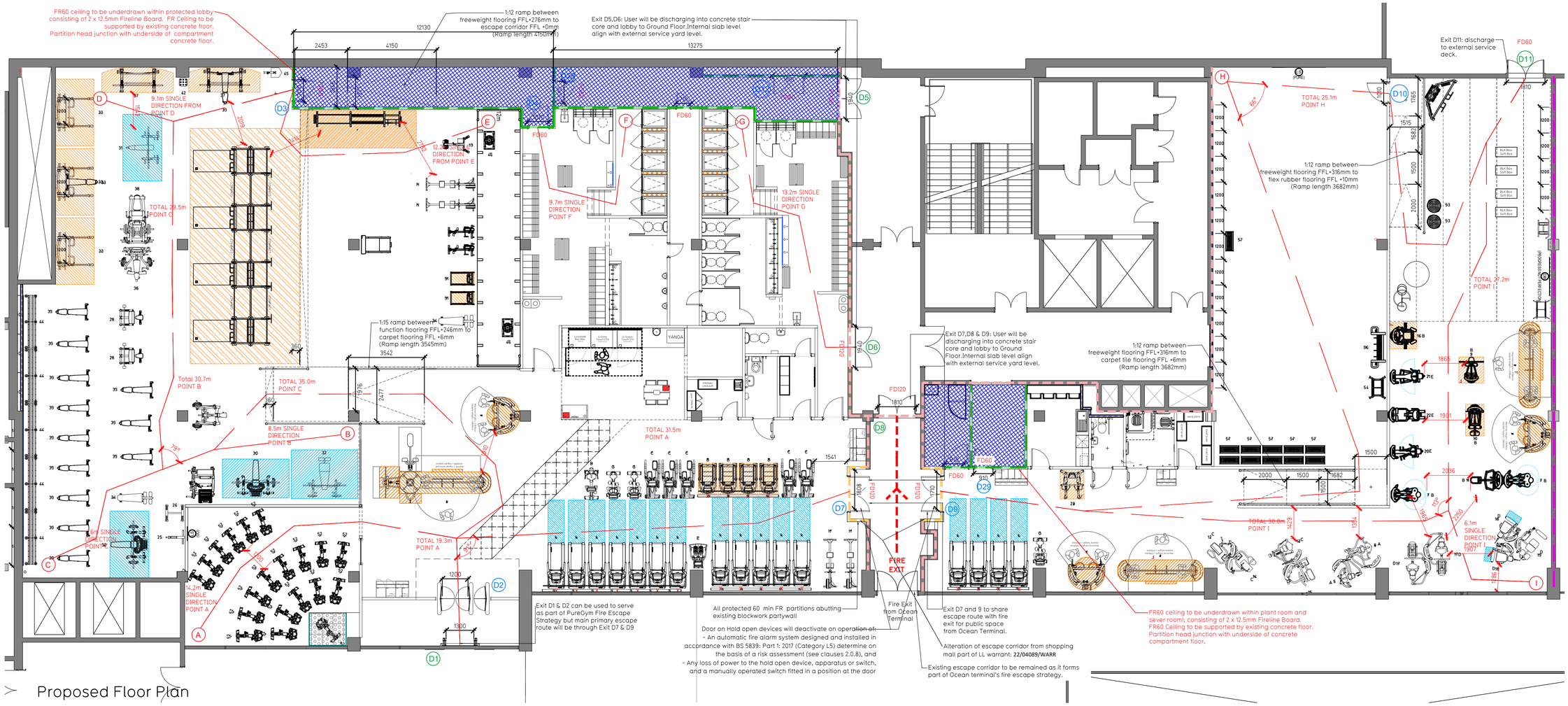
Note: All existing support steel beams are painted in Cafio Mandolite CP2 Spray o achieve R120 Fire resistance.

