General Installation Info for cero II and cero III

Installation of sill with a wood leveler underneath

For a unit to be able to operate properly, **the sill has to be absolutely level**. The best way to achieve this is to install a secondary substrate (wood leveler) just below the sill with height adjustable legs to install it perfectly level.

Appendix I and Appendix II show fastener spacings for different substrates and different number of tracks as well as vertical detail drawings on suggested installation. Please note that the maximum gap between the bottom of the wood leveler and the top of the substrate should be 3/4” (19mm).

If no wood leveler is used below the sill, the anchorage holes of the sill should be the same as the anchorage of the head track.

Installation of Head Track and Side Jambs

Install the appropriate fasteners through the pre-drilled holes provided from the factory. Add holes in the field as needed such that for the head track, there are at least 4 sets of 2 holes each above each panel, preferably with 2 sets of holes on either side of the meeting points of the panels that are 4" (100mm) apart. For the side jambs, there should be a set of holes not more than 23-1/2" (600mm) apart and if the set of holes is staggered, then the holes shouldn't be more than 12" (300mm) apart.

For installation in projects with design pressures **more than +/- 30 psf**, the maximum shim space of the unit with the surrounding substrates should be a maximum of 3/8” (10mm).

As local conditions and requirements vary, a local licensed structural engineer should be consulted to verify specific anchoring and spacing requirements. For projects in FL or other windload areas, please also see FL Product Approval #'s 38028 for cero II and 35024 for cero III documents available on the FL Product Approval website.

General Notes

1. NanaWall will assume no responsibility for errors resulting from the use of these drawings by other trades. NanaWall will assume no responsibility for dimensional errors or changes resulting from actual field conditions that vary from these drawings.
2. All framing systems shall be fabricated and installed per the NanaWall instructions.
3. Perimeter substrate must be capable of withstanding reaction forces imposed by design loads.
4. Laws and building and safety codes governing the design and use of glazing entrance, window and curtain wall products vary widely. NanaWall does not control the selection of product configurations, operating hardware or glazing material and assumes no responsibility for same.

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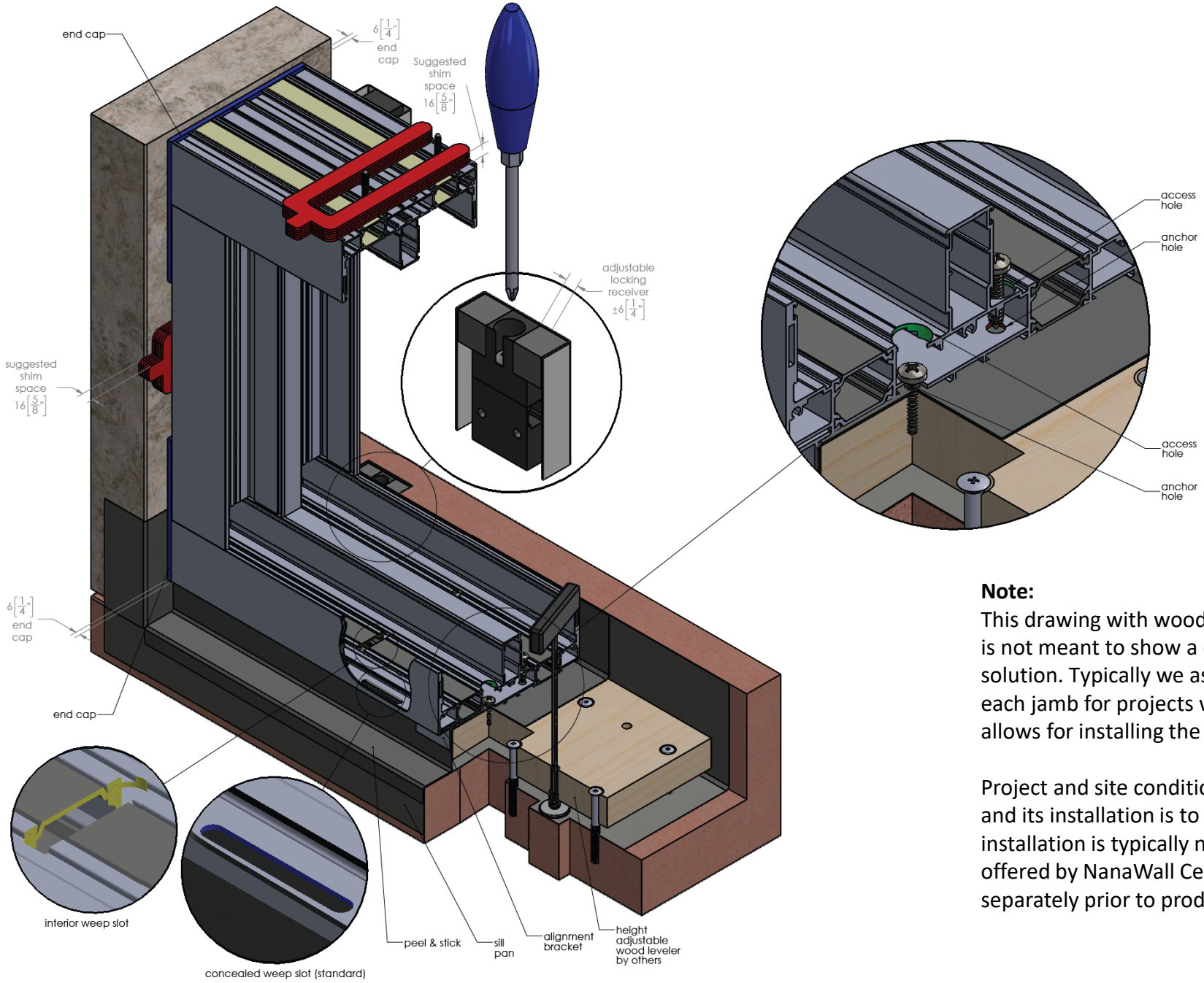

