NOTICE OF DECISION

PLANNING DIVISION
555 LIBERTY ST. SE, RM 305
SALEM, OREGON 97301
PHONE: 503-588-6173
FAX: 503-588-6005

CITY OF Salem AT YOUR SERVICE

Si necesita ayuda para comprender esta informacion, por favor llame 503-588-6173

DECISION OF THE PLANNING ADMINISTRATOR

HISTORIC DESIGN REVIEW CASE NO.: HIS19-26

APPLICATION NO.: 19-113322-DR

NOTICE OF DECISION DATE: SEPTEMBER 27, 2019

SUMMARY: A proposal to replace the porch posts, handrails, and guardrail on the front porch of the exterior of the Chemeketa Street Evangelical Church (1894).

REQUEST: Minor Historic Design Review of a proposal to replace the porch posts and railing on exterior of the Chemeketa Street Evangelical Church (1894), a historic contributing resource in the Court Chemeketa Historic District in the RD (Duplex Residential District) zone, and located at 270 17th Street NE - 97301 (Marion County Assessor Map and Tax Lot Number: 073W26AC01300).

APPLICANT: Janet Strauch

LOCATION: 270 17th St NE

CRITERIA: Salem Revised Code (SRC) Chapter 230.025(d)

FINDINGS: The findings are in the attached Decision dated September 27, 2019.

DECISION: The **Historic Preservation Officer,** a Planning Administrator designee, **APPROVED** Historic Design Review HIS19-26 based upon the application materials deemed complete on September 19, 2019 and the findings as presented in this report.

This Decision becomes effective on October 15, 2019. No work associated with this Decision shall start prior to this date unless expressly authorized by a separate permit, land use decision, or provision of the Salem Revised Code (SRC).

The rights granted by the attached decision must be exercised, or an extension granted, by October 15, 2021 or this approval shall be null and void.

Application Deemed Complete:	September 19, 2019
Notice of Decision Mailing Date:	September 27, 2019
Decision Effective Date:	October 15, 2021
State Mandate Date:	January 17, 2020

Case Manager: Hayley Feightner, hfeightner@cityofsalem.net, 503-540-2397

This decision is final unless written appeal from an aggrieved party is filed with the City of Salem Planning Division, Room 305, 555 Liberty Street SE, Salem OR 97301, no later than 5:00 p.m., Monday, October 14, 2019. must state where the decision failed to conform to the provisions of the applicable code section, SRC Chapter(s)

230. The appeal must be filed in duplicate with the City of Salem Planning Division. The appeal fee must be paid at the time of filing. If the appeal is untimely and/or lacks the proper fee, the appeal will be rejected. The Historic Landmarks Commission will review the appeal at a public hearing. After the hearing, the Historic Landmarks Commission may amend, rescind, or affirm the action, or refer the matter to staff for additional information.

The complete case file, including findings, conclusions and conditions of approval, if any, is available for review at the Planning Division office, Room 305, City Hall, 555 Liberty Street SE, during regular business hours.

http://www.cityofsalem.net/planning

Si necesita ayuda para comprender esta informacion, por favor llame 503-588-6173

BEFORE THE PLANNING ADMINISTRATOR OF THE CITY OF SALEM

HISTORIC DESIGN REVIEW CASE NO. HIS19-26
DECISION

IN THE MATTER OF APPROVAL OF	**)**	**MINOR HISTORIC DESIGN REVIEW**
HISTORIC DESIGN REVIEW	**)**	
CASE NO. HIS19-26	**)**	
270 17TH STREET NE	**)**	**September 27, 2019**

In the matter of the application for a Minor Historic Design Review submitted by Janet Strauch, the Historic Preservation Officer (a Planning Administrator Designee), having received and reviewed evidence and the application materials, makes the following findings and adopts the following order as set forth herein.

REQUEST

SUMMARY: A proposal to replace the porch posts, handrails, and guardrail on the front porch of the exterior of the Chemeketa Street Evangelical Church (1894).

REQUEST: Minor Historic Design Review of a proposal to replace the porch posts and railing on exterior of the Chemeketa Street Evangelical Church (1894), a historic contributing resource in the Court Chemeketa Historic District in the RD (Duplex Residential District) zone, and located at 270 17th Street NE - 97301 (Marion County Assessor Map and Tax Lot Number: 073W26AC01300).

A vicinity map illustrating the location of the property is attached hereto, and made a part of this decision **(Attachment A).**

DECISION

APPROVED based upon the application materials deemed complete on September 19, 2019 and the findings as presented in this report.

FINDINGS

1. Minor Historic Design Review Applicability

SRC230.020(f) requires Historic Design Review approval for any alterations to historic resources as those terms and procedures are defined in SRC 230.The Planning Administrator shall render a decision supported by findings that explain conformance or lack thereof with relevant design standards, state the facts relied upon in rendering the decision, and explain justification for the decision.

2. Analysis of Minor Historic Design Review Approval Criteria

Finding: Due to its poor condition, the applicant is proposing to replace the existing porch posts, handrails, and guardrail on the front porch of the Chemeketa Street Evangelical Church (**Attachment C**). The applicant is also proposing to remove one diseased non-historic tree located on the northern side of the resource. The removal of this tree is not subject to historic design review.

In June 2019, the property owner was issued a stop work order from Compliance Services for beginning work on the repair of the porch without building permits or historic design review approval. This application satisfies the historic design review component of the violation case. The proposed material and design of the porch features will match what is existing. Staff determined that the following standards from 230.025(d) *Standards for Contributing Resources in Residential Historic Districts, Porches* are applicable to this project.

FINDINGS:

Criteria: 230.025(d) Porches. *Replacement of porches on historic contributing buildings shall be allowed only where the owner has attempted to repair the original porch, but repair was not feasible due to the poor condition of the original materials. If the porch is not original then every effort shall be made to replicate the original porch; the effort shall be substantiated by historic, physical, or pictorial evidence. If the porch cannot be replicated then it should be of a compatible design and material.*

(1) Materials. All features of the porch shall be replaced with material that duplicate, to the greatest degree possible, the appearance and structural qualities of the original porch.

Finding: The applicant is proposing to replace portions of the existing porch because of its poor condition due to dry rot. The existing wooden posts below the chamfer will be replaced with cedar wood, matching the material of the existing porch posts. The applicant will add putty and paint as needed to ensure the replaced portion below the chamfer and the pilaster and column above the chamfer will continue to appear as one piece.

The existing wooden guardrail will be repaired and repainted, and portions will be replaced if the alignment to the column is not complete. The wooden handrails located on the outermost portion of the porch appear to be in good condition. The applicant is not planning to replace the outermost guardrail and handrail unless there is evidence of dry rot. Should it be necessary to replace the outermost handrails, it will be replaced with wood and will be painted to match the material and design of the existing handrails.

The handrails that flank the interior of the porch are not original to the resource, and will be replaced with Hemlock wood, model number H6210 in the Oregon Wood Specialties Catalog (**Attachment C**), which will be painted to match the existing. The wooden newels located at the bottom of the stairs on both sides of the porch will be reused if there is no sign of rot and they can be securely attached at the bottom of the stair. Overall, the applicant's proposal will

ensure that the repair of the porch and associated features will utilize in kind materials, replicating the original materials found throughout the porch. Staff finds that SRC 230.025(d)(1) has been met.

(2) Design. The overall design of the porch shall reproduce, to the greatest degree possible, the appearance of the original porch.

Finding: The applicant is proposing to replicate the design of the existing porch by replacing the porch posts and railings with materials and design that match the existing. The applicant is proposing to install new footings under the existing porch landing wall and will install twenty ¼" screws (Strong Drive SDS) at porch column posts adjacent to this wall. These alterations will not be easily visible and will ensure that the overall porch repair will meet current building code, and continue to adequately support the weight of the church bell tower structure above the porch. The porch posts will be replaced with 8 x 8 cedar posts of the same style. The non-original handrails that flank the interior stairs on the west façade of the resource will be raised to comply with Oregon Residential Specialty Code requirements. The handrails will be located approximately 34 inches above tread nosing and will have rounded terminations. The handrail will be replaced with Hemlock wood (model number H6210 in the Oregon Wood Specialties Catalog),and will be painted to match the existing. The porch wooden railing and stair hand rails on the exterior of the stairs flanking the front entry will be replaced with wood in the same dimensions as the existing matching the design of the existing rails if evidence of dry rot is found on the existing railings. Overall, the proposed repair of the porch and associated features will serve to reproduce the appearance of the original porch and strengthen the support of the church bell tower above this front entry. Therefore, staff finds that SRC 230.025(d)(2) has been met.

