

FAIRWAY ENGINEERING LLC

Land Development-Geotechnical-Structural

28525 Beck Road, Suite 124

Wixom, MI 48393

June 6, 2021

Fabio Giske

Facilities Director | Princeton Management
2550 Telegraph rd., Suite 200 | Bloomfield Hills, MI 48302
Main: (248) 683-2500 | Fax: (248) 633-2390
E-mail: f.giske@prinmgmt.com

Re: Sidewalk Repair Review
Claridge
1514 Washington Blvd
Detroit, MI

Dear Mr. Giske:

Per your request, we visited the above referenced site on June 2nd, 2021. The purpose of the site visit to review sidewalk repair location and support under the sidewalk. Attached are some photographs of the site taken during site visit. Previously we had visited the same site in 2019 and prepared a support plan for the sidewalk which is attached.

The sidewalk is supported by glass and steel framing from the original building construction. Under the sidewalk the building basement is extended. Overtime the surface material/asphalt patches have deteriorated. Current plan is to repair and recap the sidewalk. Recap consist of cleaning the area, remove asphalt debrie and repatch with concrete.

In 2019 we had prepared a plan to support the sidewalk framing from underside as additional support system (to the original framing system). Attached are calculation of r the steel beam and support columns. The columns are supported or either existing concrete platform for utilities and/or floor slab of the building. The maximum spacing of the posts is 8 feet and carry partial load from the sidewalk. The system was installed in 2019 with steel plate and beams and columns per plan.

Based on current field condition review, the column bases are in same condition and adequate for the purpose as it installed. The beams were designed to carry full concrete sidewalk load. Since the original framing is integral to the building foundation and to exterior wall along the sidewalk, it is planned to leave in place, clean up the damaged areas, recap the damaged asphalt with concrete. Based on the field conditions observed and our calculations, it is our opinion that current plan for sidewalk recap is adequate with leaving support system in place.

This report is based on the field observations made during site visit and information gathered from the site and verbal information provided to us. The information provided in this report addresses the limited objectives related to the inspection of the subject property and provide documentation. This report describes the conditions present at the time of report preparation and is based upon the observations made. This report is not intended to fully delineate or document every defect or deficiency throughout the subject property. If any additional information or evidence becomes available at later date, Fairway Engineering LLC reserves the right to amend this report and modify our recommendations as necessary at additional cost. If you have any questions or need additional information, please contact us.

Sincerely,

FAIRWAY ENGINEERING LLC



Madhukar D. Mahajan, P.E.
President/Owner



Enclosures:

Site Photographs, beam calculations, drawing of the support system.