Note:
This drawing with wood leveler is only for general illustrative purposes and is not meant to show a comprehensive waterproofing and drainage solution. Typically we ask for 5/8“ (16mm) shim space at the head and each jamb for projects with a design pressure of +/- 30psf or less. This allows for installing the system plumb, level and square.

Project and site condition specific detail waterproofing and drainage design and its installation is to be by others. Waterproofing and drainage installation is typically not part of the standard product installation services offered by NanaWall Certified Installers and have to be agreed on separately prior to product installation.

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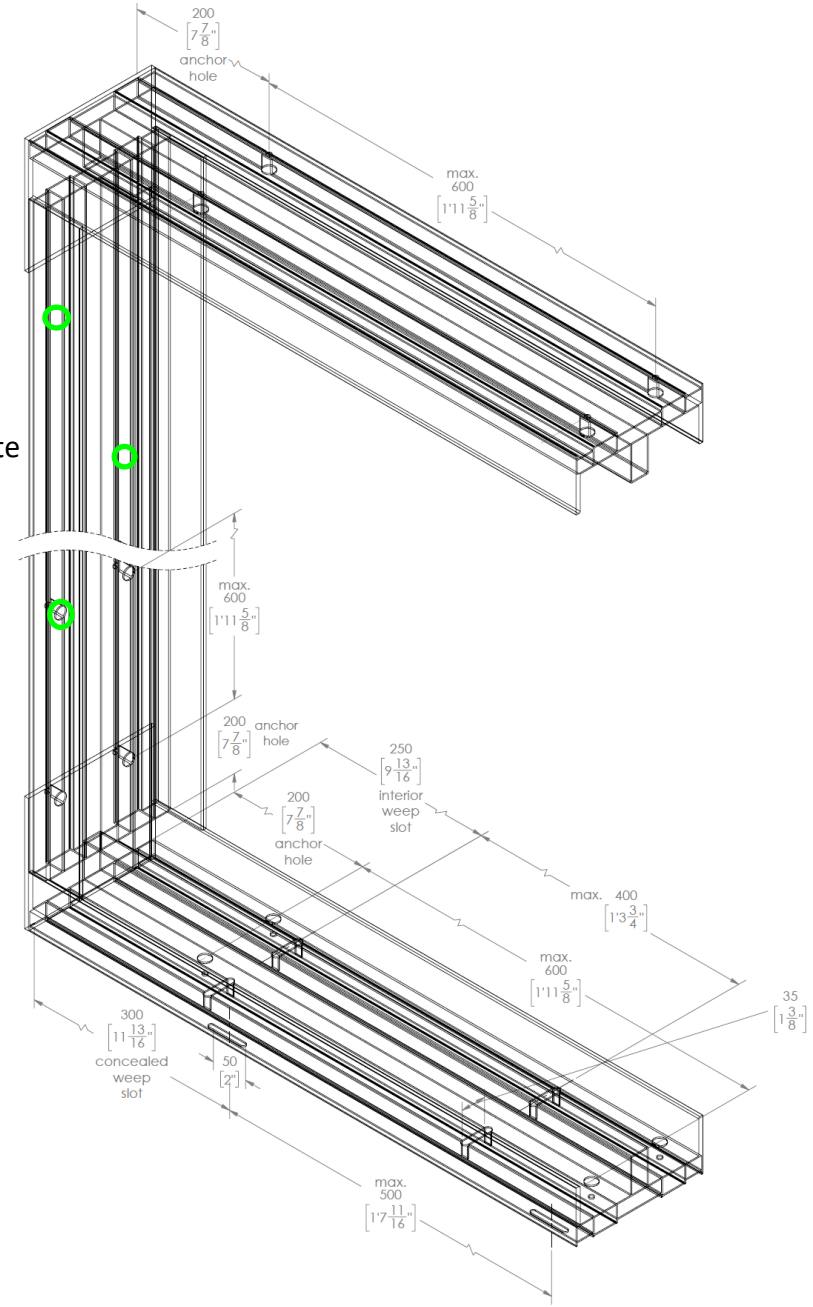
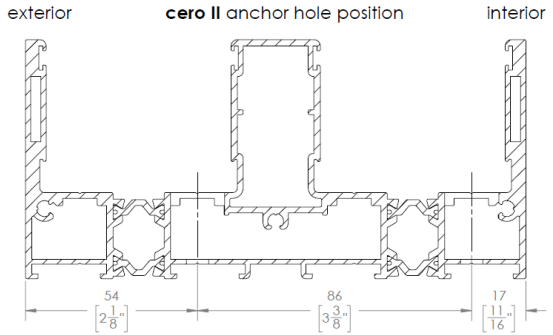
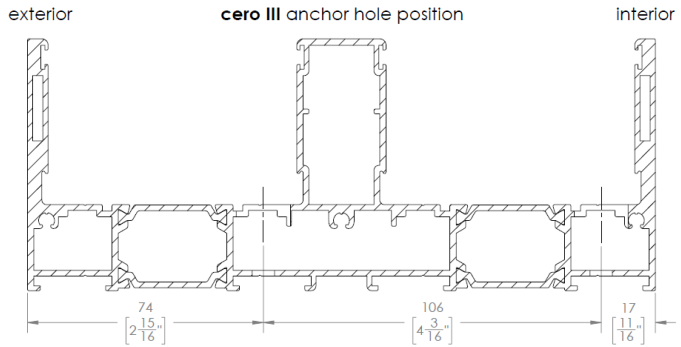
Note:
Staggered hole alternate between inside and outside of side jamb.