DECISION

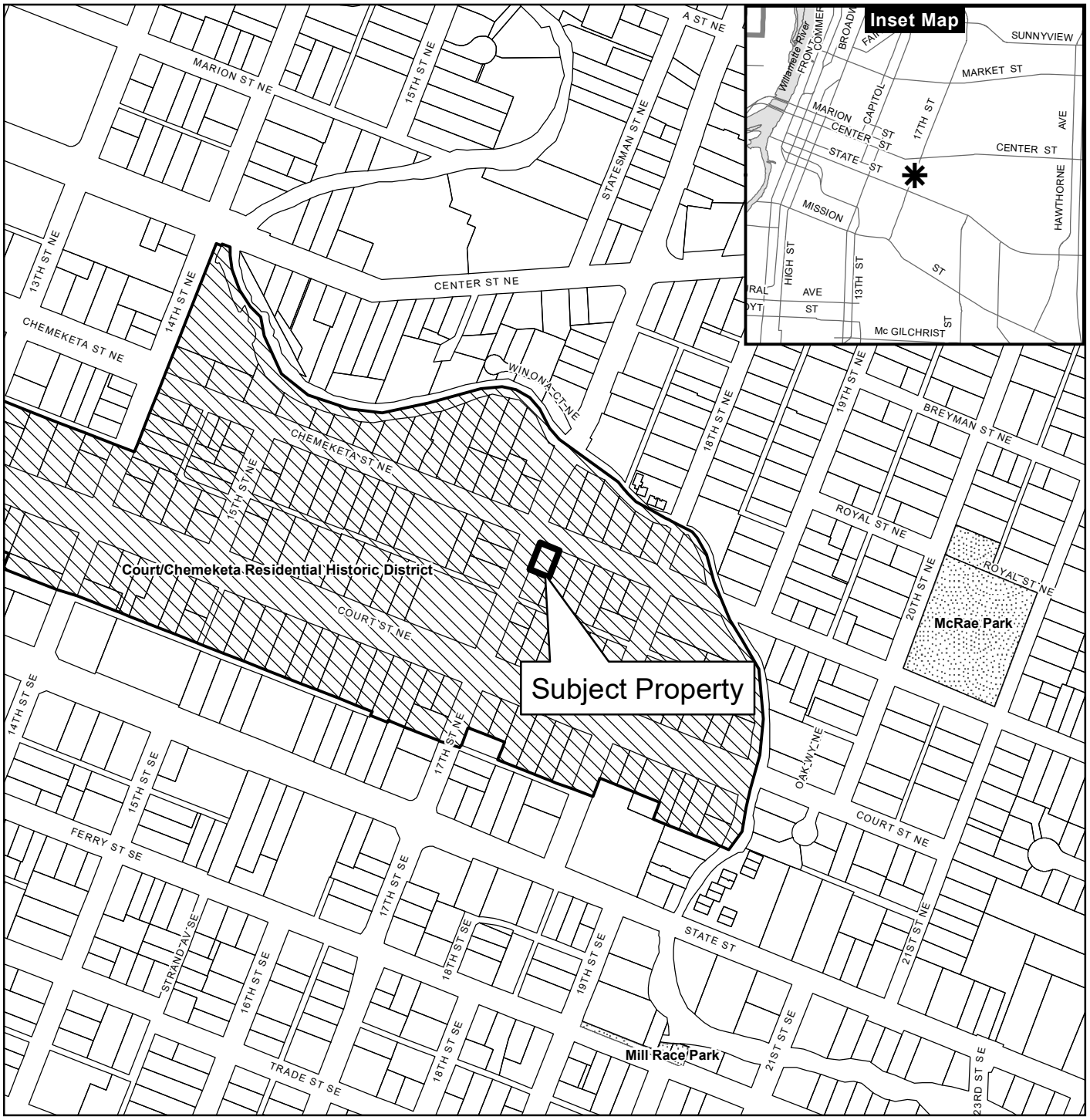
Based upon the application materials deemed complete on September 19, 2019 the findings as presented in this report, the application for HIS19-26 is **APPROVED.**

Kimberli Fitzgerald, AICP
Historic Preservation Officer
Planning Administrator Designee

Prepared by: Hayley Feightner, Planner I

Attachments: A. Vicinity Map
B. Excerpt from National Register Nomination
C. Applicant's Submittal Materials

Vicinity Map
270 17th St NE



Legend

- Taxlots
- Urban Growth Boundary
- City Limits
- Outside Salem City Limits
- Historic District
- Schools
- Parks

0 100 200 400 Feet

CITY OF Salem AT YOUR SERVICE
Community Development Dept.

G:\CD\PLANNING\HISTORIC\VICINITY MAPS for Historic Review Cases\270 17th St NE.mxd - 6/13/2019 @ 2:30:06 PM

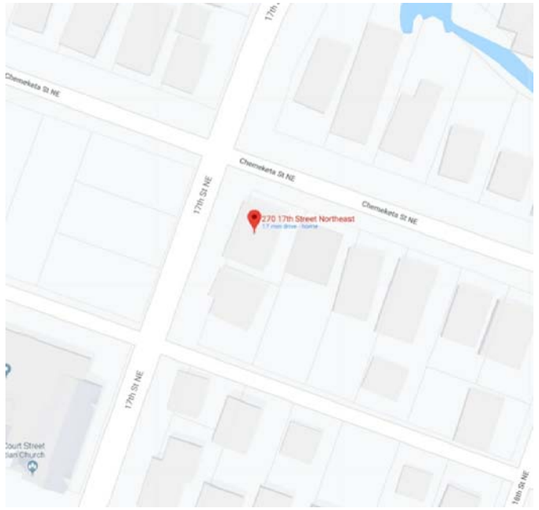
89. CHEMEKETA STREET EVANGELICAL CHURCH (1894) PRIMARY (Contributing)

1700 Chemeketa Street NE; Assessor's Map 26AC073W; 073W-26AC-01300; Tax Lot 1-84400-220 [redacted]

Description: Located on the southeast corner of Chemeketa and 17th Streets, this wood frame church is a simple rectangular structure, end-gabled, with a entry/bell tower located on the west-facing side near the northwest corner. The church is Gothic Revival in style. Its tower is comprised of a portico with chamfered posts supporting a louvered belfry with a spire. Carpentered details, including brackets with pendants under the eaves at the corners of the main roof, panels of boarding beneath the windows, and wall moldings framing the group of three gothic windows on the north end, give the structure a distinctive, well-made quality despite weathering and deterioration that has set in.

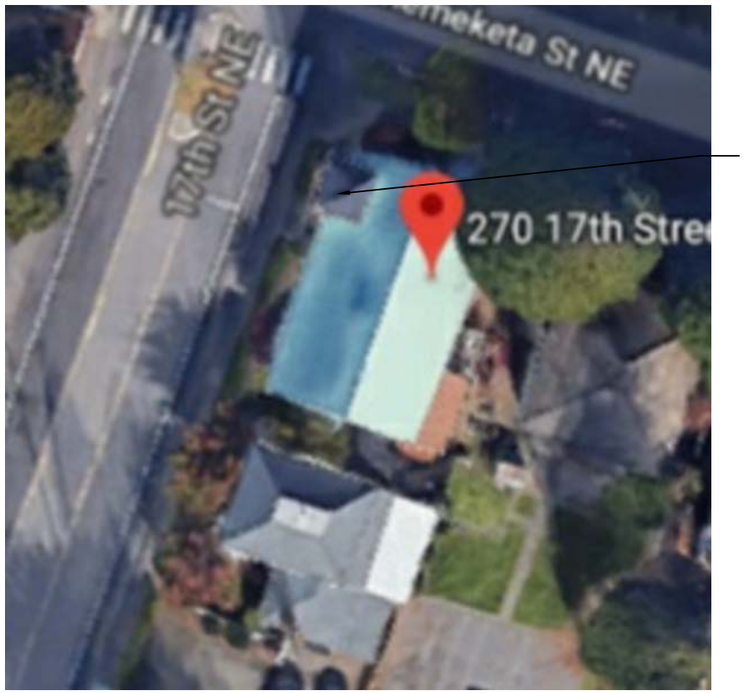
Cultural Data: The building was completed in 1894 as the East Salem extension of the Zion Evangelical Church, constructed in 1866 at the corner of Center and Liberty Streets. At a conference of 1893, Rev. I. B. Fisher was appointed to East Salem in connection with his work as presiding elder of the Albany District. He first built a temporary church of rough lumber, replaced by the current church. Rev. N. Shupp of Spokane delivered the dedication message when the new building was completed in 1894. The downtown church became the place of worship for the many German-speaking members of the congregation, while services in English were established at the East Salem church. In 1895, membership of 107 was reported, and the annual conferences of 1906 and 1913 were held in this church. Pastors included T. R. and E. G. Hornschuch (cf. commentary on #81 and #83). The last Evangelical pastor of the Chemeketa Street Church was Rev. E. A. Fogg, and on July 1, 1929, this church united with Salem First Church---the consolidated Evangelical church, a reunion of several groups, which made its location a structure built in 1915 at the Center and Liberty Street site. The structure at Chemeketa and 17th was later used by the Salem Mennonite church and the LSD Reorganized church. It has been vacant for many years but is a central focal point in the District, important for its visual and historic character. (Church history from "One Hundred Years of Evangelical Witness in Salem, 1865-1965," booklet compiled by Frank Butler, church historian.)

ATTACHMENT C



LOCATION MAP

NTS



AREA OF WORK
PORCH ONLY

AERIAL VIEW

NTS

GENERAL NOTES

1. ALL WORK IS TO COMPLY WITH THE 2017 EDITION OF THE OREGON RESIDENTIAL SPECIALTY CODE AND ANY APPLICABLE BUILDING CODES OF STATE OF OREGON, COUNTY OF MARION OR THE CITY OF SALEM AND THE HISTORIC LANDMARKS COMMISSION.

2. THE CONTRACTOR IS RESPONSIBLE TO CHECK THE PLANS AND IS TO NOTIFY THE ARCHITECT OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION.

3. WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE THE DRAWINGS.

4. THIS HOME IS EXISTING. ANY ALTERATIONS ARE DESIGNED TO BEST MEET THE ORSC WITH HISTORIC EXCEPTIONS TO THE HANDRAIL AND GUARDRAIL BEING REPLACED DUE TO THE COLUMNS AND PILASTERS BEING REPLACED.