1514 WASHINGTON BLVD
DETROIT, MI









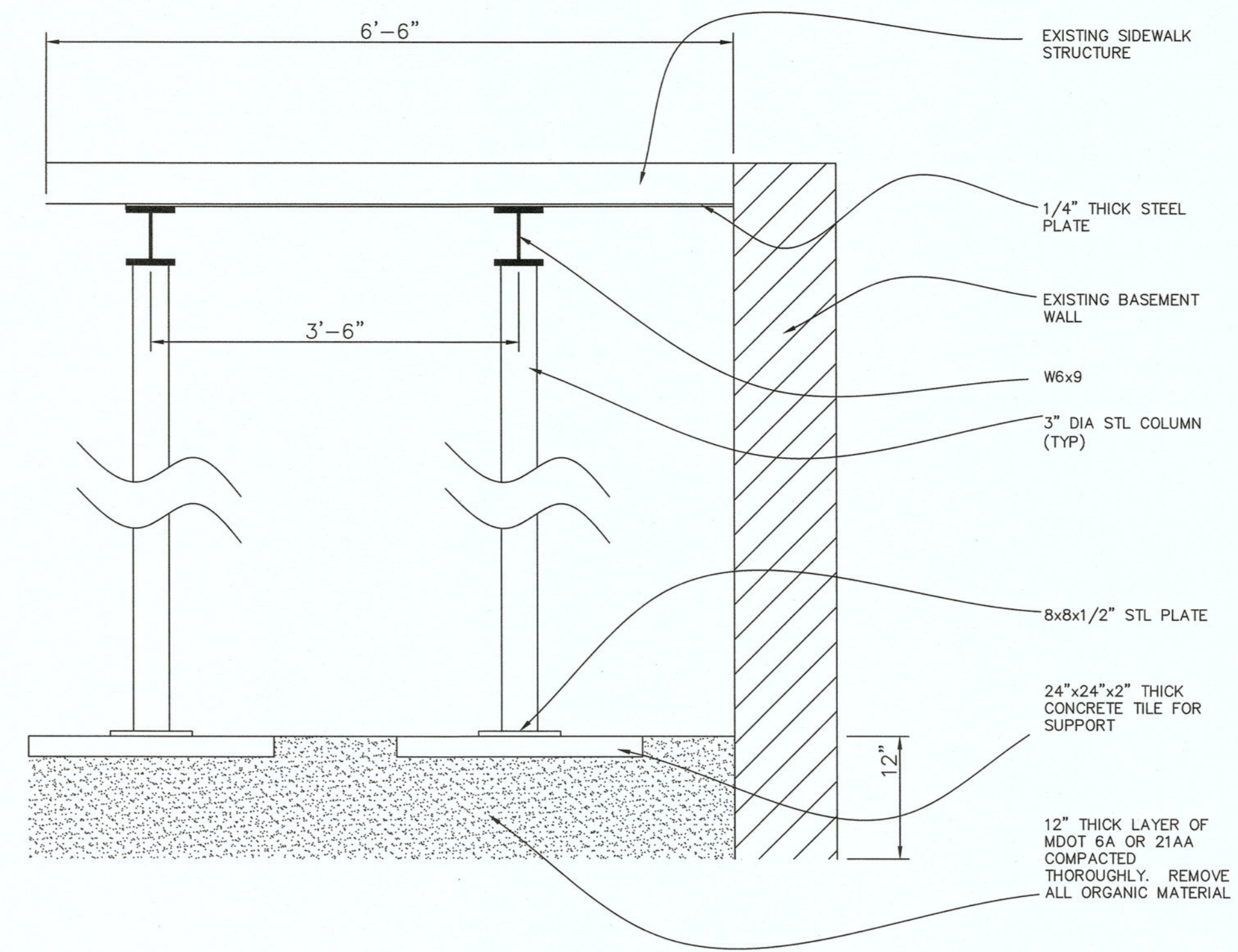