Note:
Each cero system is custom and anchor hole and weep slot patterns can vary. This drawing is only for general illustrative purposes to show the maximum distance between the anchor hole and the weep slot pattern of the pre-drilled holes and slots coming from the factory.

As local conditions and requirements vary, a local licensed structural engineer should be consulted to verify specific anchoring and spacing requirements.

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Appendix I: cero II

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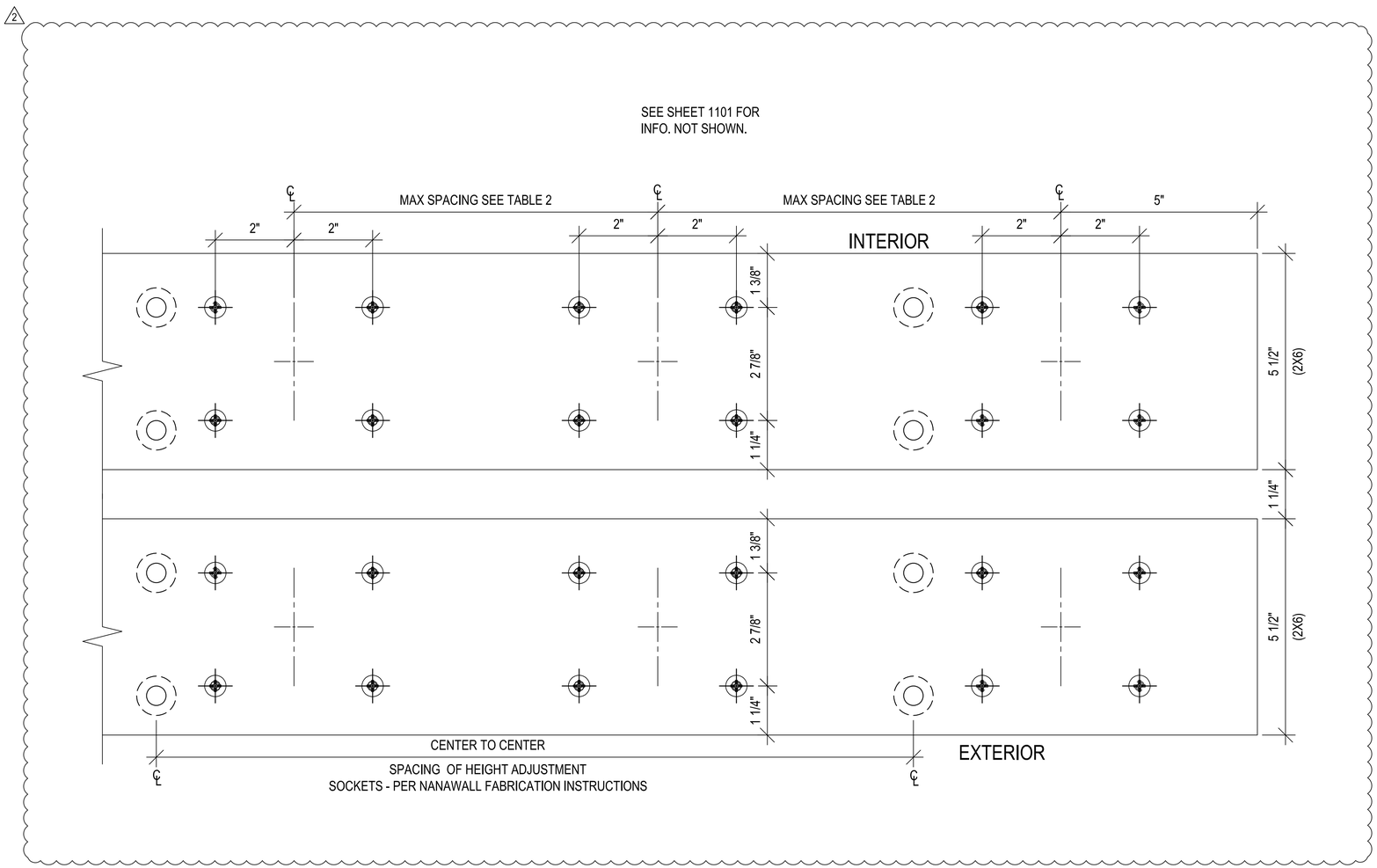
PLAN VIEWS FOR CERO II SYSTEM



