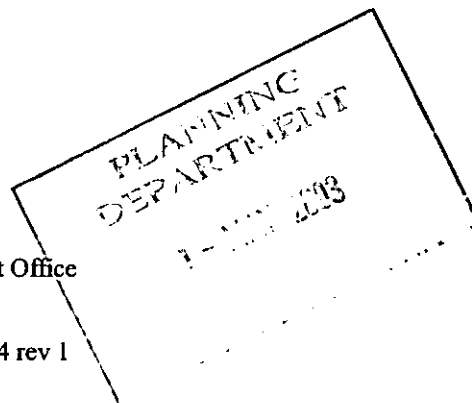
Dear David

**HERTFORDSHIRE UNIVERSITY POST FC
CYCLE PARKING - OUTLINE PERMISSION S6/1999/1064/OP condition 3(ii) +
PERMISSION S6/2002/1026/DE condition 01a**

We submit drawings L(90)024 rev E, L(90)041 rev 1, and L(90)054 rev 1 for your consideration of discharging condition 3(ii) of the outline permission S6/1999/1064/OP and condition 01a of permission S6/2002/1026/DE (confirmation of the use of Sheffield Hoops).

Yours sincerely


Nick Wright
Design Team Leader



Copy: Mr S Webb - Carillion Building Special Projects Project Office

Enc: Drawings L(90)024 rev E, L(90)041 rev 1, and L(90)054 rev 1

Copied to SBT (Hilary Foster) for info for remainder of site.

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Registered Office
Birch Street Wolverhampton WV1 4HY



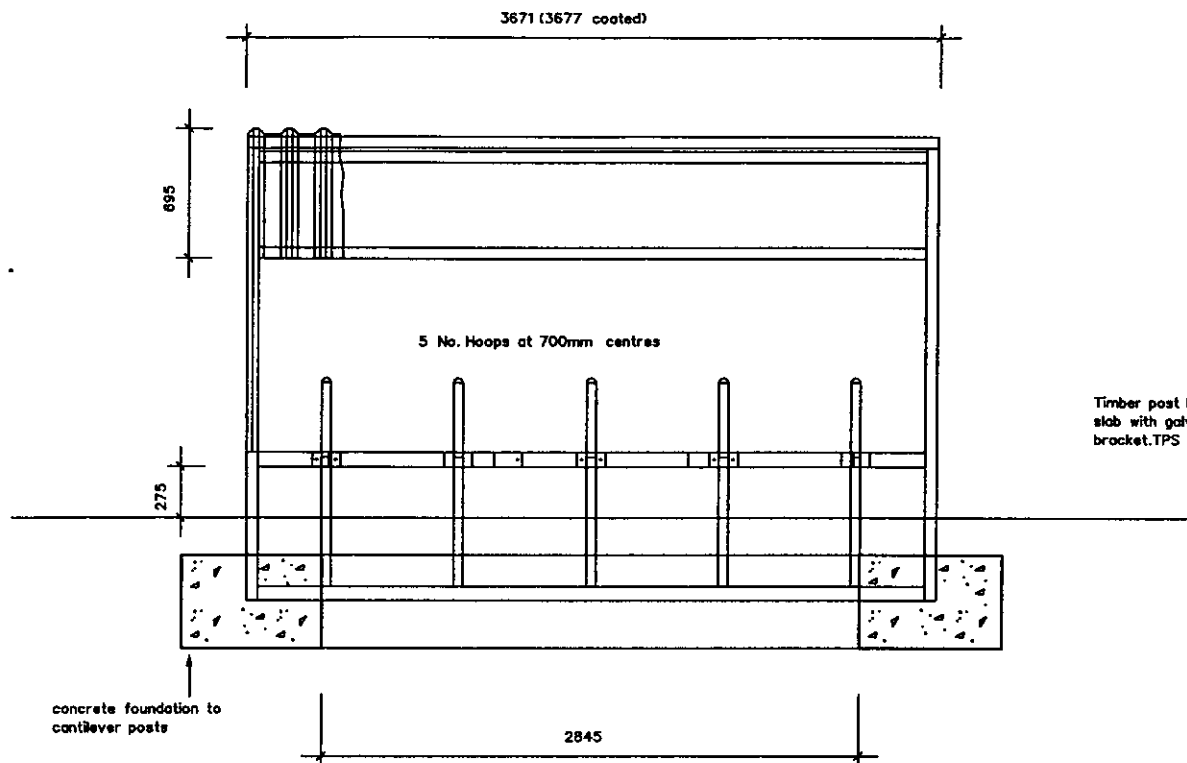
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU



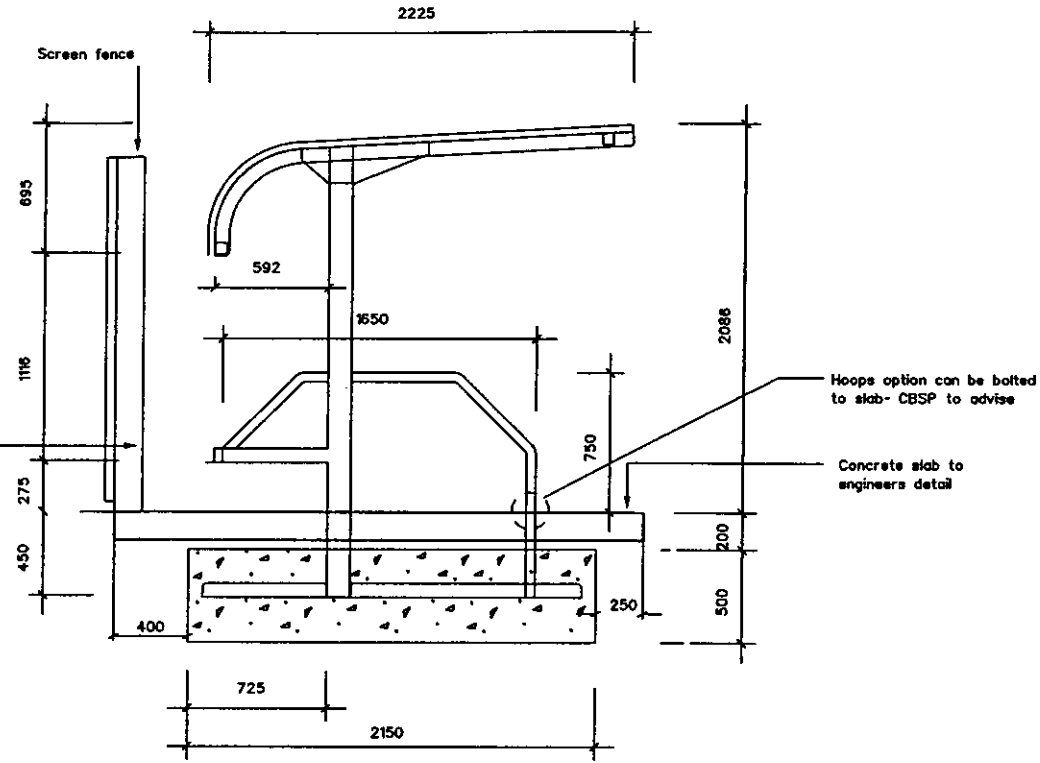
T 020 8256 4000
www.tpsconsult.co.uk

File Ref: j:\107640\CORRESP\AR\C-8-1-AR-27.DOC

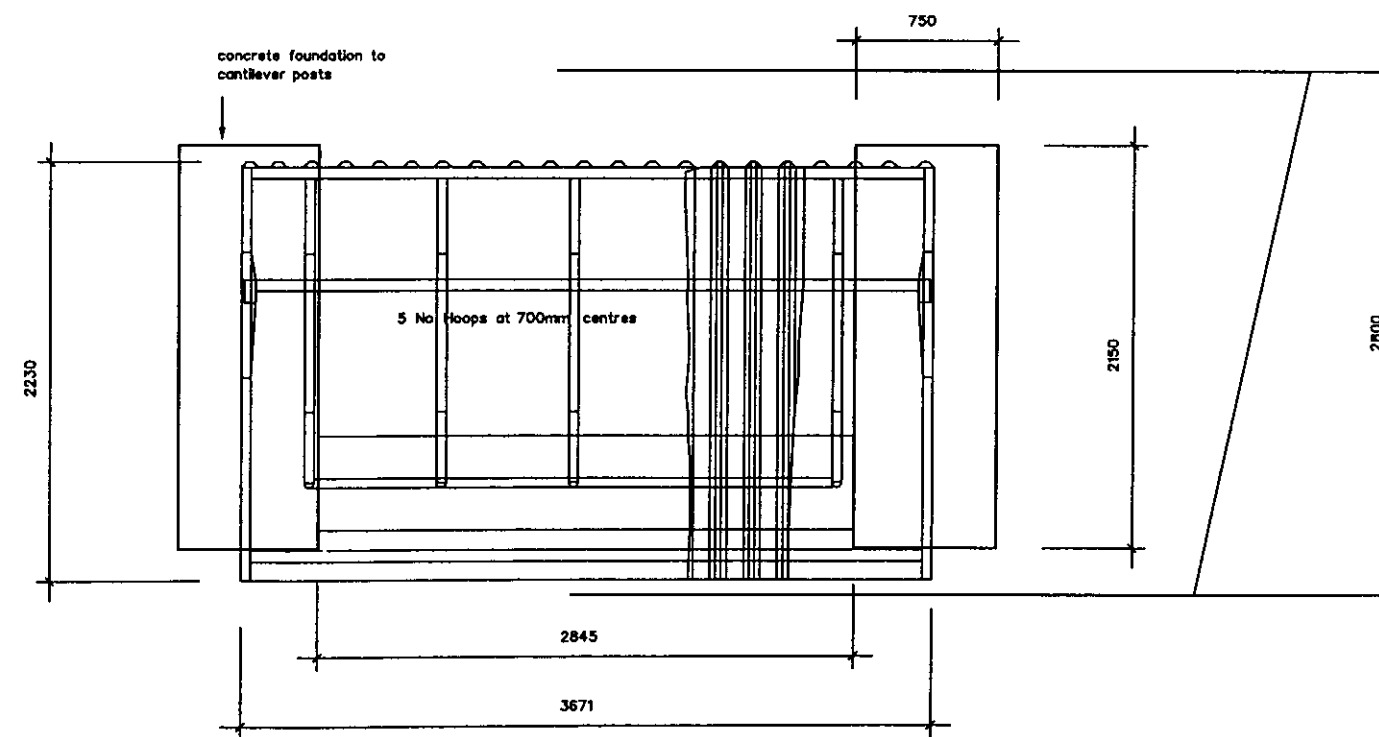
ISO 9001 - FS 00581
ISO 14001 - EMS 57306



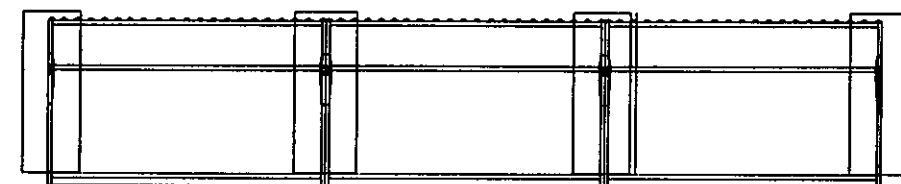
FRONT ELEVATION



SIDE ELEVATION



PLAN VIEW



MULTIPLE SHELTER ARRANGEMENT 1:50

NOTES :
 Colour -
 Frame and cladding : Standard 'Grey' BS 4800 (00.A.09)
 Heavy-duty plastic coating.

Cycle shed Ref: BK248 BiRak modified to take 10no.cycles

Glasdon Manufacturing Limited
 Industrial Estate
 Poulton-le-Fylde
 Lancashire FY6 8JW
 Tel: 01253 891131
 Fax 01253 891923

This drawing incorporates information from CAD drawings prepared by Glasdon Manufacturing Limited.

2001/1026

| | | |
|----------|----------|--------------------|
| 1 | 29.8.02 | CONSTRUCTION ISSUE |
| A | 14.8.02 | TENDER ISSUE |
| Rev/Date | Revision | |



Project
 UNIVERSITY OF HERTFORDSHIRE
 CAMPUS REDEVELOPMENT P.F.I

Drawing Title
 CYCLE SHED DETAIL

| | |
|----------------|--|
| Trade Packages | |
|----------------|--|

Originating Office



17 Bowling Green Lane London EC1R 0QA London
 Telephone: 0207 251 6161 Cardiff
 Facsimile: 0207 808 3400 Glasgow
 E-mail: sellondon@claf.pipex.com Warrington

Originating Manager Responsible P LYON
 QA System - Checks Signature Date
 Drawn By: GJM 12.06.02

Checked:
 Authorised:

| | | |
|------------------------|------------------------|-----------------------|
| Project No. 101212 | Status CONSTRUCTION | Scale (if A1) 1:20 |
| Drawing No L(90)054 | Rev. No. 1 | Revision |

