

KEY

GA 6501H linework (architect plan, PDF layers)

scan walls band 1.0-1.5 m AFF (as-built)

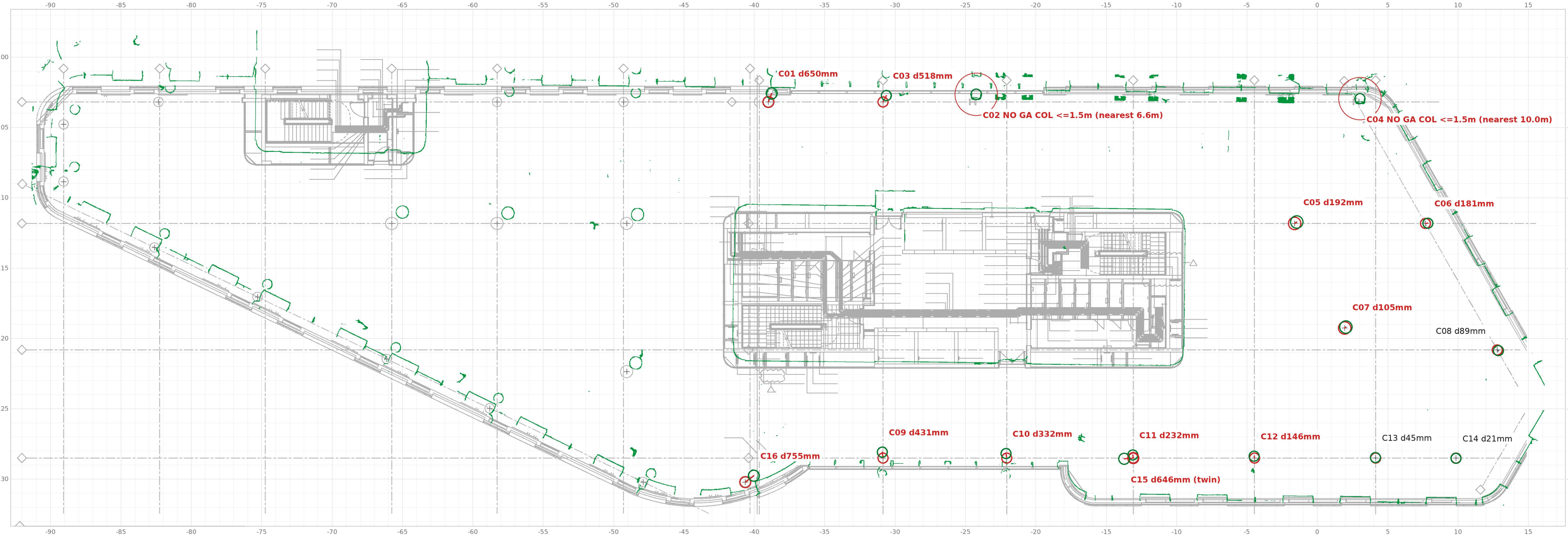
scan column (circle = measured dia)

nearest GA column (red ring) + delta tick

GA column position (cross, all 27)

red 1.5 m circle = NO GA column inside it

L3 VERIFICATION — SCAN AS-BUILT OVER GA 6501H (project grid, mm)



COLUMN FIT TABLE — scan vs GA (project mm)

ID	scan E	scan N	d GA	note
C01	-38774	-102585	650	> 100mm
C02	-24232	-102643	6643	NO GA COL <=1.5m (nearest 6.6m)
C03	-30630	-102726	518	> 100mm
C04	3032	-102944	10027	NO GA COL <=1.5m (nearest 10.0m)
C05	-1457	-111719	192	> 100mm
C06	7858	-111812	181	> 100mm
C07	2019	-119185	105	> 100mm
C08	12863	-120860	89	
C09	-30910	-128079	431	> 100mm
C10	-22115	-128178	332	> 100mm
C11	-13110	-128277	232	> 100mm
C12	-4493	-128362	146	> 100mm
C13	4129	-128463	45	
C14	9844	-128523	21	
C15	-13725	-128551	646	twin - shares GA col with C11
C16	-40040	-129761	755	> 100mm

SUMMARY

scan columns validated: 16 GA column file: 56 rows -> 27 unique positions

matched <=1.5 m: 14/16 raw delta median 212 mm, max 755 mm (all 16: median 282 mm)

registration residual: -60 mm (5 tie pairs only)

rigid re-fit (13 pairs): rotation +0.57 deg + shift (-104,-220) mm about centroid

after removing trend: median 54 mm, 12/13 within 130 mm; worst C16 591 mm

A/B on the whole cloud: de-rotating ALL 595k wall-band points drops

median dist to GA linework 150 mm -> 25 mm (one voxel)

wall fit as-registered: N-east 105 / NE-rake 25 / S-east 75 / S-mid 200 mm median

N-west 380 / SW-rake 455-510 mm median (west swings N)

wall fit de-rotated: same zones all fall to 0-240 mm median

VERDICT

AS-BUILT vs GA: columns median d282mm (all 16), max d755mm (14 matched) — NOT a ~60mm cluster: the fit as registered EXCEEDS survey registration tolerance.

BUT the misfit is ONE GLOBAL TREND: +0.57deg rotation + (-104,-220)mm shift. Column deltas grow linearly westward (C14 21mm -> C09 431mm -> C16 755mm) and the wall band does the same. De-rotating the ENTIRE cloud drops wall-to-GA distance 150mm -> 25mm median: the as-built FITS THE GA FORM — the residual rotation lives in the scan registration (5 tie pairs, under-constrained over a 107m plate).

After the trend: 12/13 columns within 130mm (median 54mm ~ registration residual); C16 stays 591mm out — CHECK.

FLAG: C02 + C04 (N edge) are real as-built columns with NO GA column within 1.5m (nearest 6.6m / 10.0m).

C15 is a TWIN column 0.67m from C11 where the GA shows ONE column — also not on GA 6501H.

Perimeter: N-east/NE/S/E-point runs sit ON the GA (25-105mm median); west end swings N progressively — N-west 380mm, SW rake 455-510mm — the rotation signature, largest at the west tip.

Core walls read ~0.2-0.4m proud of GA core lines all round — linings/build-out, not displacement.

RECOMMEND: re-register on >=3 well-spread targets before any dimensional sign-off from this overlay.

ASANA FIT-OUT — AS-BUILT FROM LASER SCAN

L3 AS-BUILT FIT CHECK vs GA 6501H

SHEET ASA-SCAN-L03-FIT-01

SCALE 1:200 @ A1

DATE 2026-07-02

Source: site laser scan (E57). Registered to Metec/GA project grid, residual ~60mm. Points are as-scanned; absence of points != absence of kit (occlusion).