1 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 4 TRACK PANEL

N.T.S.

SERIES:	CERO II
ARCH REF:	N/A
STRUC REF:	N/A

FIELD VERIFY ALL DIMENSIONS

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WWW.LTSDRAFTING.COM

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ARCHITECT:

GLAZING SUBCONTRACTOR:

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LTS PROJECT	19-0147
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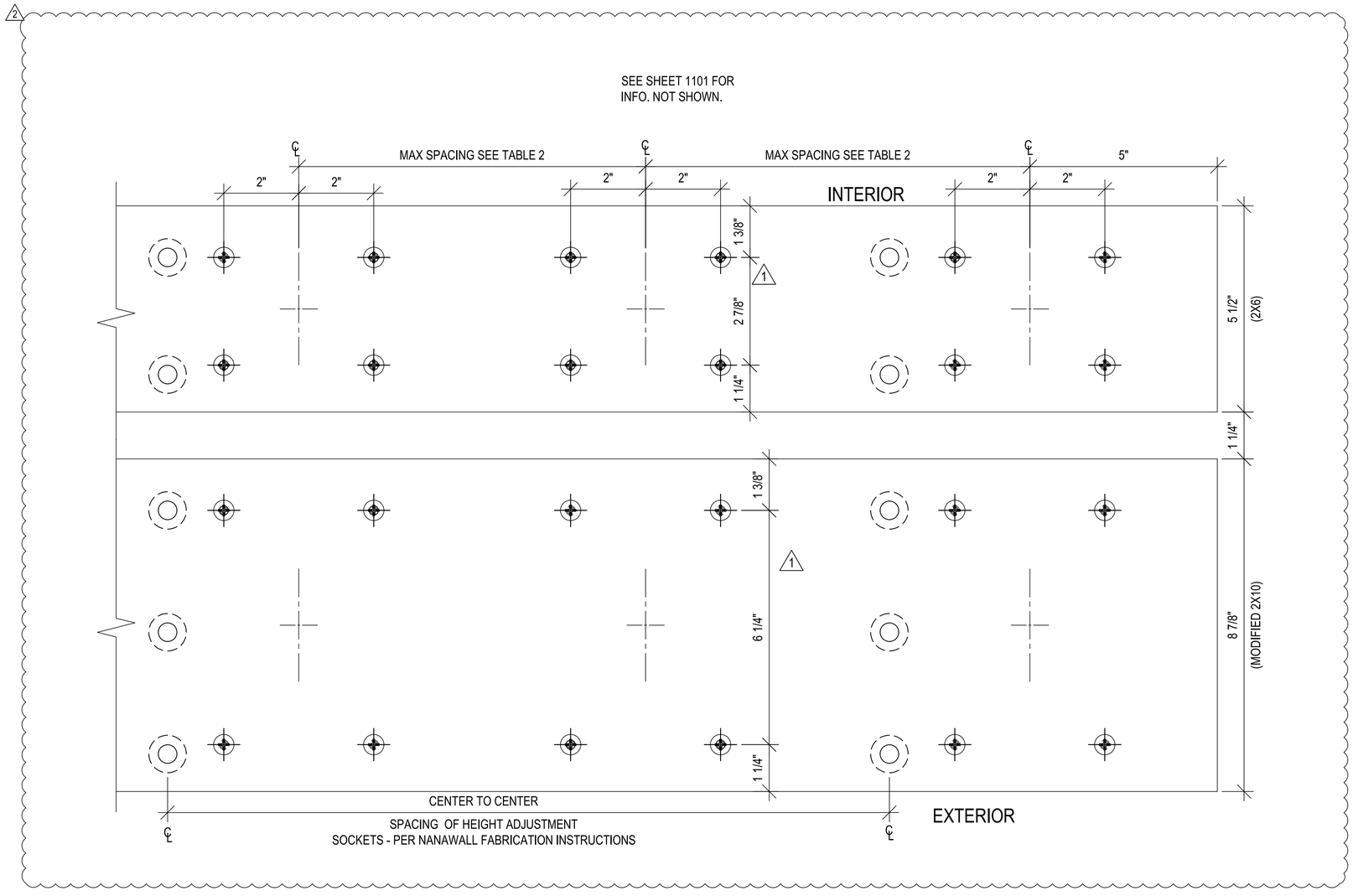
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1102