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



Proposed Floor Plan

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:
Final Fire Exit D1 clear opening width = 1300mm but is limited by D2 clear opening width = 1060mm (allows 222 persons to escape)
Final Fire Exit D5 clear opening width = 1940mm but is limited by D3 and D4 both have same clear opening width = 1010mm (allows 220 persons to escape)
Final Fire Exit D6 clear opening width = 1940mm (allows 398 persons to escape)
Final Fire Exit D8 clear opening width = 1810mm but is limited by D7 and D9 both have same clear opening width = 1710mm (allows 352 persons to escape)
Final Fire Exit D11 clear opening width = 1810mm (allows 372 persons to escape)

Total Aggregate Width for Ground Floor (Less Largest Opening Width of 1940mm from D6) = 5590mm
Ground Floor Maximum Occupancy Capacity = Total Aggregate Width for Ground Floor (Less Largest Opening Width of 1940mm from DR6) = 5590/ 5.3 = 1055 people

Combined Occupancy Provision

Ground floor maximum occupancy:	1055
Total occupancy provision:	1055

Based on PG existing occupancy data of comparable sites, the peak occupancy of a Pure Gym at this size will be unlikely to exceed 242 people, This is smaller than the max. no of 1055 persons (see calculation above). Therefore thought to meet with the Section 2.9 of Technical Handbook - Non Domestic.

It is important to note that 242 people is the peak occupancy figure, Pure Gym Ocean Terminal's average occupancy during everyday operation will likely be approx. 50% lower than peak hour occupancy .

The peak occupancy of 242 people derives from the vast amount of data collected via 340+ Pure Gyms of comparable size; data collection is conducted through access control ironmongery at turnstiles and can be viewed on Pure Gym app and website.

Escape Distance and Angle of Divergence

Position A
Total escape distance to nearest Final Exit **D1 = 21.6** m
Distance before divergence is **14.4** m
A.O.D to be > (2.5 X **14.4**)+45 = **81°**
Drawn A.O.D = **89°** thus complies

Position B
Total escape to nearest Final Exit **D1** = 13.5m
The total escape distance is less than 15m and thus complies.

Position C
Total escape distance to nearest Final Exit D3 = **28.9** m
Distance before divergence is **4.6** m
A.O.D to be > (2.5 X **4.6**)+45 = **56.5°**
Drawn A.O.D = **69°** thus complies

Position D
Total escape to nearest Final Exit **D5 = 12.2** m
The total escape distance is less than 15m and thus complies.

Position E
Total escape distance to nearest Final Exit **D3 = 12.2** m
The total escape distance is less than 15m and thus complies.

Position F
Total escape to nearest Final Exit **D5 = 9.7** m
The total escape distance is less than 15m and thus complies.

Position G
Total escape to nearest Final Exit **D6 = 13.2** m
The total escape distance is less than 15m and thus complies.

Position H
Total escape distance to nearest Final Exit **D11 = 25.1** m
Total escape distance to secondary exit **D9 = 39.7** m

Position I
Total escape distance to nearest Final Exit **D11 = 27.2** m
Distance before divergence is **6.1** m
A.O.D to be > (2.5 X **6.1**)+45 = **60.25°**
Drawn A.O.D = **113°** thus complies

Fire Evacuation Key

FD30	Existing wall to achieve min 30 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor		Fire Escape Route		Existing wall to achieve min 120 minute fire rating
FD60	Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor	1050 min	Minimum Clear Widths		New wall to achieve min of 60min fire rating
FD30	New wall to achieve min of 30min fire rating	0	Exit No.		
FD60	New wall to achieve min of 60min fire rating		Shared Escape Route		
	Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant construction.	FD30	Fire Door Rating		
	Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.				

Sprinklers
System design and installed in compliance with BS EN 12845:2015 & LPC Technical Bulletins

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.

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.

Smoke Extract
Smoke Extract System to be designed and installed in accordance with BS 7346: Part 8. Please refer to M&E Engineer's drawings for final layout and specificaion.

Escape Signage and emergency lighting is CDP under the M&E specification. Details of contractors proposals to be provided to Building Control Approved Inspector and Fire Officer within the Contractors Proposals Package, Clause 1.4

Rev	Date	Description	Drawn/ Checked

PROJECT TITLE	DRAWING TYLE
Ocean Terminal Ocean Terminal Shopping Centre, EH6 6JJ	Fire Evacuation Plan Floor Plan

DRAWN / CHECKED	DATE	SCALE	JOB No	DRAWING No
SK/KL	26.10.23	1:100 @ A1	2208	003-FEP

DRAWING PURPOSE	Rev
CONSTRUCTION	C00

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