Do Not Scale

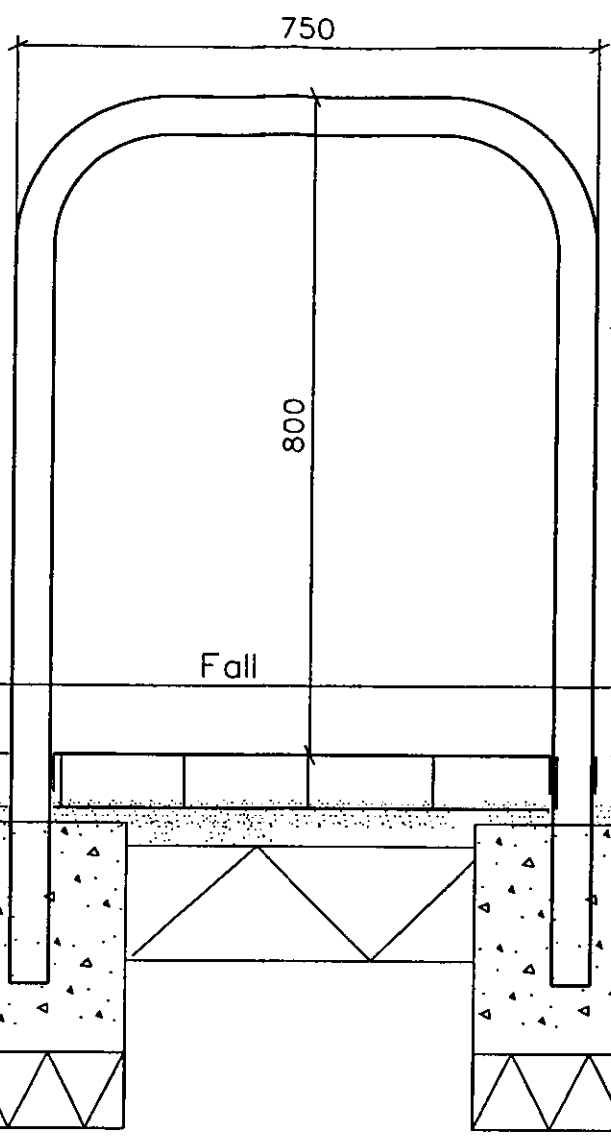
CYCLE STANDS SECTION 1:10

Pcc Tegula setts
12 no. courses 160mm guage
Q25.600

Flush pcc pinkerb edging (K3B)
Q10.110

Topsoil to turf/planting areas
450mm to planting, 150 to turf

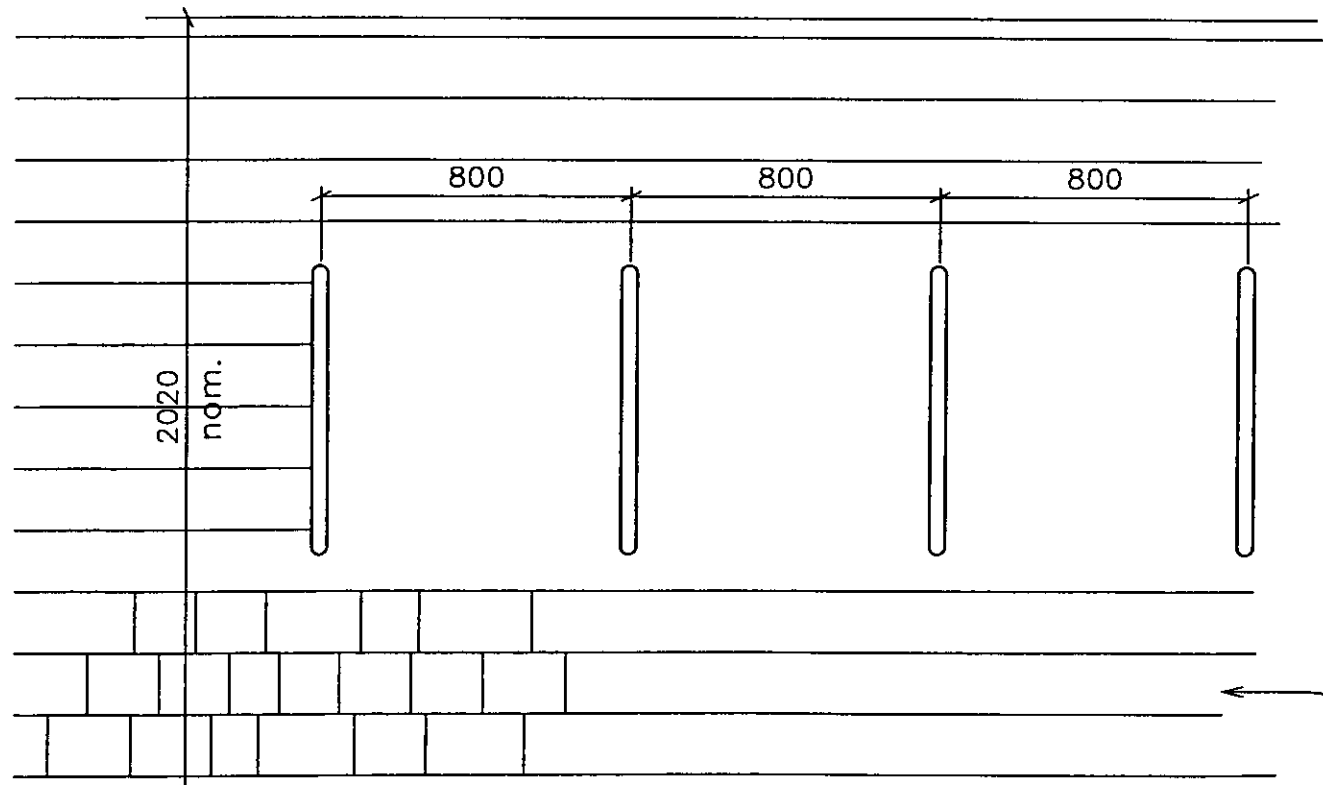
Stone filled drainage
trench



Sheffield style cycle hoop
Q50.411

Fall

concrete foundation
to hoop legs



Pcc Tegula setts
12 no. courses 160mm guage
Q25.600

PLAN 1:20

KEY PLAN



2001/102A

| | | |
|---|-------|--------------------|
| 1 | 28.02 | CONSTRUCTION ISSUE |
| A | 14.02 | TENDER ISSUE |



Project
UNIVERSITY OF HERTFORDSHIRE
CAMPUS REDEVELOPMENT P.F.I

Drawing Title
CYCLE HOOP DETAIL

| | | | | | | | | | |
|--------------------|--|--|--|--|--|--|--|--|--|
| Trade Packages | | | | | | | | | |
| Originating Office | | | | | | | | | |



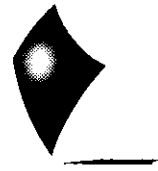
17 Bowling Green Lane London EC1R 0GA London ●
 Telephone: 0207 251 6161 Cardiff ○
 Facsimile: 0207 805 3408 Glasgow ○
 E-mail: sellondon@del.pipex.com Warrington ○

| | |
|---------------------------------|-----------|
| Originating Manager Responsible | PLYON |
| QA System - Check | Signature |
| Drawn By: | CM |
| Checked: | |
| Authorised: | |

| | | | | | |