5. STAIR RUNS WITH FOUR OR MORE RISERS OR WITH OPEN SIDE, TO HAVE CONTINUOUS HANDRAIL. ALL HANDRAILS SHALL BE AT 34" ABOVE TREAD NOSING AND CONFORM TO ORSC HANDGRIP DIMENSIONS. ENSURE 1 1/2" MINIMUM BETWEEN INDEPENDENT HANDRAILS AND ADJACENT WALL OR GUARDRAIL. ENDS SHALL RETURN TO WALL OR NEWEL OR SHALL HAVE ROUNDED TERMINATIONS OR BENDS. EXTERIOR STAIRS WITH 3 OR FEWER RISERS DO NOT NEED TO HAVE LANDINGS (OTHER THAN THE MAIN EGRESS DOOR).

6. IF THE ROT IS TOO SIGNIFICANT TO SUCCESSFULLY SPLICE AND CONCEAL THE DIFFERENCE IN LOWER COLUMN/PILASTER FROM THE EXISTING UPPER THEN NEW MEMBERS SHALL BE USED IN WHOLE.

EXISTING HOUSE AND PORCH

PROJECT INFO

073W26AC01300

SCOPE OF WORK: EXIST CONTRIBUTING HISTORIC BUILDING. PORTIONS OF PORCH COLUMNS AND PILASTERS TO BE REPLACED, REPAIRS MADE TO OTHER WOOD PIECES BASED ON PHOTOGRAPHS AND EXISTING STRUCTURE.

NO NEW SQUARE FOOTAGE.

OWNER:
JANET STRAUCH
270 17TH ST NE
SALEM, OR
CONTACT:ERIC DUDLEY 909.855.0345

ARCHITECT:
MILL CREEK ARCHITECTURE, LLC
CONTACT: LEAH McMILLAN
503.580.4171

CONTRACTOR:
KRAFT CUSTOM CONSTRUCTION
CONTACT: ROBERT KRAFT

ENGINEER: WILLAMETTE ENGINEERING
CONTACT: JERRY HORNER

HISTORIC PORCH IMAGE

INDEX

A1.0 SITE AND TITLE
A2.1 PROPOSED PLAN
A3.1 ELEVATION

STRUCTURAL CALCS

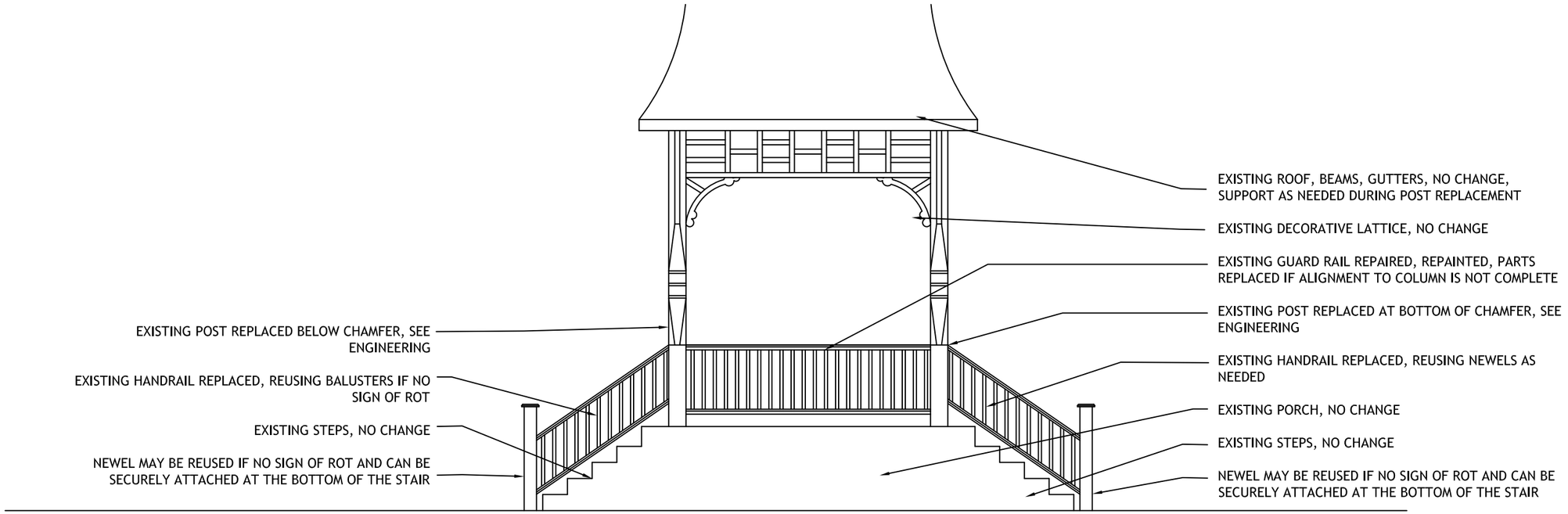
MILL CREEK ARCHITECTURE | OR ID
503-580-4171
leah@millcreekarch.com

REGISTERED ARCHITECT
5422
LEAH N. MCMILLAN
SALEM, OREGON
EXP. 12/19
STATE OF OREGON

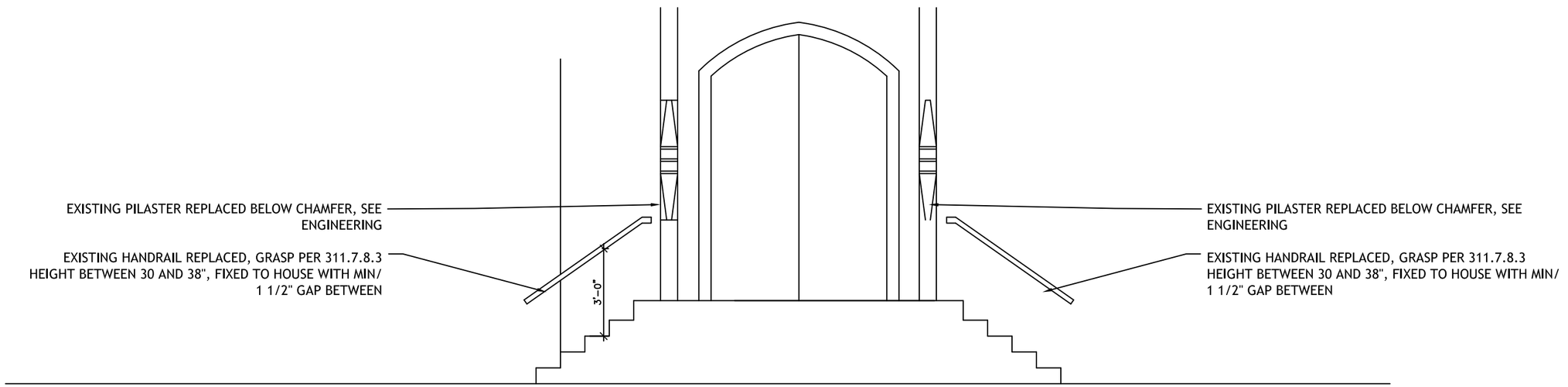
270 17TH ST
PORCH REPAIR
SALEM, OR

A1.0
7/18/19
TITLE

If bar is not 1"
drawing is not to scale.



1 ELEVATION
1/4" = 1'-0"



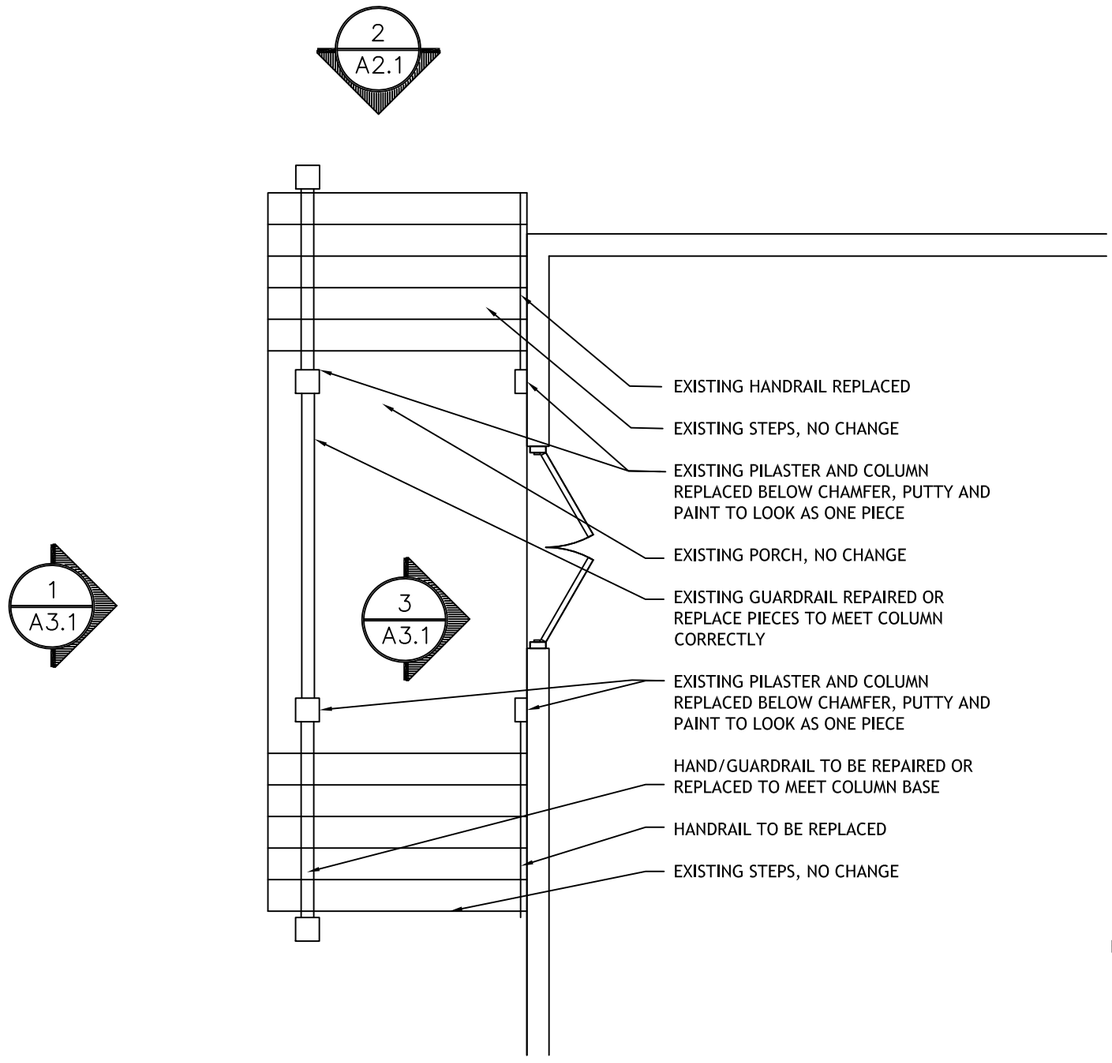
2 ELEVATION
1/4" = 1'-0"

