

NOTES:-

NOTE 1:- ACCORDING TO THE BUILDING REGULATIONS, TGD B, FIRE SAFETY, TABLE 1.2 THE MAXIMUM ESCAPE DISTANCE FOR PURPOSE GROUP 5(b) IS 18m IN ONE DIRECTION. THE TRAVEL DISTANCE OF ESCAPE FROM THE OFFICES UPSTAIRS IN THE EXTENSION TO THE REAR EXCEEDS THIS FIGURE.

SINCE THE OFFICES ARE NOT GOING TO BE HEAVILY POPULATED, A PROPOSAL WOULD BE TO CONSTRUCT A SUITABLE DOOR, BOTH FIRE RESISTANT AND SECURE (OPENABLE ONLY FROM THE INSIDE), TO ALLOW THE OFFICE WORKERS TO ESCAPE ONTO THE NEIGHBOURING ROOF, PROVIDED THE APPROPRIATE LEGAL CONDITIONS ARE PUT IN PLACE.

NOTE 2:- IT IS PROPOSED TO PROVIDE A PROTECTED ESCAPE STAIRWAY USING THE MAIN CURVED STAIRS TO THE REAR OF THE BUILDING.

SINCE THIS IS ALMOST ENTIRELY EXISTING, IT WOULD NOT BE RECOMMENDED TO APPLY FIRE RESISTING CONSTRUCTION TO THE INSIDE OF THE EXISTING FABRIC.

THEREFORE, AN ALTERNATIVE, PASSIVE, FIRE PROTECTION MEASURE IS TO PRESSURISE THE STAIRWELL AND CONSTRUCTION OF A BUILDING (SUCH AS FLOORS AND WALLS).

FURTHER GUIDANCE ON EFFECTIVE AND FEASIBLE RECOMMENDATIONS AND SELECTION CRITERIA FOR THE USE OF PASSIVE FIRE PROTECTION (PFP) SYSTEMS IN BUILDINGS IS GIVEN IN DOCUMENT BEST PRACTICE FOR PASSIVE FIRE PROTECTION IN OVERSEAS PUBLISHED BY THE ASSOCIATION OF SPECIALIST FIRE PROTECTION (ASFP).

TGD B - FIRE SAFETY

EXISTING BUILDINGS:-

0.1.5 IN THE CASE OF AN EXISTING BUILDING THERE MAY BE CONSTRAINTS THAT WOULD NOT EXIST WITH A NEW BUILDING AND SOME VARIATION OF THE PROVISIONS SET OUT IN THIS DOCUMENT MAY BE APPROPRIATE. ALTERNATIVE SOLUTIONS (SEE D.1.4), WHETHER APPLIED TO ALL OR PART OF THE BUILDING OR TO SPECIFIC PROVISIONS, MAY BE EMPLOYED IN THESE SITUATIONS.

A NUMBER OF USEFUL PUBLICATIONS ARE AVAILABLE WHICH OUTLINE ALTERNATIVE APPROACHES TO FIRE SAFETY IN EXISTING BUILDINGS OF SPECIAL OR HISTORIC MERIT. THESE INCLUDE:

- ARCHITECTURAL HERITAGE PROTECTION GUIDELINES FOR PLANNING AUTHORITIES CHAPTER 6 (PAGE 89) AND CHAPTER 17 PUBLISHED BY THE HERITAGE SECTION DOE/H.G.2005;
- FIRE PROTECTION IN OLD BUILDINGS AND HISTORIC TOWN CENTRES, PUBLISHED BY THE FIRE PROTECTION ASSOCIATION;
- FIRE PROTECTION MEASURES FOR THE ROYAL PALACES, DEPARTMENT OF NATIONAL HERITAGE, LONDON; AND
- HERITAGE UNDER FIRE, A GUIDE TO THE PROTECTION OF HISTORIC BUILDINGS BY THE UNITED KINGDOM WORKING PARTY ON FIRE SAFETY IN HISTORIC BUILDINGS.

NOTES:-

1. USE FIGURED DIMENSIONS ONLY - DO NOT SCALE
2. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION

EXISTING CONSTRUCTION

ALL EXISTING CONSTRUCTION SHALL BE TREATED WITH THE UTMOST CARE WHEN WORK IS PROGRESSING IN THE VICINITY. ALL EXISTING BUILDING FABRIC TO BE REPAIRED LIKE WITH LIKE BY SKILLED TRADESPEROPLE WITH A KNOWLEDGE OF CONSERVATION WORK. THERE SHALL BE NO DECISIONS MADE REGARDING WORK TO THE EXISTING FABRIC UNTIL A CONSULTATION WITH THE ARCHITECT AND LOCAL CONSERVATION OFFICER.

