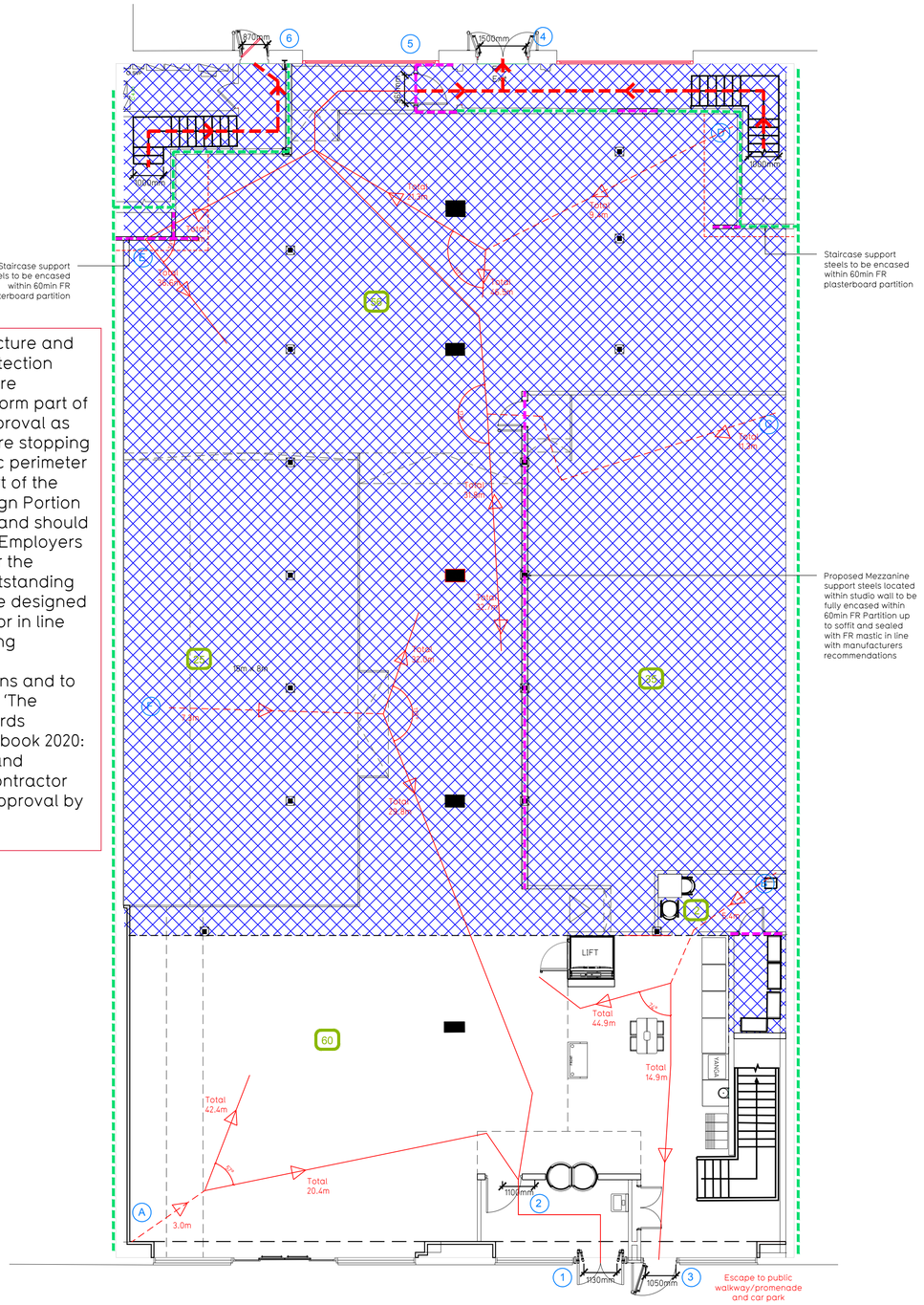
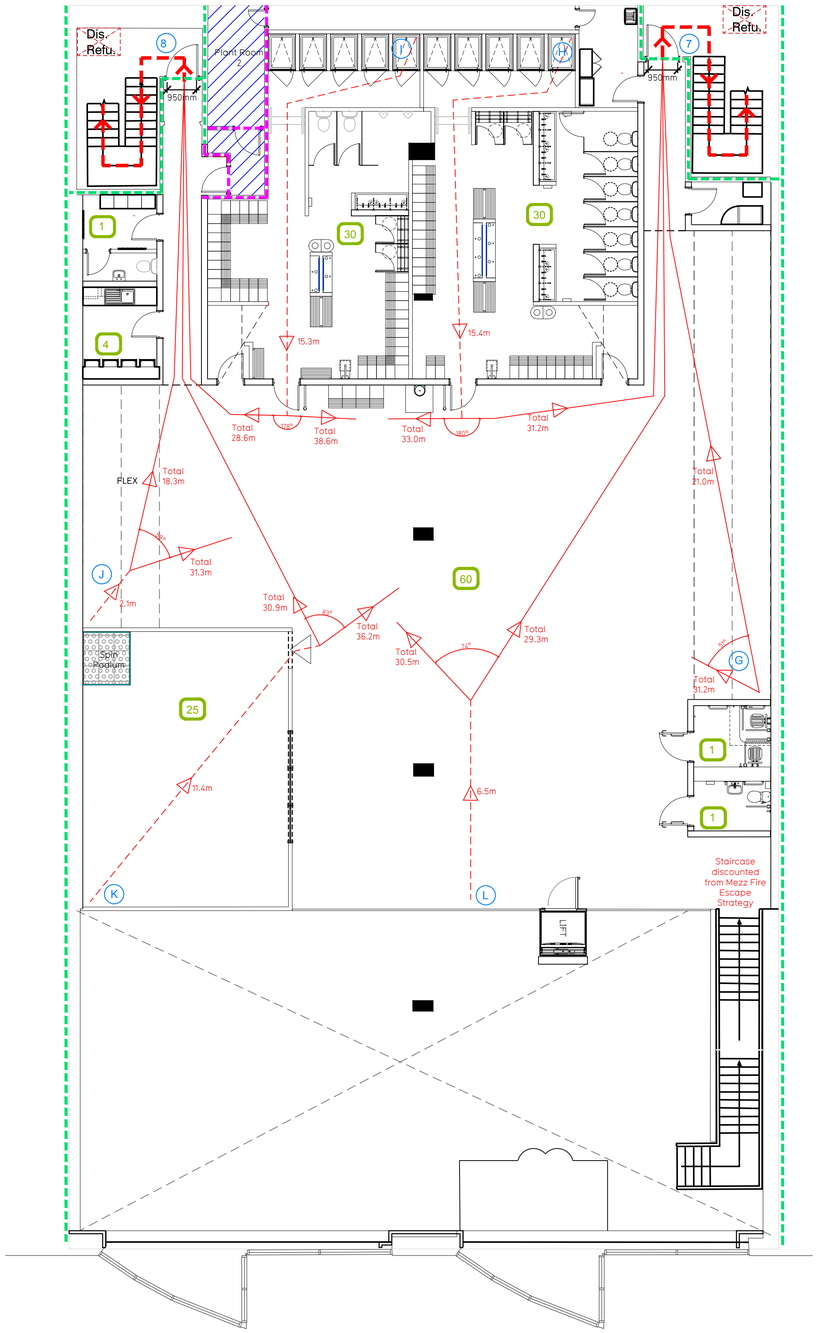
Mezzanine structure and passive fire protection details shown are indicative and form part of the warrant approval as the principle. Fire stopping and site specific perimeter details form part of the Contractor Design Portion of the contract and should be used as the Employers Requirement for the design. Any outstanding details are to be designed by the contractor in line with the boarding manufacturers recommendations and to be compliant to 'The Building standards Technical Handbook 2020: Non Domestic' and submitted as Contractor Proposals for approval by the Employer.