MILL CREEK ARCHITECTURE OR ID
503-580-4171
leah@millcreekarch.com

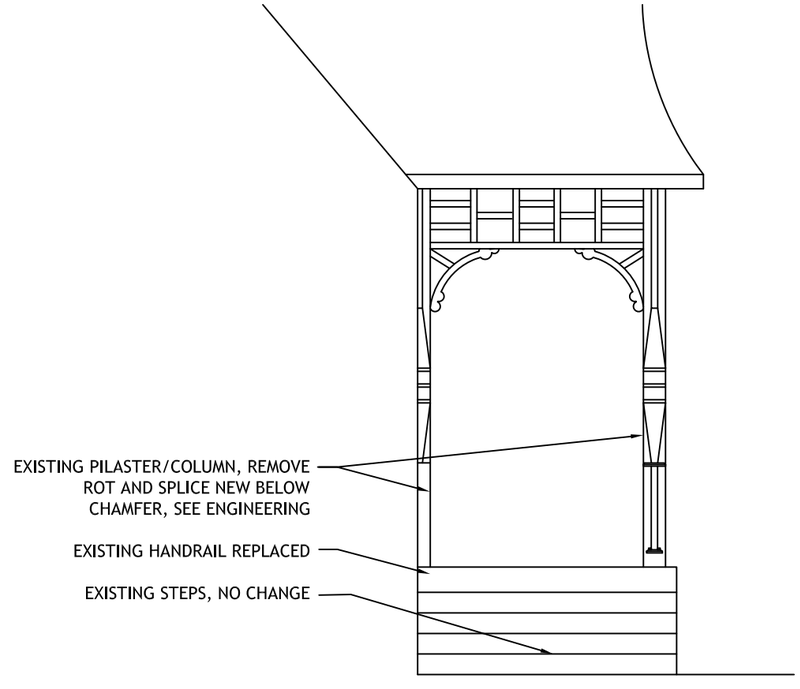
270 17TH ST PORCH REPAIR
SALEM, OR

A3.1
7/18/19
ELEVATIONS

If bar is not 1"
drawing is not to scale.



1 PROPOSED PLAN
1/4" =1'-0"



2 ELEVATION
1/4" =1'-0"

MILL CREEK ARCHITECTURE OR ID
503-580-4171
leah@millcreekarch.com

REGISTERED ARCHITECT
5422
LEAH N. MCMILLAN
SALEM, OREGON
EXP. 12/19
STATE OF OREGON

270 17TH ST PORCH REPAIR
SALEM, OR

A2.1
7/18/19
FLOOR PLAN

If bar is not 1"
drawing is not to scale.

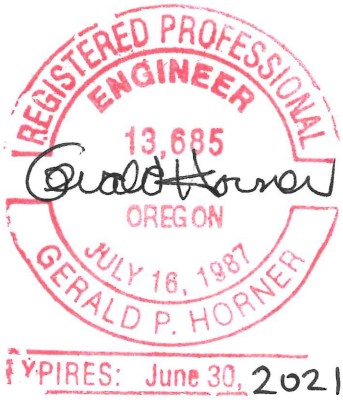
Willamette Engineering, Inc.
PO Box 9032, Salem 97305 Ph (503) 304-0905 Fax (503) 304-9512

STRUCTURAL CALCULATIONS AND DETAILS FOR PORCH REPAIR

DESIGN CRITERIA:
SOIL CAPACITY – 1000 PSF
CEILING DEAD – 20 PSF
ROOF DEAD – 20 PSF
WALL DEAD – 15 PSF
ROOF SNOW – 20 PSF
WIND AND SEISMIC – NO CHANGE

LOCATED AT:
270 17TH ST
SALEM, OR 97301

THESE SHEETS ARE VOID IF SEAL IS NOT RED



SIGNATURE ARE NOT ORIGINAL
10 PAGES NOT INCLUDING COVER SHEET
******LIMITATIONS******

NO RESPONSIBILITY AND/OR LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.