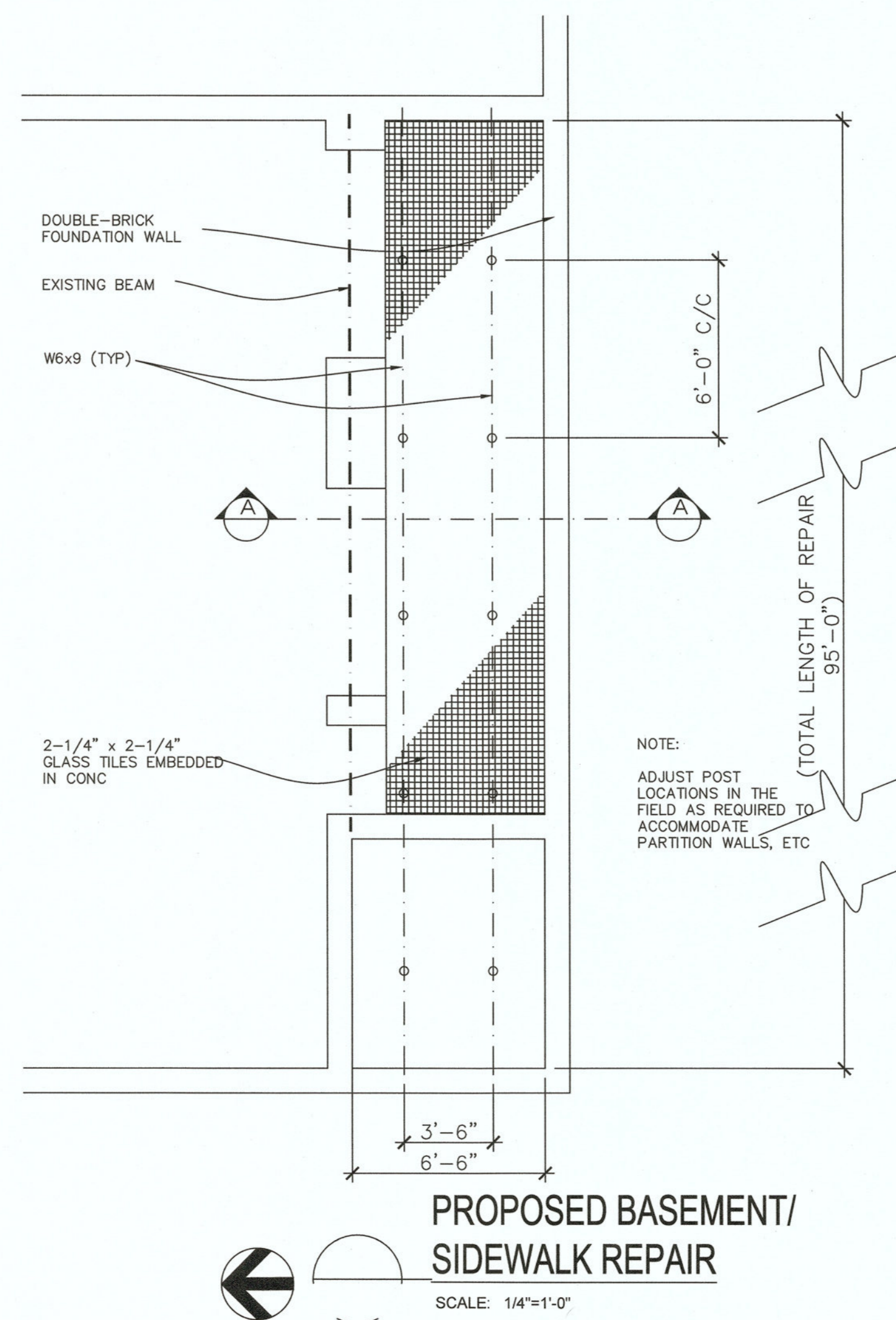
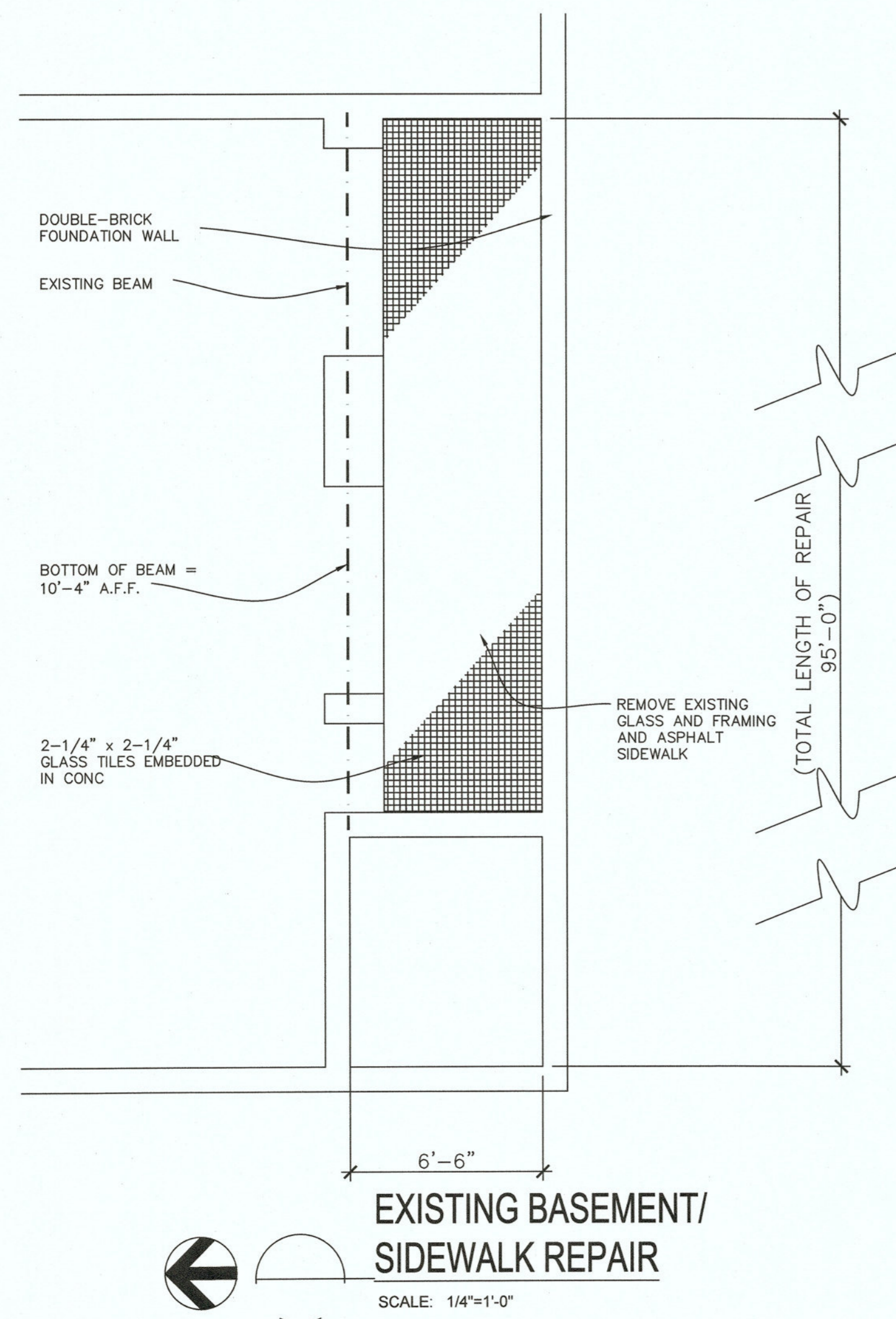