NOTE:

- Proposals must comply with all acoustic, fire & building regulation requirements
- No dimensions are to be scaled from this drawing. The contractor is responsible for checking all dimensions on site

Escape Route Widths

In line with Section 2.9.8 of the Technical Handbook - Non Domestic, the aggregate unobstructed width in mm of all escape routes from a room, or storey, should be at least 5.3 x the occupancy capacity of the room or storey.

Ground Floor

Aggregate Clear Opening Width of Escape Routes Calculation:
Exit 1 = 1130mm - Shares route with exit 2 and is wider (not included)
Exit 2 = 1100mm
Exit 3 = 1050mm
Exit 4 = 1500mm - Shares route with exit 6 and is wider (not included)
Exit 5 = 965mm
Exit 6 = 870mm - Serves only first floor (not included)

Total Aggregate Width for Storey 3,115mm (Less Largest Opening Width 1100mm) = 2,015mm

Ground Floor Maximum Occupancy Capacity = 2,015 / 5.3 = 380 people

First Floor

Aggregate Clear Opening Width of Escape Routes Calculation:
Exit 7 = 950mm*
Exit 8 = 950mm* (Restricted by Exit 6 (which is located on GF and is 870mm)

*Exits 7 and 8 both are each served by separate staircases that are 1000mm wide.