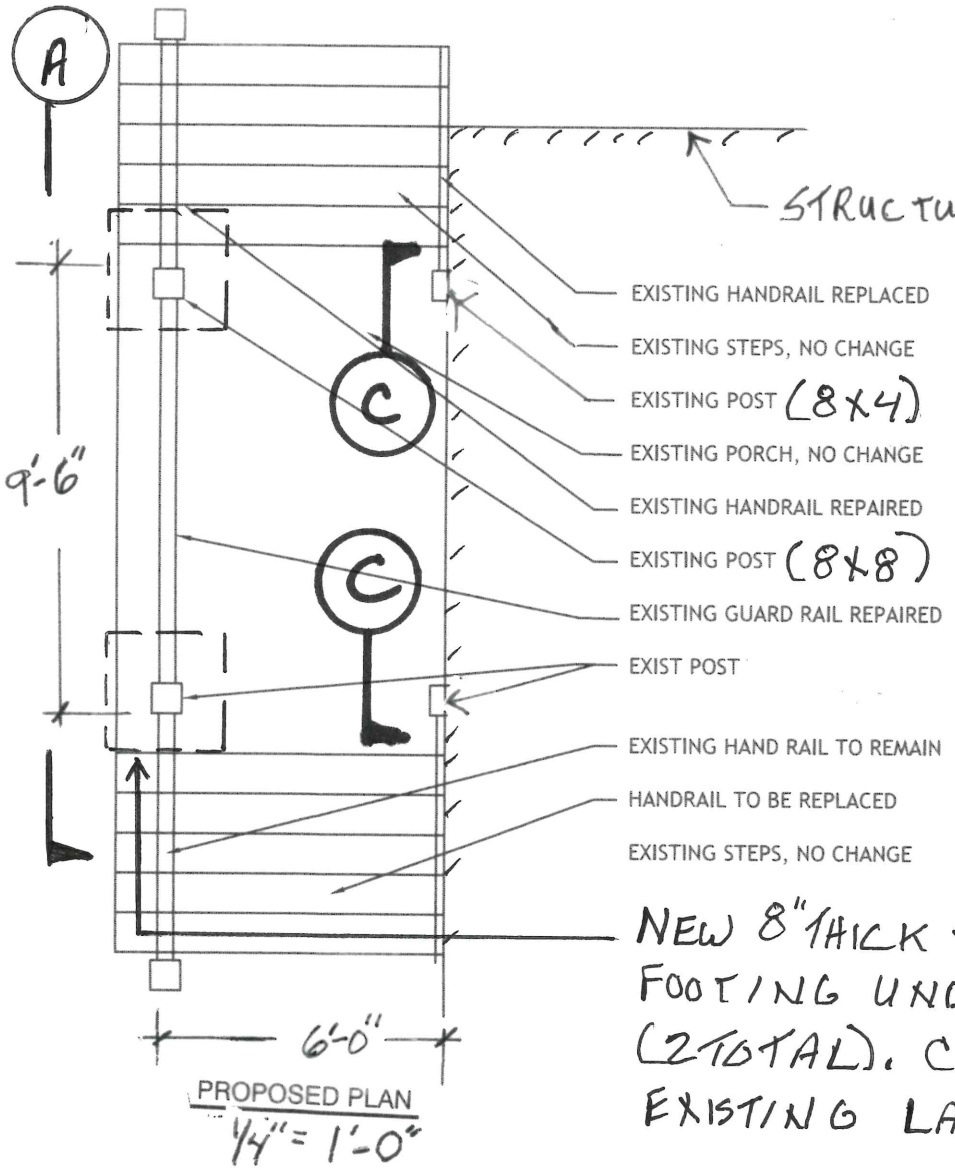
JOB NO. 2019-75
JULY 10, 2019

PREPARED BY
GERALD P. HORNER, PE

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19



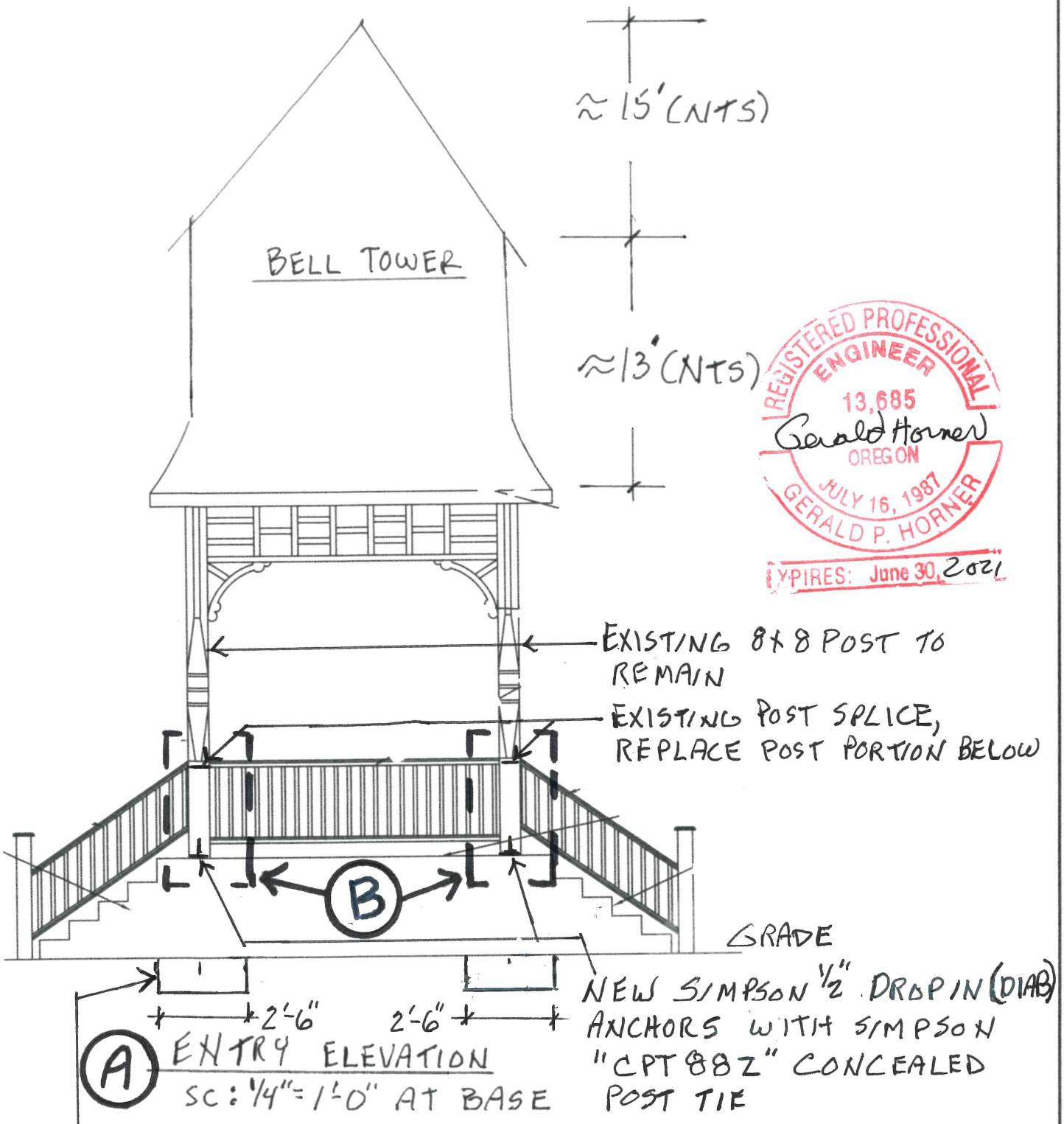
PROPOSED PLAN
1/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
13,685
Gerald Horner
OREGON
JULY 16, 1987
GERALD P. HORNER
EXPIRES: June 30, 2021