NEW CONSTRUCTION

FOUNDATIONS:-
TO BE AUGERED PILES WITH CONCRETE PILE CAPS AND CONCRETE GROUND BEAMS CAST BETWEEN TO ENGINEER'S SPECIFICATION.

GROUND FLOOR:-
TO BE 50MM SELF LEVELING SCREED, SELF FINISHING, ON 75mm RIGID INSULATION ON BLOCK AND PLANK FLOOR MADE UP OF PRECAST CONCRETE T-BEAM UNITS, WITH HANSON THERMOFLITE FLOORING BLOCKS BETWEEN.

EXTERNAL WALLS:-
TO BE PRECAST, AND CRANED INTO PLACE. TO BE 85mm LENO TEC SOLID TIMBER WALL UNITS WITH 75MM WOOD FIBRE INSULATION BATTS, WATERPROOF MEMBRANE AND 15MM EUROFORM VERSAPANEL CLADDING BOARD.

INTERNAL WALLS:-
TO BE 85MM SOLID TIMBER WALLS SUPPLIED BY LENO TEC, SELF FINISHING ON THE INTERNAL SURFACES.
WHERE 60MIN FIRE RATING IS REQUIRED, TO BE FINISHED ON ONE SIDE WITH 15mm CEMENT FIBRE BOARD.

FIRST FLOOR:-
TO BE OF 115mm SOLID TIMBER SUPPLIED BY LENO TEC, SELF FINISHING.

ROOF:-
TO BE A FLAT ROOF OF CODE 4 LEAD. TO BE BUILT UP USING CODE 4 LEAD ON A WATERPROOF MEMBRANE ON 15mm MARINE PLYWOOD, ON 100x40mm TAPERED CEILING JOISTS WITH 75mm WOOD FIBRE INSULATION BETWEEN, ON 115mm SOLID TIMBER ROOF PANEL.

ROOFLIGHTS:-
TO BE TRIPLE GLAZED UNITS, 4.8x4.8m BUILD UP, SECURED BY BEING GLUED TO STEEL BRACKETS.