NANAWALL
FASTENE LAYOUT

PLAN VIEWS FOR CERO II SYSTEM



1 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 5 TRACK PANEL

FULL

SERIES: CERO II
ARCH REF: N/A
STRUC REF: N/A

FIELD VERIFY ALL DIMENSIONS

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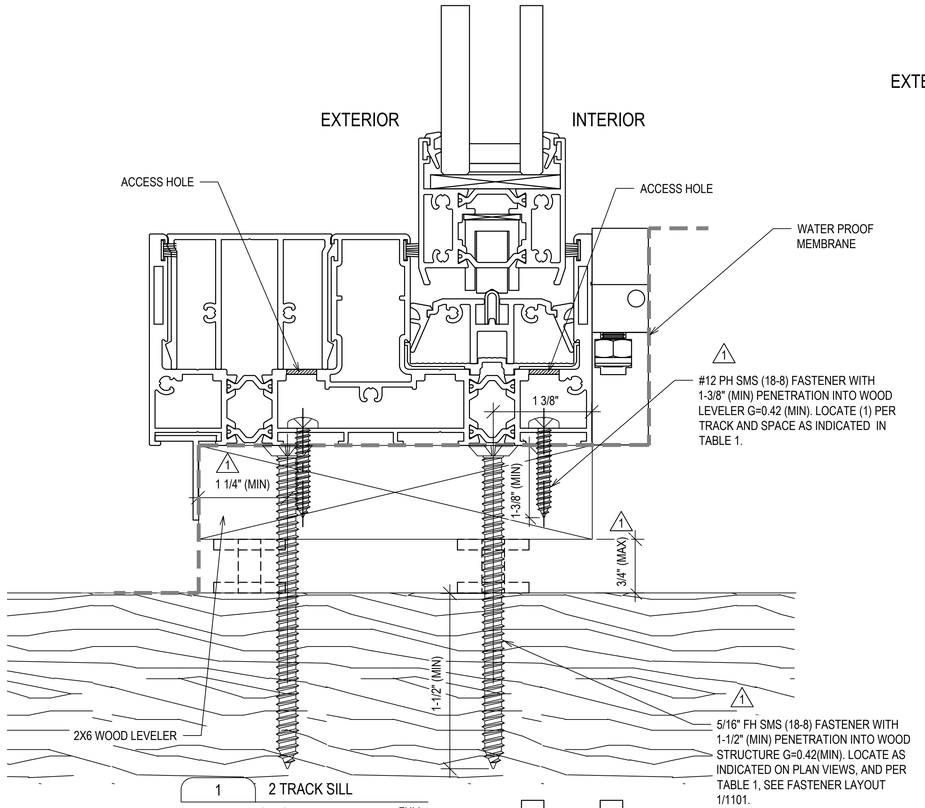
ARCHITECT:

GLAZING SUBCONTRACTOR:

SHOP DRAWINGS FOR:

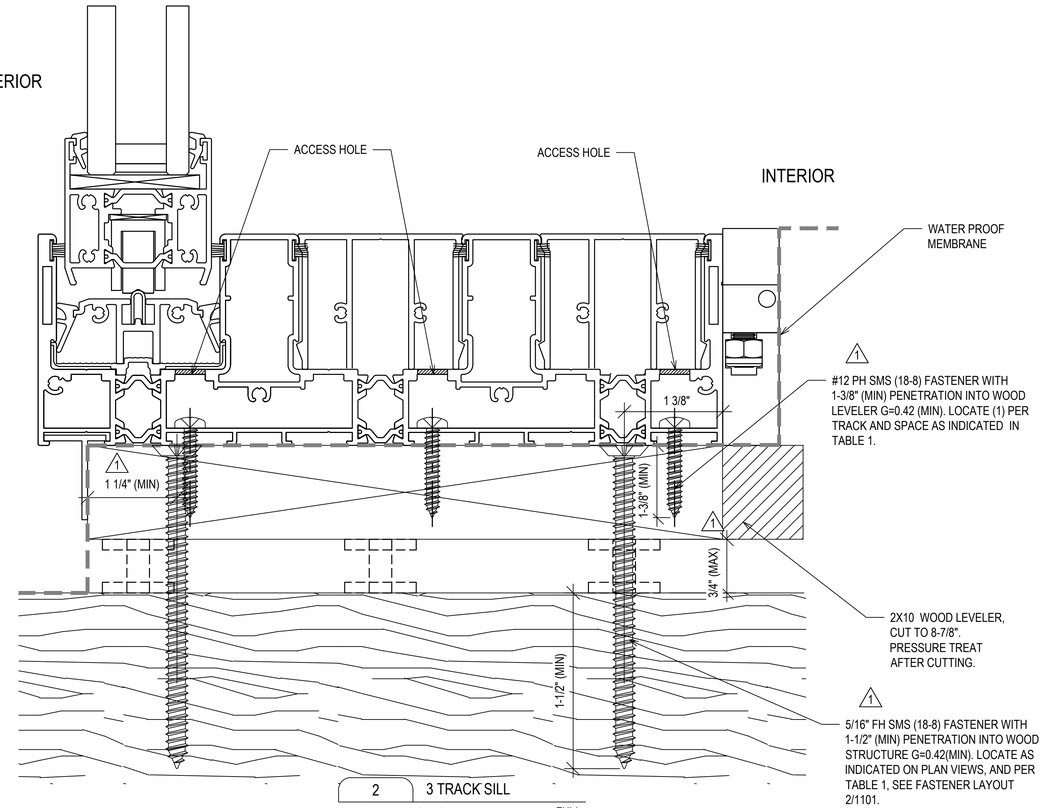
LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1103
NANAWALL
FASTENER LAYOUT