|-------------|----------|--------|--------------|--------------|-----------|
| Project No. | 101212 | Status | CONSTRUCTION | Scale (M A3) | 1:20/1:10 |
| Drawing No. | L(90)041 | Date | | Rev. No. | 1 |

DA

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TPS consult

Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

30 April 2003

Your ref: S6/01/1026/FP

Our ref: 107640/c-8/1/AR-26

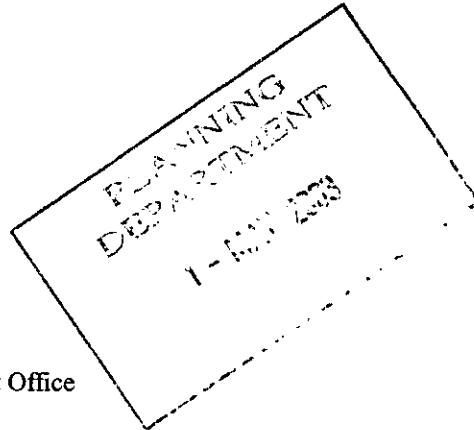
Dear David

**HERTFORDSHIRE UNIVERSITY POST FC
INCOMING SERVICES COMPOUND SCREENING PLANTING**

Further to your letter at the above reference please find enclosed revised planting plans which confirm the use of the planting requested in your letter dated 12.03.03

Yours sincerely

Nick Wright
Design Team Leader



Copy: Mr S Webb - Carillion Building Special Projects Project Office

Enc: Planting plans L(90)028 rev 6 & L(90)030 rev 6

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Registered Office
Birch Street Wolverhampton WV1 4HY



TPS Consult
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Whitgift Centre
Croydon
CR9 0AU



Best Security Consultant
Award Winner 2001

T 020 8256 4000
www.tpsconsult.co.uk

Mr N Wright
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU.