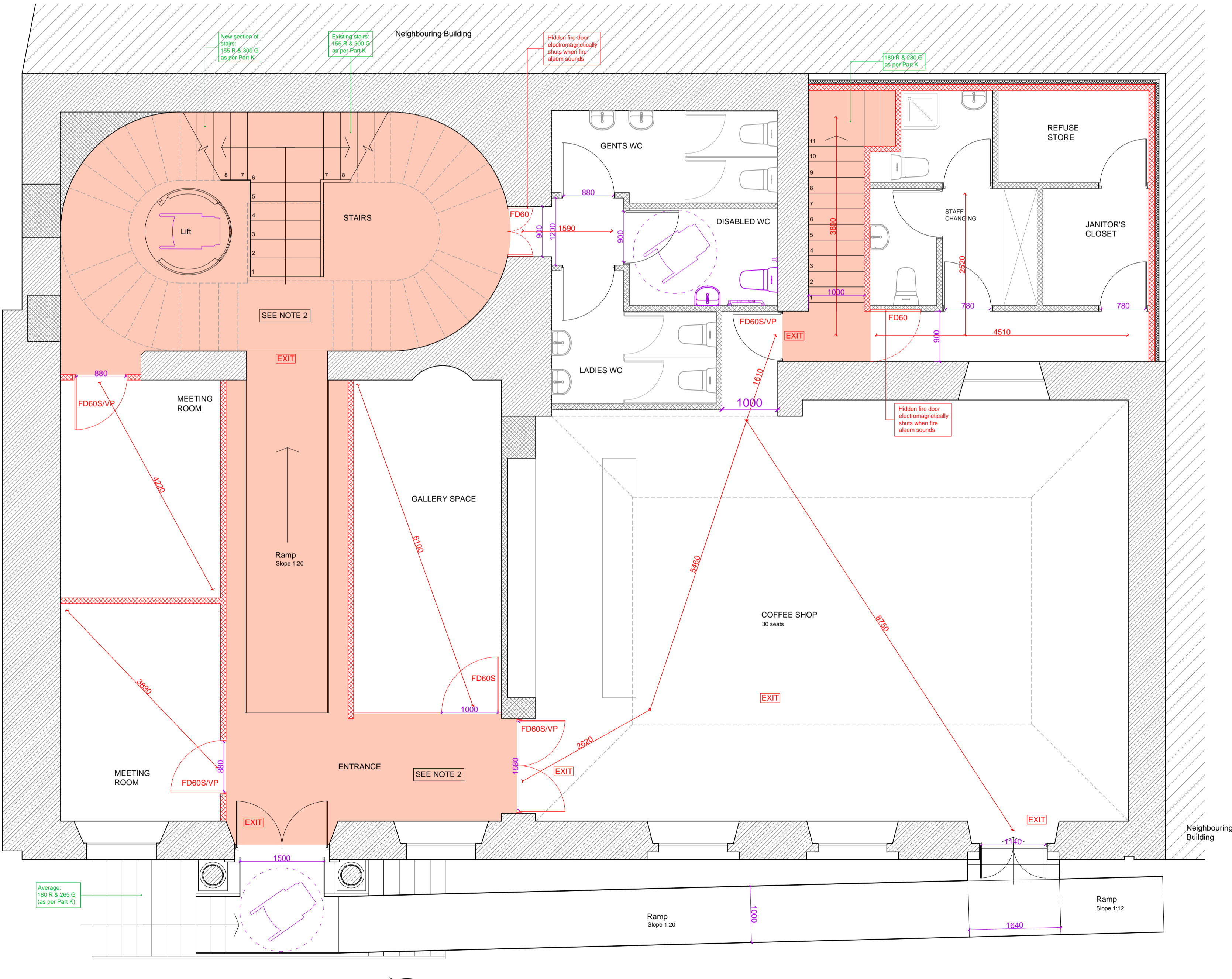
INTERNAL PARTITION WALLS WITHIN EXISTING STRUCTURE:-
ACCORDING TO THE LAMBETH HOUSING DOCUMENT, RECOMMENDED MATERIALS FOR SUSTAINABLE CONSTRUCTION, PC 4, THE RECOMMENDED FORM OF CONSTRUCTING PARTITIONS IS USING TMR STUD WALLS.
THESE ARE TO BE OF 60MIN FIRE RATING RESISTANCE AND MADE UP OF 15mm LIGHTWEIGHT PLASTER ON 10mm CEMENT PARTICLE BOARD AT 300mm CRS WITH 25mm DRY LINING SCREWS AT BUTT JOINTS, STAGGERED AT EACH SIDE; ON 75mmx50mm SOFTWOOD TIMBER STUDS AT 610mm CRS WITH 50MM MINERAL FIBRE INSULATION PACKED BETWEEN THE STUDS.

CODE 4 LEAD:-
CE 1 (AP)@300x6x4 D
- FOR USE ON FLAT/PITCHED ROOFING

REQUIRES:-
- PATINATION TREATMENT - AN APPLICATION OF OIL TO AVOID UNSIGHTLY RESIDUE BUILDING UP ON THE SURFACE
- CLIPS
- NAILS
- WOOD CORE ROLL
- GEOTEC UNDERLAY

LEGEND

- Existing Construction
- New Construction / Repaired
- Demolished/Removed



THE GUIDANCE:-

THE MATERIALS, METHODS OF CONSTRUCTION, STANDARDS AND OTHER SPECIFICATIONS (INCLUDING TECHNICAL SPECIFICATIONS) WHICH ARE REFERRED TO IN THIS DOCUMENT ARE THOSE WHICH ARE LIKELY TO BE SUITABLE FOR THE PURPOSES OF THE REGULATIONS. WHERE WORKS ARE CARRIED OUT IN ACCORDANCE WITH THE GUIDANCE IN THIS DOCUMENT, THIS WILL, PRIMA FACIE, INDICATE COMPLIANCE WITH PART B OF THE SECOND SCHEDULE OF THE BUILDING REGULATIONS. HOWEVER, THE ADOPTION OF AN APPROACH OTHER THAN THAT OUTLINED IN THE GUIDANCE IS NOT PRECLUDED PROVIDED THAT THE RELEVANT REQUIREMENTS OF THE REGULATIONS ARE COMPLIED WITH. THOSE INVOLVED IN THE DESIGN AND CONSTRUCTION OF A BUILDING MAY BE REQUIRED BY THE RELEVANT BUILDING CONTROL AUTHORITY TO PROVIDE SUCH EVIDENCE AS IS NECESSARY TO ESTABLISH THAT THE REQUIREMENTS OF THE BUILDING REGULATIONS HAVE BEEN COMPLIED WITH. IN THE CASE OF AN APPLICATION FOR A FIRE SAFETY CERTIFICATE UNDER THE BUILDING CONTROL REGULATIONS, IT IS NECESSARY TO DEMONSTRATE COMPLIANCE WITH PART B OF THE SECOND SCHEDULE TO THE BUILDING REGULATIONS.