1 2 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



2 3 TRACK SILL

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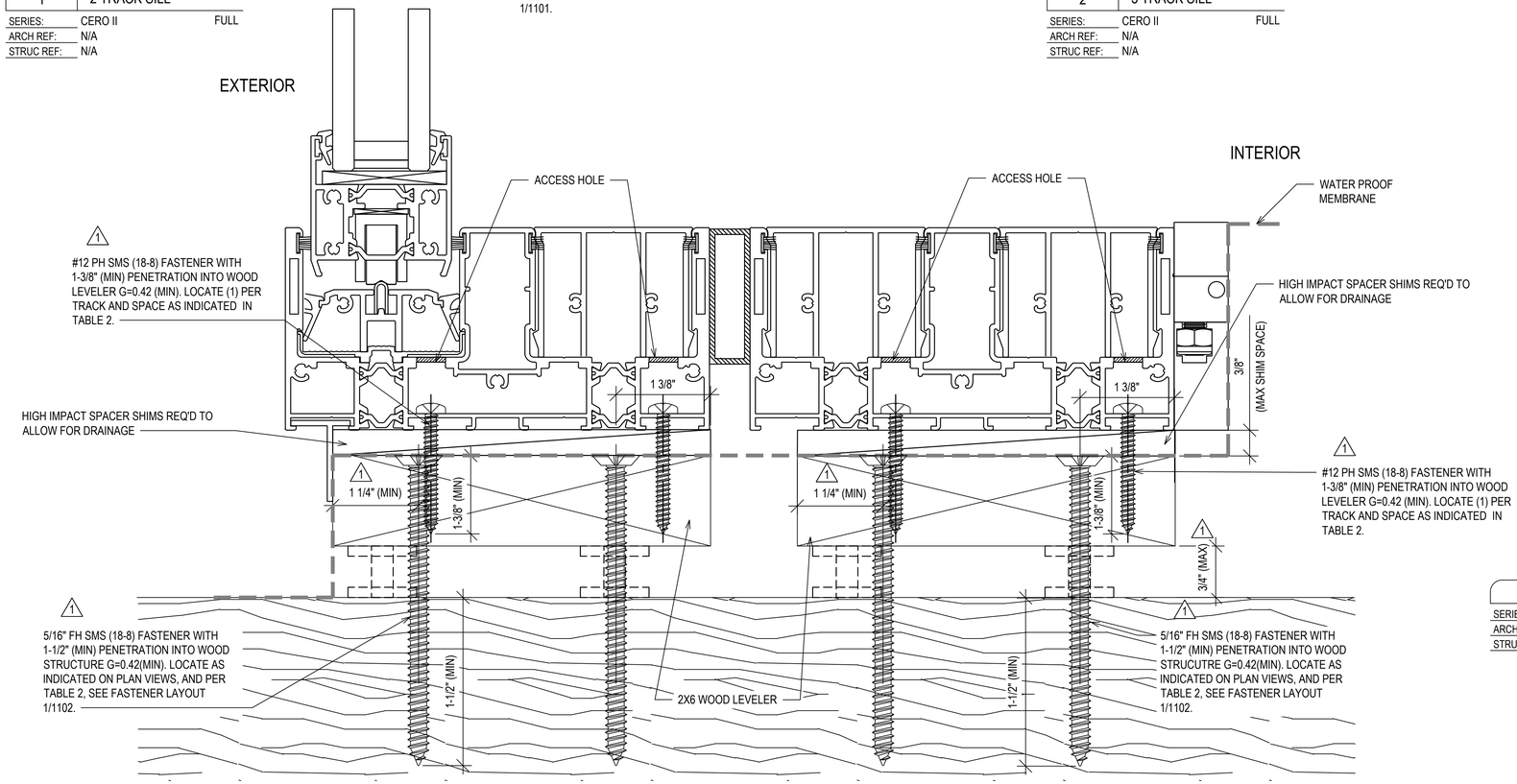
ARCH REF:	N/A	
STRUC REF:	N/A	