Please ask for: David Ames
Extension: 2509
Our Ref: S6/01/1026/FP

9th May 2003

University Development – Hatfield BAe Site

I refer to the above.

We are aware that the contract for this development will shortly be coming to an end.

I am concerned that there are a number of piles of earth on the site.

We would like to confirm that unless part of an already approved landscaping scheme, where changes in levels have been agreed, it is not acceptable for this spoil to be retained on the site.

Please can you therefore ensure that such materials are removed from the site.

I trust that this is acceptable.

Yours sincerely

David Ames
Principal Development Control Officer

Mr N Wright
TPS Consult
Centre Tower
Whitgift Centre
Croydon
CR9 0AU.

Please ask for: David Ames
Extension: 2509
Our Ref: S6/01/1026/DE

16th April 2003

Dear Mr Wright

Hertfordshire University – Hatfield BAe

Thank you for your letter dated 8th April 2003, regarding the above.

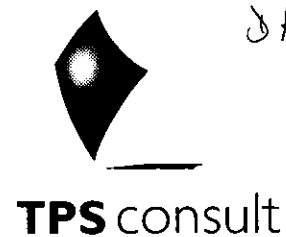
I can confirm that the proposed pathway details, included as drawing C_L (94) 001 rev J, are acceptable under the terms of the above permission reference S6/01/1026/DE.

I trust that this is acceptable.

Yours sincerely

David Ames
Development Control

Total Professional Solutions for the built environment



Mr D Ames
Welwyn Hatfield Council
Council Offices
Welwyn Garden City
Hertfordshire
AL8 6AE

Direct tel: +44 (0)20 8256 4169

Direct fax: +44 (0)20 8256 4121

08 April 2003

Your ref: S6/2001/1026/DE

Our ref: 107640/c-8/1/AR-24

Dear David

**HERTFORDSHIRE UNIVERSITY POST FC
RESERVED MATERS APPLICATION S6/2001/1026/DE condition 3 details of link to
sports pitches**

We submit drawing C_L (94) 001 rev J for your consideration of discharging condition 3.

Yours sincerely

Nick Wright
Design Team Leader



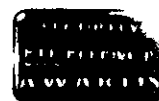
Copy: Mr S Webb - Carillion Building Special Projects Project Office

Enc: 2 No. A3 copies of drawing C_L (94) 001 rev J

TPS Consult is the trading name of
TPS Consult Limited
Registered in England No 2574820
Registered Office
Birch Street Wolverhampton WV1 4HY



TPS Consult
Centre Tower
Whitgift Centre
Croydon
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WELWYN HATFIELD COUNCIL

Council Offices, Welwyn Garden City, Herts, AL8 6AE
Telephone: Welwyn Garden (01707)357000

TOWN AND COUNTRY PLANNING ACT 1990 PLANNING DECISION NOTICE – APPROVAL

S6/2001/1026/DE

ERECTION OF 1600 STUDENT STUDY BEDROOMS AND ASSOCIATED SUPPORT FACILITIES, REFECTORY, SPORTS CENTRE INCLUDING POOL, SPORTS HALLS AND HEALTH CLUB AND LAYOUT OF PLAYING FIELDS. (RESERVED MATTERS APPLICATION PURSUANT TO OUTLINE PLANNING PERMISSION S6/1999/1064/OP AND S6/1999/1106/OP)

at: LAND AT HATFIELD AERODROME, ST ALBANS ROAD WEST, HATFIELD

Agent Name And Address

K E MARTIN,
CENTRE TOWER,
WHITGIFT CENTRE,
CROYDON,
SURREY
CR9 0AU

Applicant Name And Address

CARILLION PLC,
BIRCH STREET,
WOLVERHAMPTON
WV1 4HY

In pursuance of their powers under the above mentioned Act and the Orders and Regulations for the time being in force thereunder, the Council hereby give **APPROVAL** to the siting, design, external appearance and landscaping of, and means of access to the development which were reserved for subsequent approval in the outline planning permission at the above mentioned location in accordance with the drawings submitted by you with your application received on 27/07/2001.