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19

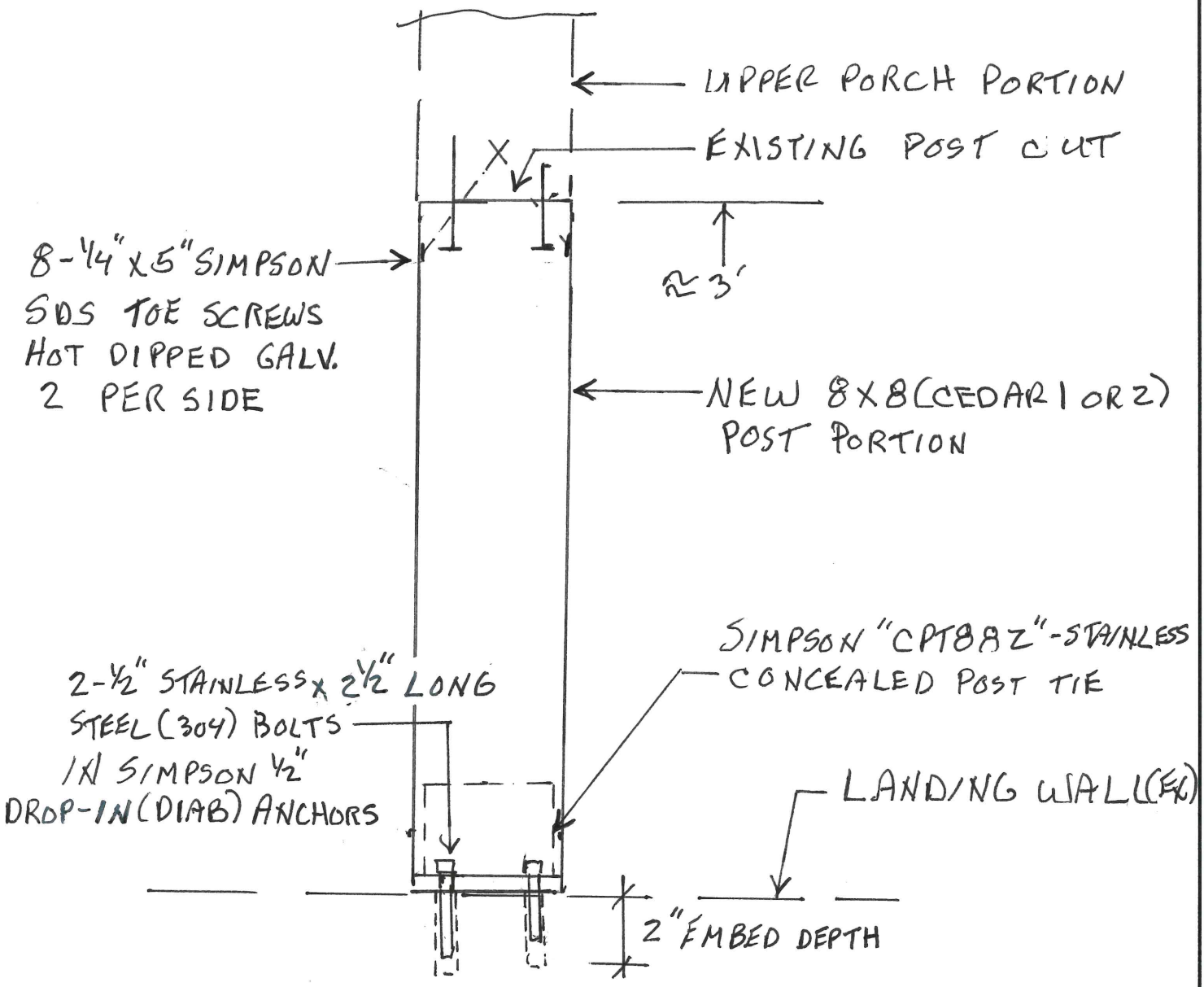


REGISTERED PROFESSIONAL ENGINEER
13,685
Gerald Horner
OREGON
JULY 16, 1987
GERALD P. HORNER
EXPIRES: June 30, 2021

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19



(B) POST REPLACEMENT

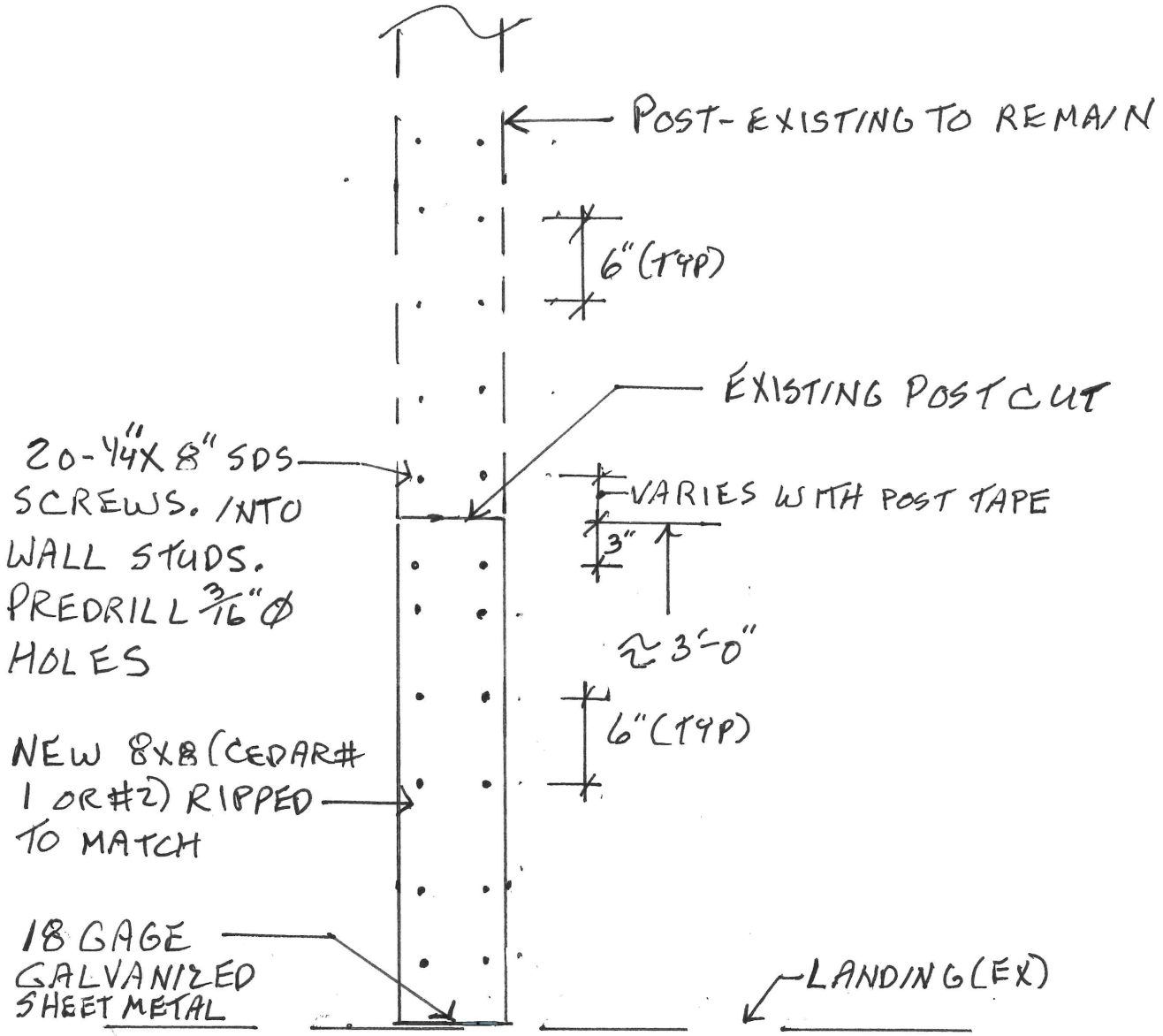
SC: 1½" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
13,685
OREGON
JULY 16, 1987
GERALD P. HORNER
EXPIRES: June 30, 2021

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19



(C) POST REPAIR AT WALL

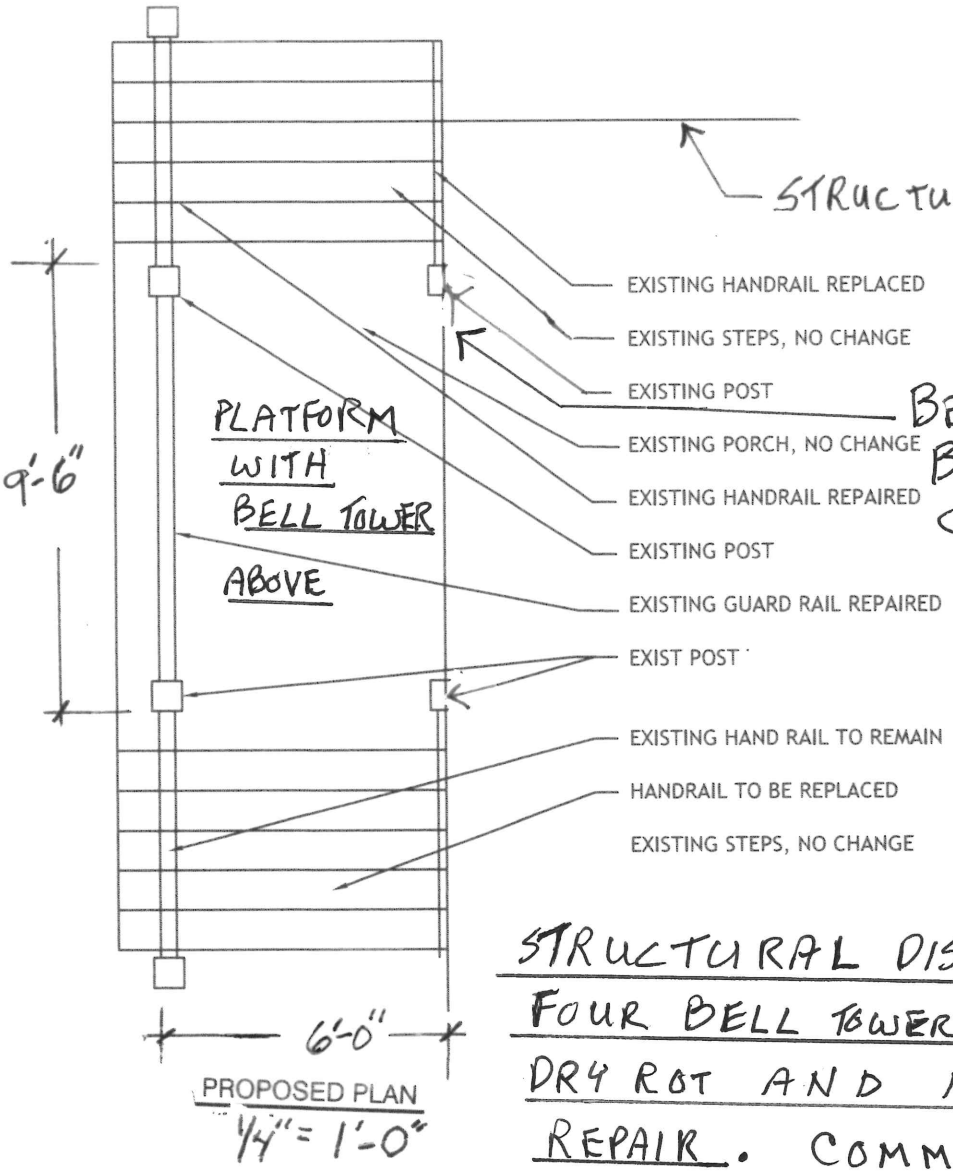
SC: 1" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
13,685
Gerald Horner
OREGON
JULY 16, 1987
GERALD P. HORNER
EXPIRES: June 30 2021

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19



BELL TOWER SECURED BY STRUCTURE CEILING. NO CHANGE.

STRUCTURAL DISCUSSION

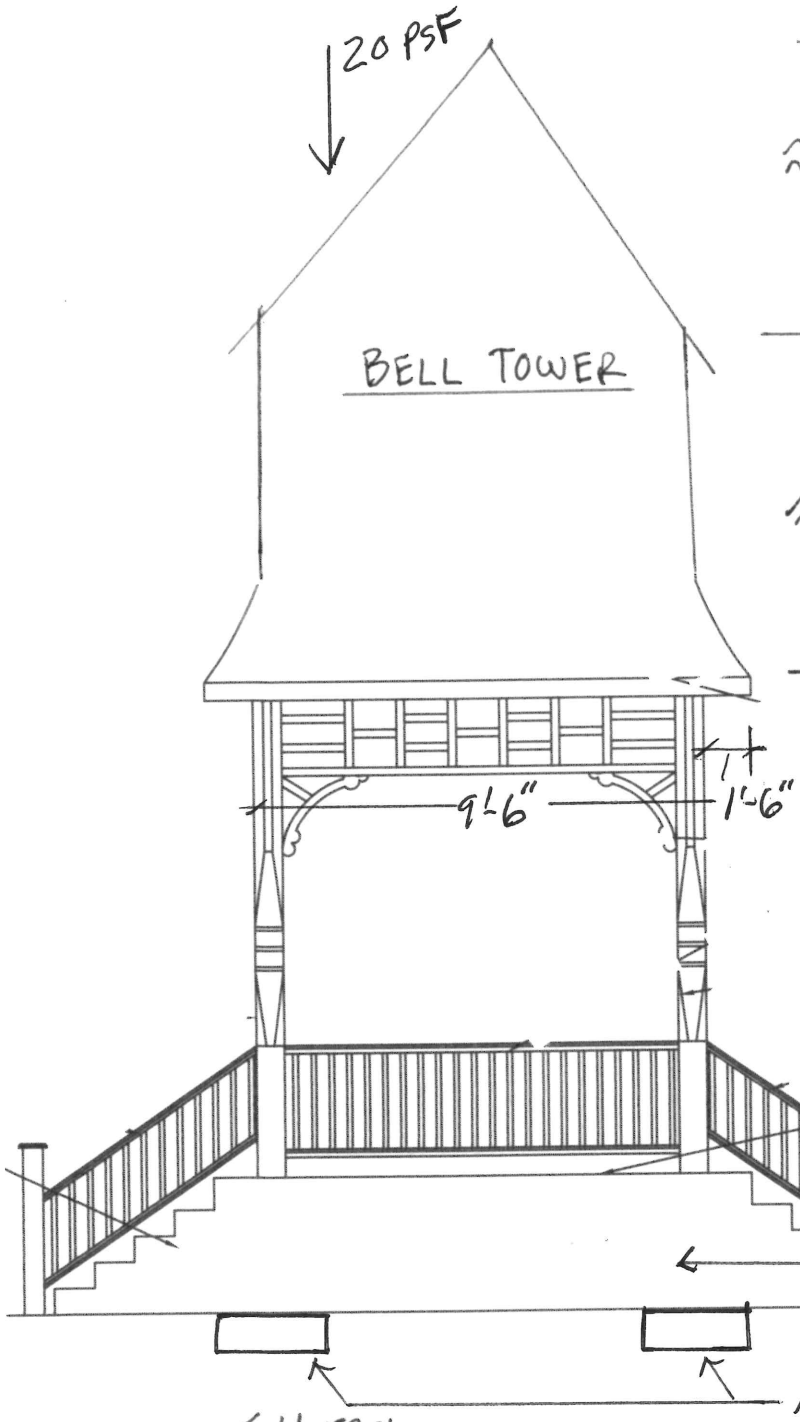
FOUR BELL TOWER POSTS HAVE DRY ROT AND IN NEED OF REPAIR. COMMENTS:

1. LATERAL LOADS ARE NOT CHANGED. THEREFORE NO DESIGN CHANGE TO THE EXISTING LATERAL SYSTEM.
2. BOTTOM PORTIONS OF POSTS WERE REPLACED BEFORE. THESE PIECES HAVE DRY ROT AGAIN. THEY WILL BE REPLACED.
3. FOOTINGS AT WEST SIDE OF PLATFORM WILL BE ADDED.

WILLAMETTE ENGINEERING, INC.
SALEM, OREGON
PH: 503-304-0905, FAX: 503-304-9512

PROJECT 17TH STREET PORCH REPAIR
BY JERRY HORNER

JOB NO 2019-75
DATE 07-09-19



ENTRY ELEVATION
SC: 1/4" = 1'-0" AT BASE

POST LOAD

CEILING - (6.5')(5')(20PSF) = 550 LB
ROOF - 5.5'(5')(20 PSF) = 550 LB
TOWER STRUC - (15 PSF)(320 S.F.) = 4800 LB
SNOW - 5.5'(5')(20 PSF) = 550 LB
POST - 12'(62.4 PCF)(.44) = 330 LB
TOTAL 6780 LB

USE 1000 PSF - SOIL

USE

$\frac{6780\ LB}{1000\ PSF} = 6.8\ FT^2$ - USE 32" SQ. FOOTING

1/4" SDS SCREWS AT POSTS ADJACENT TO WALL
350 LB EACH 6780 LB / 350 LB = 20 SCREWS

STRONG-DRIVE® SDS HEAVY-DUTY CONNECTOR *Screw*

SIMPSON Strong-Tie

Pg 7 of 10

The Simpson Strong-Tie® Strong-Drive® SDS Heavy-Duty Connector screw is a ¼" diameter structural wood screw ideal for various connector installations as well as wood-to-wood applications. It installs with no predrilling and has been extensively tested in various applications. The SDS Heavy-Duty Connector screw is improved with a patented easy driving 4CUT™ point and a corrosion resistant double-barrier coating.

The #8x1¼" SD Wafer-Head screw is ideal for miscellaneous fastening applications. The needle point ensures fast starts and deep #2 Phillips drive reduces cam-out and stripping.

SDS FEATURES:

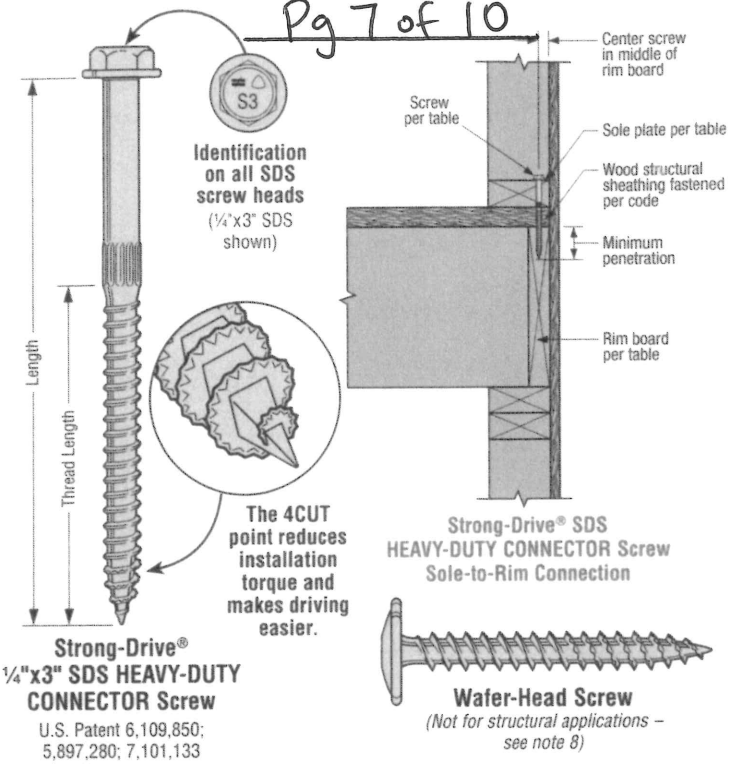
- The patented 4CUT point has a square core and serrated threads to reduce installation torque and make driving easier with no predrilling and minimal wood splitting.
- Available with a double-barrier coating or in Type 316 stainless steel. Carbon steel loads apply to corresponding stainless steel models.
- ⅜" hex washer head is stamped with the No-Equal sign and fastener length for easy identification after installation.

MATERIAL: Heat-treated carbon steel, Type 316 stainless steel

FINISH: SD8x1.25—Electro Galvanized;
SDS—Double Barrier (all lengths);
SDS—Type 316 Stainless Steel (1½" thru 3½" lengths)

CODES: See page 12 for Code Reference Key Chart.

WARNING: Industry studies show that hardened fasteners can experience performance problems in wet or corrosive environments. Accordingly, the SD8x1.25 should be used in dry, interior, and noncorrosive environments only.



These products feature additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Simpson Strong-Tie® Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw and Wafer-Head Screw

Size (in.)	Model No.	Thread Length (in.)	Fasteners per Carton[6]	DF/SP Allowable Loads[4]						SPF/HF Allowable Loads[4]						Code Ref.
				Shear (100)[1]					Withdrawal[5] (100)	Shear (100)					Withdrawal[5] (100)	
				Wood Side Plate[3]		Steel Side Plate				Wood Side Plate[3]		Steel Side Plate				
				1½"	1¾" SCL	16 ga	14 ga & 12 ga	10 ga or Greater	Wood or Steel Side Plate	1½"	1¾" SPF LVL	16 ga	14 ga & 12 ga	10 ga or Greater	Wood or Steel Side Plate	
5/32 x 1¼	SD8x1.25[8]	—	—	—	—	50	50	50	—	—	—	45	45	45	—	170
¼ x 1½	SDS25112	1	1500	—	—	250	250	250	170	—	—	180	180	180	120	
¼ x 2	SDS25200	1¼	1300	—	—	250	290	290	215	—	—	180	210	210	150	
¼ x 2½	SDS25212	1½	1100	190	—	250	390	420	255	135	—	180	280	300	180	
¼ x 3	SDS25300	2	950	280	—	250	420	420	345	200	—	180	300	300	240	I5,
¼ x 3½	SDS25312	2¼	900	340	340	250	420	420	385	245	245	180	300	300	270	L1,
¼ x 4½	SDS25412	2¾	800	350	340	250	420	420	475	250	245	180	300	300	330	F20
¼ x 5	SDS25500	2¾	500	350	340	250	420	420	475	250	245	180	300	300	330	
¼ x 6	SDS25600	3¼	600	350	340	250	420	420	560	250	245	180	300	300	395	
¼ x 8	SDS25800	3¼	400	350	340	250	420	420	560	250	245	180	300	300	395	

Simpson Strong-Tie® Strong-Drive® SDS HEAVY-DUTY CONNECTOR Screw – Allowable Shear Values for Sole-to-Rim Connections

Size (in.)	Model No.	Sole Plate Nominal Size	Minimum Penetration into Rim Board (in.)	Allowable Loads								Code Ref.
				2x DF/SP Rim Board		2x SPF/HF Rim Board		1¼" Minimum LVL Rim Board		1¼" Minimum LSL Rim Board		
				DF/SP Sole Plate	SPF/HF Sole Plate	DF/SP Sole Plate	SPF/HF Sole Plate	DF/SP Sole Plate	SPF/HF Sole Plate	DF/SP Sole Plate	SPF/HF Sole Plate	
¼ x 4½	SDS25412	2x	2	250	190	190	190	190	190	220	190	I5,
¼ x 5	SDS25500	2x	2	250	190	190	190	190	190	220	190	L1,
¼ x 6	SDS25600	2x or 3x	2	250	190	190	190	190	190	220	190	F20

1. Screws may be provided with the 4CUT or Type 17 point.
2. Strong-Drive® SDS Heavy-Duty Connector screws install best with a low speed ½" drill with a ⅜" hex head driver.
3. Values are valid for connections between two members with full thread penetration into the main member. For other wood side plate values, see *Fastening Systems* catalog (C-F-14) pages 317-321.
4. Allowable loads are shown at the wood load duration factor of $C_D = 1.00$. Loads may be increased for load duration per the building code up to a $C_D = 1.60$.
5. Withdrawal loads shown are in pounds (lbs.) and are based on the entire threaded section installed into the main member. If thread penetration into the main member is less than the Thread Length as shown in the table, reduce allowable load by 172 lbs. x inches of thread not in main member. Use 121 lbs./inch for SPF.
6. Fasteners per Carton represent the quantity of screws that are available in bulk packaging. Screws are also available in mini bulk and retail packs. Refer to Simpson Strong-Tie® *Fastening Systems* catalog (C-F-14).
7. LSL wood-to-wood applications that require 4½", 5", 6" or 8" SDS screws are limited to interior-dry use only.
8. SD8x1.25 requires ¾" minimum penetration. DO NOT USE SD8x1.25 wood screws with structural connectors unless specified and stated in this catalog.
9. Where predrilling is required for Strong-Drive® SDS Heavy-Duty Connector screws, predrill diameter is 5/32".
10. Minimum spacing, edge, and end distance requirements are listed in ICC-ES ESR-2236. For smaller requirements, please contact Simpson Strong-Tie engineering.