3 4 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

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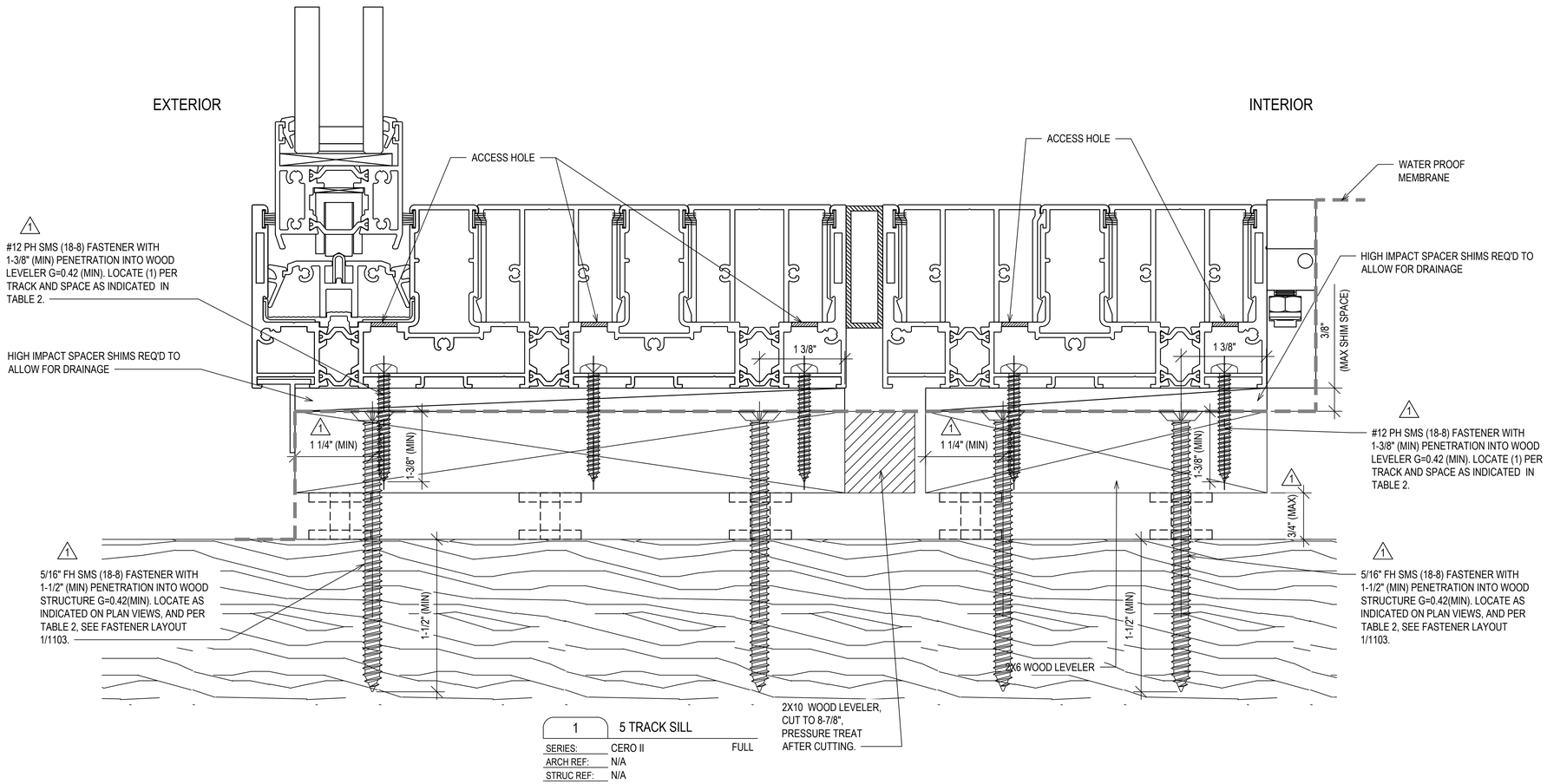
LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1104