EXISTING BUILDINGS:-

IN THE CASE OF MATERIAL ALTERATIONS OR CHANGES OF USE OF EXISTING BUILDINGS, THE ADOPTION OF THE GUIDANCE IN THIS DOCUMENT WITHOUT MODIFICATION MAY NOT, IN ALL CIRCUMSTANCES, BE APPROPRIATE. IN PARTICULAR, THE ADHERENCE TO GUIDANCE INCLUDING CODES, STANDARDS OR TECHNICAL SPECIFICATIONS, INTENDED FOR APPLICATION TO NEW WORK MAY BE UNDULY RESTRICTIVE OR IMPRACTICABLE. BUILDINGS OF ARCHITECTURAL OR HISTORICAL INTEREST ARE ESPECIALLY LIKELY TO GIVE RISE TO SUCH CIRCUMSTANCES. IN THESE SITUATIONS, ALTERNATIVE APPROACHES BASED ON THE PRINCIPLES CONTAINED IN THE DOCUMENT MAY BE MORE RELEVANT AND SHOULD BE CONSIDERED.

TECHNICAL SPECIFICATIONS:-

BUILDING REGULATIONS ARE MADE FOR SPECIFIC PURPOSES, E.G. TO PROVIDE, IN RELATION TO BUILDINGS, FOR THE HEALTH, SAFETY AND WELFARE OF PERSONS, THE CONSERVATION OF ENERGY AND ACCESS FOR PEOPLE WITH DISABILITIES. TECHNICAL SPECIFICATIONS (INCLUDING HARMONISED EUROPEAN STANDARDS, EUROPEAN TECHNICAL APPROVALS, NATIONAL STANDARDS AND CEI/TOV CERTIFICATES) ARE RELEVANT TO THE EXTENT THAT THEY RELATE TO THESE CONSIDERATIONS. ANY REFERENCE TO A TECHNICAL SPECIFICATION IS A REFERENCE TO SO MUCH OF THE SPECIFICATION AS IS RELEVANT IN THE CONTEXT IN WHICH IT ARISES. TECHNICAL SPECIFICATIONS MAY ALSO ADDRESS OTHER ASPECTS NOT COVERED BY THE REGULATIONS.

A REFERENCE TO A TECHNICAL SPECIFICATION IS TO THE LATEST EDITION (INCLUDING ANY AMENDMENTS, SUPPLEMENTS OR ADDENDA) CURRENT AT THE DATE OF PUBLICATION OF THIS TECHNICAL GUIDANCE DOCUMENT. HOWEVER, IF THIS VERSION OF THE TECHNICAL SPECIFICATION IS SUBSEQUENTLY REVISED OR UPDATED BY THE ISSUING BODY, THE NEW VERSION MAY BE USED AS A SOURCE OF GUIDANCE PROVIDED THAT IT CONTINUES TO ADDRESS THE RELEVANT REQUIREMENTS OF THE REGULATIONS.

LEGEND

- TGD B - Fire
- TGD K - Stairs/Ramps
- TGD M - Universal Access
- EXIT Location of Exit Signs
- FD60S Fire door; 60mins fire rating; self closing
- FD60S/VP Fire door; 60mins fire rating; self closing; vision panel

from TGD B - Fire Safety, pg 2-3

No.	DATE	REMARKS

Institute of Technology, Carlow
Architectural Technology Year 4
2009-2010

Project Two - Conservation

DRAWING TITLE
Application of Building Regulations

LECTURER:
Allan Read, Dan O'Sullivan

DRAWN: Eric Stilwell **CHECKED:**

SCALE: As Shown **DATE:** 16.12.2009

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