SIMPSON Strong-Tie

CPTZ

Pg 8 of 10

Concealed Post Tie

The CPTZ concealed post base provides a clean, concealed look while providing a 1" standoff height above concrete. The 1" standoff reduces the potential for decay at the post end and satisfies code requirements for posts that are exposed to weather, water splash or in basements. It is part of a system of concealed connectors that includes the CBTZ and CJTZ.

- The CPTZ is tested and load-rated for uplift, download and lateral load.
- Simpson Strong-Tie saves installers time by providing all the necessary components to make the post connection in one box (anchors not included).
- There are two anchorage solutions available. See tables for information.
- Solutions have been calculated per ACI 318 to determine their allowable load in different concrete configurations.

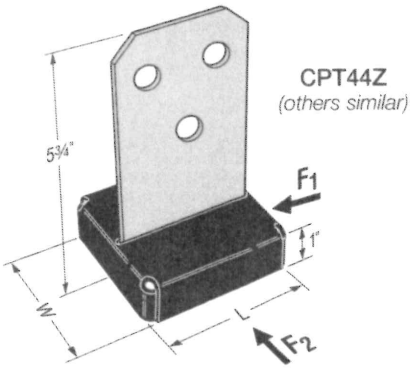
Material: See table below

Finish: Knife plate, washers and standoff base are ZMAX®-galvanized steel. The standoff base has an additional textured, flat black powder-coat finish for aesthetic purposes. The ½"-diameter drift dowels are mechanically galvanized in accordance with ASTM B695, Class 55. If substituting ½"-diameter bolts, a hot-dip galvanized finish is recommended. Some available in stainless steel (see table).

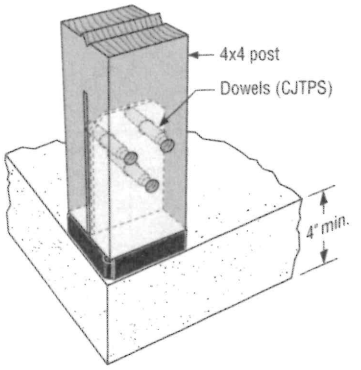
Installation:

- Use all specified fasteners; see General Notes
- More extensive installation instructions are available through our Literature Library app or by visiting **strongtie.com**
- Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended for non-braced, or non-top-supported installations

Codes: See p. 12 for Code Reference Key Chart



CPT44Z
(others similar)



Typical CPT44Z Installation

These products are available with additional corrosion protection. For more information, see p. 15.

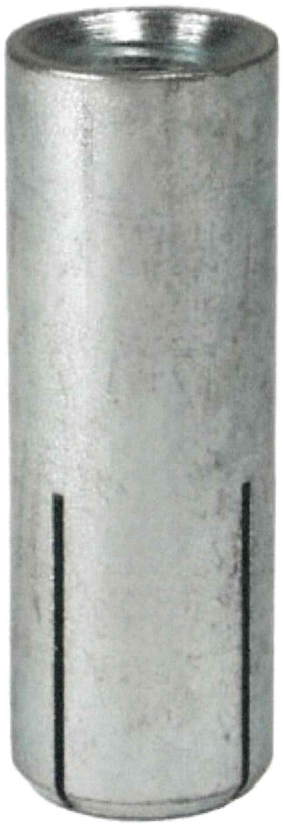
SS For stainless-steel fasteners, see p. 21.

Model No.	Nominal/ Rough Post Size	Base (ga.)	Knife Plate (ga.)	Dimensions (in.)		Fasteners				Allowable Loads (DF/SP)				Code Ref.
				W	L	Anchor		Post		Uplift (160)	Down (100)	F_1 (160)	F_2 (160)	
						Qty.	Dia.	Qty.	Type[3]					
SS CPT44Z	4x4	12	10	3½	3½	2	½	3	½" x 2¾" dowel	3,035	9,805	600	605	IBC, FL, LA
									½" MB	3,200				
CPT66Z	6x6	12	10	5⅜	5⅜	2	½	3	½" x 4¾" dowel	3,580	19,840	655	1,025	
									½" MB	3,565				
CPT88Z	8x8	12	10	7¼	7¼	2	½	3	½" x 4¾" dowel	3,625	22,805	740	1,080	
									½" MB	3,850				

1. Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
2. Downloads shall be reduced where limited by capacity of the post.
3. CPTZ concealed post ties are supplied with (3) ½"-diameter dowel pins. Alternative ½"-diameter hex- or square-head machine bolts may be used for loads listed.
4. Lag or carriage bolts are not permitted.
5. Structural composite lumber columns have sides that show either the wide face or the edges of the lumber strands/veneers. Values in the tables reflect dowel or bolt installation into the wide face.

Pg 9 of 10

Drop-In (DIA) Internally Threaded Anchor



On This Page

Product Details

Drop-In anchors are internally threaded drop-in expansion anchors for use in flush-mount applications in solid base materials. Available in stainless steel (DIA) or short (DIAS) versions. Minimum thread engagement should be equal to the nominal diameter of the threaded insert.

Key Features

- Lipped edge (DIAS) eliminates need for precisely drilled hole depth
- Hand- and power-setting tools available for fast, easy and economical installation
- Fixed-depth stop bit helps you drill to the correct depth every time
- Short length (DIAS) enables shallow embedment to help avoid drilling into rebar or pre-stressed/post-tensioned cables
- Short drop-in anchors include a setting tool compatible with the anchor to ensure consistent installation

To the Top

Material

- Stainless steel and carbon steel

Finish

- Carbon steel; zinc plated

Installation

1. Drill a hole in the base material using the appropriate diameter carbide drill bit as specified in the table. Drill the hole to the specified embedment depth plus 1/8" for flush mounting. Blow the hole clean using compressed air. Overhead installations need not be blown clean.
2. Insert designated anchor into hole. Tap with hammer until flush against surface.
3. Using the designated drop-in setting tool, drive expander plug toward the bottom of the anchor until shoulder of setting tool makes contact with the top of the anchor.
4. Minimum thread engagement should be equal to the nominal diameter of the threaded insert.

⚠ Caution

Pg 10 of 10

Product Information Table

Model No.	Description	Coating/Material	Drill Bit Dia. (in.)	Length (in.)	Rod Dia. (in.)	Thread Length (in.)	TPI	Component Material, Anchor Body	Component Material, Expander Plug	Component Material, Thread	Box Qty.	Carton Qty.
DIA256SS	Drop-In Anchor	Type 316 Stainless Steel	3/8	1	1/4	3/8	20	Type 316	Type 316	UNC	100	500
DIA25SS	Drop-In Anchor	Type 303/304 Stainless Steel	3/8	1	1/4	3/8	20	AISI 303. Meets chemical requirements of ASTM A582	AISI 303	UNC	100	500
DIA376SS	Drop-In Anchor	Type 316 Stainless Steel	1/2	1 9/16	3/8	5/8	16	Type 316	Type 316	UNC	50	250
DIA37S	Short Drop-In Anchor	Zinc Plated Carbon Steel	1/2	3/4	3/8	1/4	16	Meets minimum 70,000 psi tensile	Meets minimum 50,000 psi tensile	UNC/Coil-thread	100	500
DIA37SS	Drop-In Anchor	Type 303/304 Stainless Steel	1/2	1 9/16	3/8	5/8	16	AISI 303. Meets chemical requirements of ASTM A582	AISI 303	UNC	50	250
DIA506SS	Drop-In Anchor	Type 316 Stainless Steel	5/8	2	1/2	3/4	13	Type 316	Type 316	UNC	50	200
DIA50S	Short Drop-In Anchor	Zinc Plated Carbon Steel	5/8	1	1/2	5/16	13	Meets minimum 70,000 psi tensile	Meets minimum 50,000 psi tensile	UNC/Coil-thread	50	200
DIA50SS	Drop-In Anchor	Type 303/304 Stainless Steel	5/8	2	1/2	3/4	13	AISI 303. Meets chemical requirements of ASTM A582	AISI 303	UNC	50	200
DIA62SS	Drop-In Anchor	Type 303/304 Stainless Steel	7/8	2 1/2	5/8	1	11	AISI 303. Meets chemical requirements of ASTM A582	AISI 303	UNC	25	100
DIA75SS	Drop-In Anchor	Type 303/304 Stainless Steel	1	3 1/8	3/4	1 1/4	10	AISI 303. Meets chemical requirements of ASTM A582	AISI 303	UNC	20	80

Footnotes

1. A dedicated setting tool is included with each box of DIA37S and DIA50S.