WALL LEGEND	
EXISTING WALL	
DEMOLITION WALL	
NEW WALL	
BRICK	
MASONRY BLOCK	



TYPICAL CROSS SECTION OF SIDEWALK DECK
SCALE: 1"=1'-0"



REVISIONS		
NO.	DATE	ADDENDUM/BULLETIN

A PROPOSED INTERIOR RENOVATION FOR:
THE CLARIDGE APARTMENTS
1514 WASHINGTON BLVD
DETROIT, MICHIGAN 48226

ZACK M OSTROFF & ASSOCIATES
RESIDENTIAL COMMERCIAL DESIGNER/PLANNER
MEMBER AIA/IBD
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THIS DRAWING AS AN INSTRUMENT OF SERVICE IS AND SHALL REMAIN THE PROPERTY OF THE DESIGNER AND SHALL NOT BE USED IN ANY WAY WITHOUT THE PERMISSION OF THE DESIGNER.
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE SITE BEFORE PROCEEDING WITH EACH PHASE OF HIS WORK.

SHEET TITLE
PROPOSED BASEMENT SIDEWALK REPAIR
DETAIL

SHEET SCALE
AS NOTED
PROJECT NO.
18-039
DATE
04.24.19
SHEET NUMBER
A-1



Steel Beam

Lic. #: KW-06007140

Licensee: FAIRWAY ENGINEERING, LLC.

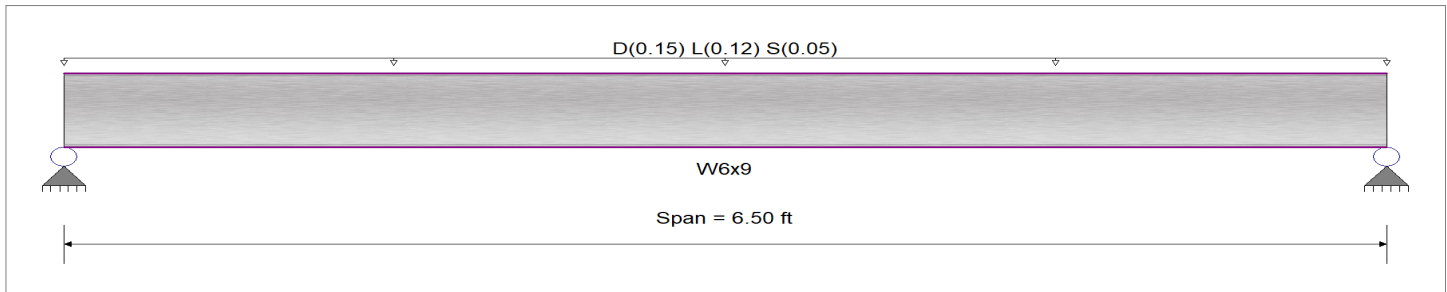
Description: DECK BEAM

CODE REFERENCES

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10
Load Combination Set: ASCE 7-10

Material Properties

Analysis Method: Allowable Strength Design
Beam Bracing: Beam is Fully Braced against lateral-torsional buckling
Bending Axis: Major Axis Bending
Fy: Steel Yield: 36 ksi
E: Modulus: 29,000.0 ksi



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading

Uniform Load: D = 0.0750, L = 0.060, S = 0.0250 ksf, Tributary Width = 2.0 ft, (Side walk load)