1. No development shall be commenced until full details of the following at a scale of 1:50 (or as otherwise agreed) have been submitted to and approved by the Local Planning Authority in writing:
 - a) Secure covered cycle stores and bin stores (for student accommodation, sports centre and the outdoor changing facilities and to the standard of provision required by Hertfordshire County Council)
 - b) CCTV and lighting
 - c) The rooftop plant room, windows, doors, eaves and verges on the student residential accommodation
 - d) Signage
 - e) Precise details of the footpath/cycle way interfaces with the public highwayThereafter only the approved details shall be implemented on site, unless agreed otherwise with the Local Planning Authority in advance and in writing.

REASON

To ensure that satisfactory details are received.

2. Prior to the first occupation of any of the development hereby approved, full details of the designation and management of the parking spaces within the development shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the spaces shall only be used in accordance with the approved management scheme or as otherwise agreed in writing with the Local Planning Authority.

Continuation...

REASON

To ensure that use of parking at the site is limited to visitor and the needs of disabled students and visitors only, consistent with the requirements of the outline planning permission and green travel requirements of this development.

3. No use shall be made of the outdoor sports pitches until an access from the sports centre across Ellenbrook, to a detail and specification agreed in writing by the Local Planning Authority has been provided in accordance with agreed details, or as otherwise agreed by the Local Planning Authority.

REASON

To ensure that access to the sports pitches is in the appropriate location and to the required specification.

4. The sports centre shall be closed between the hours of 23.00 and 06.30 unless otherwise agreed in writing with the Local Planning Authority.

REASON

In the interests of residential amenity.

5. No development shall be commenced until full details including operating specification, and details of any screening of plant required in relation to the sports centre, cafeteria/dining hall shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the equipment shall be installed and operated in accordance with the agreed details unless agreed otherwise in writing with the Local Planning Authority.

REASON

In the interests of residential amenity.

6. No development shall be commenced until full details of any external amplification or announcement system for the sports pitches, and a protocol for its usage has been submitted to and approved in writing by the Local Planning Authority. Thereafter only the agreed system may be used unless agreed otherwise in writing with the Local Planning Authority.

REASON

In the interests of residential amenity.

7. No occupation of the student residential accommodation shall take place unless arrangements for pastoral supervision of those students and any associated visitors have been implemented by the University or parties acting for them. Full details of these arrangements are to be submitted to the Local Planning Authority for information.

REASON

To ensure that management supervision of the accommodation is undertaken in the interests of amenity of occupants and surrounding residential properties.

INFORMATIVE

The applicant's are reminded that a full reserved matters submission in relation to the landscaping of this site is required and attention is drawn to the requirements of planning conditions 2, 4, 6, 9, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26 of the outline planning

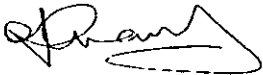
Continuation...

permission for this site and the requirements of the associated planning obligation which need to be satisfied before any development may proceed on an ongoing basis

APPROVED PLAN NUMBER(S):

| | | |
|--------------------|-------------------|------------------|
| BA3L(00)100 Rev E | BA2D()302 Rev E | |
| BA3L(00)101 Rev E | BA2D(27)303 Rev E | |
| BA3L(00)102 Rev E | BA2E()304 Rev E | |
| BL2L(90)203 Rev E | BA2S()305 Rev E | |
| BL2L(90)204 Rev E | BA2F()306 Rev E | |
| BA2L(30)A205 Rev E | BA2F()309 Rev E | |
| BA2E(40)C201 Rev E | A2E(20)100 Rev C | |
| BA2L(30)C206 Rev E | A2E(20)101 Rev C | |
| BA2L(30)E207 Rev E | A24(20)102 Rev C | |
| BA2L(30)J208 Rev E | A2E(20)102 Rev C | |
| BA2(30)217 Rev E | A2E(20)103 Rev C | |
| BA2D()301 | A2E(20)104 Rev C | |
| A2E(20)105 Rev C | A2E(20)107 Rev C | A2E(20)106 Rev C |

Date "Date_R"



Chris Conway
Chief Planning and Environmental Health Officer