Total Aggregate Width for Storey 1,820mm (Less Largest Opening Width 950mm) = 870mm

First Floor Maximum Occupancy Capacity = 870 / 5.3 = 163 people.

The maximum escape capacity of the combined floors however is determined by the final exit on the ground floor being 380 people. The target and stated occupancy of the gym is 330 people, and is therefore thought to be meet with Section 2.9.8 of the Technical Handbook.

Escape Distance and Angle of Divergence

Position A
Total escape distance to Exit 1 via 2 = 20.4m
Distance before divergence is 3m
A.O.D to be > (2.5 X 3)+45 = 57°
Drawn A.O.D = 47° thus complies

Position B
Total escape to Exit 3 = 14.9m
Distance before divergence is 5.4m
A.O.D to be > (2.5 X 6.7)+45 = 58.5°
Drawn A.O.D = 74° thus complies

Position C
Total escape to Exit 5 via 6 = 27.6m
Distance before divergence is 11.3m
A.O.D to be > (2.5 X 11.3)+45 = 74.5°
Drawn A.O.D = 178° thus complies

Position D
Total escape to Exit 5 via 6 = 21.3m
Distance before divergence is 9.4m
A.O.D to be > (2.5 X 9.4)+45 = 67.56°
Drawn A.O.D = 85° thus complies

Position E
Total escape to Exit 5 and 6 = 11.4m
Distance before divergence is 0m
A.O.D to be > (2.5 X 0)+45 = 45°
Drawn A.O.D = 77° thus complies

Position F
Escape to Exit 1 and 2 = 29.8m
Distance before divergence is 7.3m
A.O.D to be > (2.5 X 7.3)+45 = 63.25°
Drawn A.O.D = 139° thus complies

Position G
Escape to Exit 5 via 9 = 21.0m
Distance before divergence is 0m
A.O.D to be > (2.5 X 0)+45 = 45°
Drawn A.O.D = 51° thus complies

Position H
Total escape to Exit 5 via 9 = 31.2m
Distance before divergence is 15.4m
A.O.D to be > (2.5 X 15.4)+45 = 83.5°
Drawn A.O.D = 180° thus complies

Position I
Total escape to Exit 7 via 10 = 28.6m
Distance before divergence is 15.3m
A.O.D to be > (2.5 X 15.3)+45 = 83.25°
Drawn A.O.D = 178° thus complies

Position J
Total escape to Exit 5 via 9 = 18.3m
Distance before divergence is 2.1m
A.O.D to be > (2.5 X 2.1)+45 = 50.25°
Drawn A.O.D = 59° thus complies

Position K
Total escape to Exit 7 via 10 = 30.9m
Distance before divergence is 11.4m
A.O.D to be > (2.5 X 11.4)+45 = 73.5°
Drawn A.O.D = 83° thus complies

Position L
Total escape to Exit 5 via 9 = 29.3m
Distance before divergence is 6.5m
A.O.D to be > (2.5 X 6.5)+45 = 61.25°
Drawn A.O.D = 74° thus complies

Fire Evacuation Key

- Existing wall to achieve min 30 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor.
- Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor.
- New wall to achieve min of 30min fire rating.
- New wall to achieve min of 60min fire rating.
- Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant construction.
- Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.
- 30 — Occupancy level within area.
- Fire Escape Route.
- 1050 mm — Minimum Clear Widths.
- 2 — Exit No.
- B — 'Escape from' location for travel distance calculation.
- Travel within a 60min protected escape Route.

Fire Alarm
Fire Alarm designed and installed to BS 5839. Smoke & heat detection / emergency lighting by specialist. Please refer to M&E engineer's drawings / specifications, provided at Stage 2.

Escape Lighting
Emergency escape lighted designed and installed in accordance with BS 5266: Part 1. Please refer to M&E Engineer's drawings for final layout and specification provided at Stage 2.

Rev	Date	Description	Drawn/ Checked
E	24.09.21	Amendments inline with revised GA-K	IR/PG
D	31.08.21	GA amended.	EK/PG
C	26.08.21	GA amended, Fire resistance indicated on walls. construction Issue.	EK/PG
B	15.07.21	Tender Issue.	EK/PG

PROJECT TITLE
Craigleith Retail Park
S Groathill Ave, Edinburgh, EH4 2LN

DRAWING TITLE
Fire Evacuation Plan
Ground and Mezzanine Floor Plans

DRAWN / CHECKED	DATE	SCALE	JOB No	DRAWING No	Rev
RSP/EK	17.06.21	1:100 @ A1	0906	003 - FEP	

DRAWING PURPOSE: CONSTRUCTION — E

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