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.135 : 1	Maximum Shear Stress Ratio =	0.064 : 1
Section used for this span	W6x9	Section used for this span	W6x9
Ma: Applied	1.514 k-ft	Va: Applied	0.9315 k
Mn / Omega: Allowable	11.192 k-ft	Vn / Omega: Allowable	14.443 k
Load Combination	+D+0.750L+0.750S+H	Load Combination	+D+0.750L+0.750S+H
Location of maximum on span	3.250 ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
Maximum Deflection			
Max Downward Transient Deflection	0.010 in	Ratio =	7,661 >=360
Max Upward Transient Deflection	0.010 in	Ratio =	7,661 >=360
Max Downward Total Deflection	0.024 in	Ratio =	3208 >=180
Max Upward Total Deflection	0.000 in	Ratio =	0 <180

Maximum Forces & Stresses for Load Combinations

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
+D+H	Dsgn. L = 6.50 ft	1	0.075	0.036	0.84		0.84	18.69	11.19	1.00	1.00	0.52	21.66	14.44
+D+L+H	Dsgn. L = 6.50 ft	1	0.132	0.063	1.47		1.47	18.69	11.19	1.00	1.00	0.91	21.66	14.44
+D+Lr+H	Dsgn. L = 6.50 ft	1	0.075	0.036	0.84		0.84	18.69	11.19	1.00	1.00	0.52	21.66	14.44
+D+S+H	Dsgn. L = 6.50 ft	1	0.099	0.047	1.10		1.10	18.69	11.19	1.00	1.00	0.68	21.66	14.44
+D+0.750Lr+0.750L+H	Dsgn. L = 6.50 ft	1	0.118	0.056	1.32		1.32	18.69	11.19	1.00	1.00	0.81	21.66	14.44
+D+0.750L+0.750S+H	Dsgn. L = 6.50 ft	1	0.135	0.064	1.51		1.51	18.69	11.19	1.00	1.00	0.93	21.66	14.44
+D+0.60W+H	Dsgn. L = 6.50 ft	1	0.075	0.036	0.84		0.84	18.69	11.19	1.00	1.00	0.52	21.66	14.44
+D+0.70E+H	Dsgn. L = 6.50 ft	1	0.075	0.036	0.84		0.84	18.69	11.19	1.00	1.00	0.52	21.66	14.44
+D+0.750Lr+0.750L+0.450W+H	Dsgn. L = 6.50 ft	1	0.118	0.056	1.32		1.32	18.69	11.19	1.00	1.00	0.81	21.66	14.44
+D+0.750L+0.750S+0.450W+H	Dsgn. L = 6.50 ft	1	0.135	0.064	1.51		1.51	18.69	11.19	1.00	1.00	0.93	21.66	14.44
+D+0.750L+0.750S+0.5250E+H	Dsgn. L = 6.50 ft	1	0.135	0.064	1.51		1.51	18.69	11.19	1.00	1.00	0.93	21.66	14.44
+0.60D+0.60W+0.60H	Dsgn. L = 6.50 ft	1	0.045	0.021	0.50		0.50	18.69	11.19	1.00	1.00	0.31	21.66	14.44

Steel Beam

Lic. # : KW-06007140

Licensee : FAIRWAY ENGINEERING, LLC.

Description : DECK BEAM

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
+0.60D+0.70E+0.60H	Dsgn. L = 6.50 ft	1	0.045	0.021	0.50		0.50	18.69	11.19	1.00	1.00	0.31	21.66	14.44

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+0.750L+0.750S+0.5250E+H	1	0.0243	3.269		0.0000	0.000

Vertical Reactions

Load Combination	Support 1	Support 2
Overall MAXimum	0.932	0.932
Overall MINimum	0.163	0.163
+D+H	0.517	0.517
+D+L+H	0.907	0.907
+D+Lr+H	0.517	0.517
+D+S+H	0.680	0.680
+D+0.750Lr+0.750L+H	0.810	0.810
+D+0.750L+0.750S+H	0.932	0.932
+D+0.60W+H	0.517	0.517
+D+0.70E+H	0.517	0.517
+D+0.750Lr+0.750L+0.450W+H	0.810	0.810
+D+0.750L+0.750S+0.450W+H	0.932	0.932
+D+0.750L+0.750S+0.5250E+H	0.932	0.932
+0.60D+0.60W+0.60H	0.310	0.310
+0.60D+0.70E+0.60H	0.310	0.310
D Only	0.517	0.517
Lr Only		
L Only	0.390	0.390
S Only	0.163	0.163
W Only		
E Only		
H Only		

Support notation : Far left is #1

Values in KIPS