NANAWALL DETAILS



1 5 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

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SCALE	FULL
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LTS ENGINEER	NB
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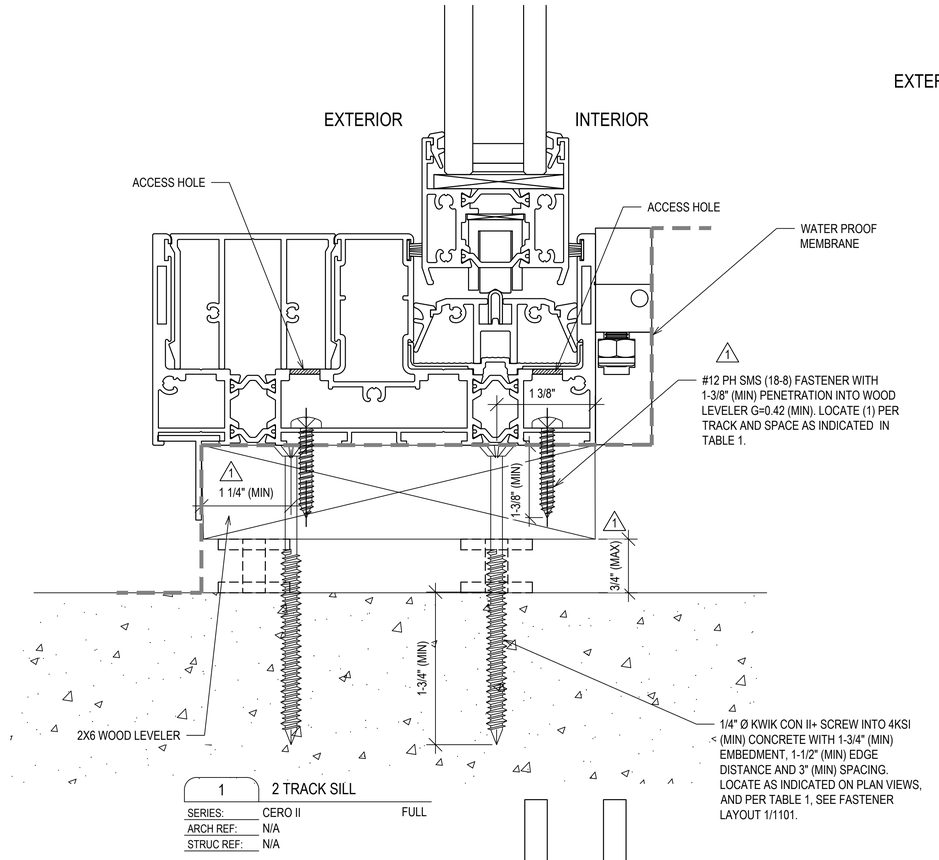
DETAILS



1 2 TRACK SILL

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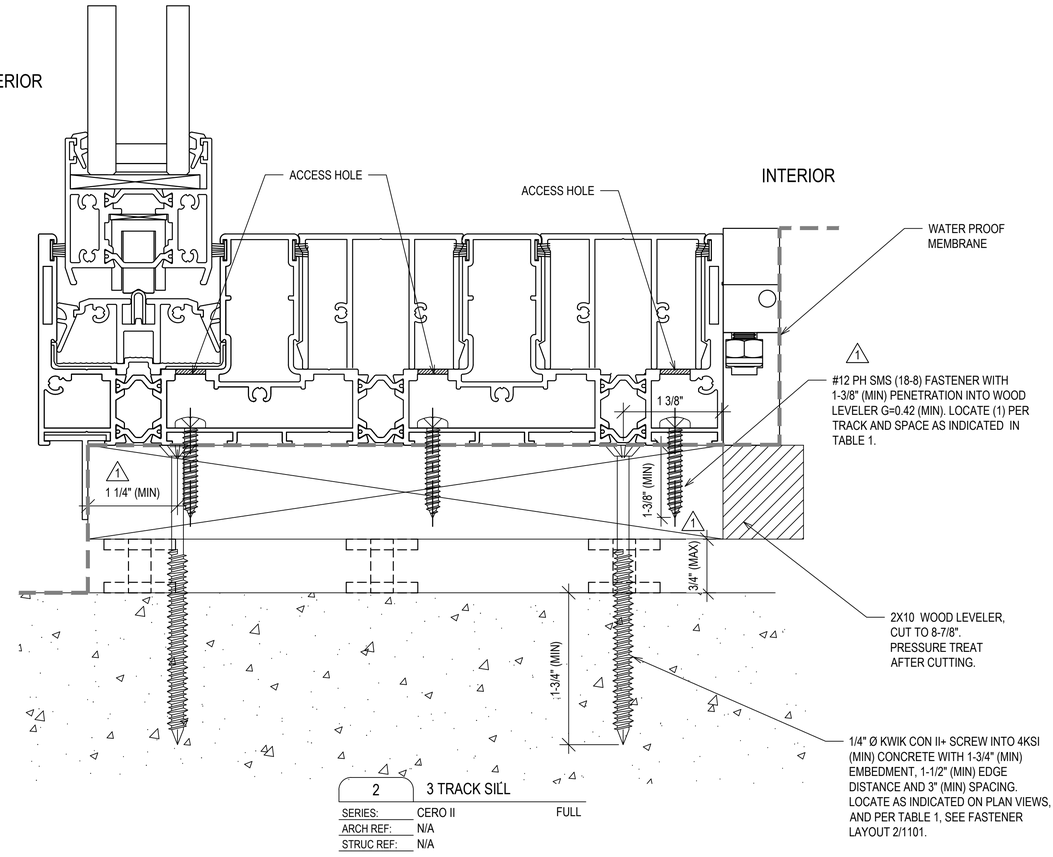
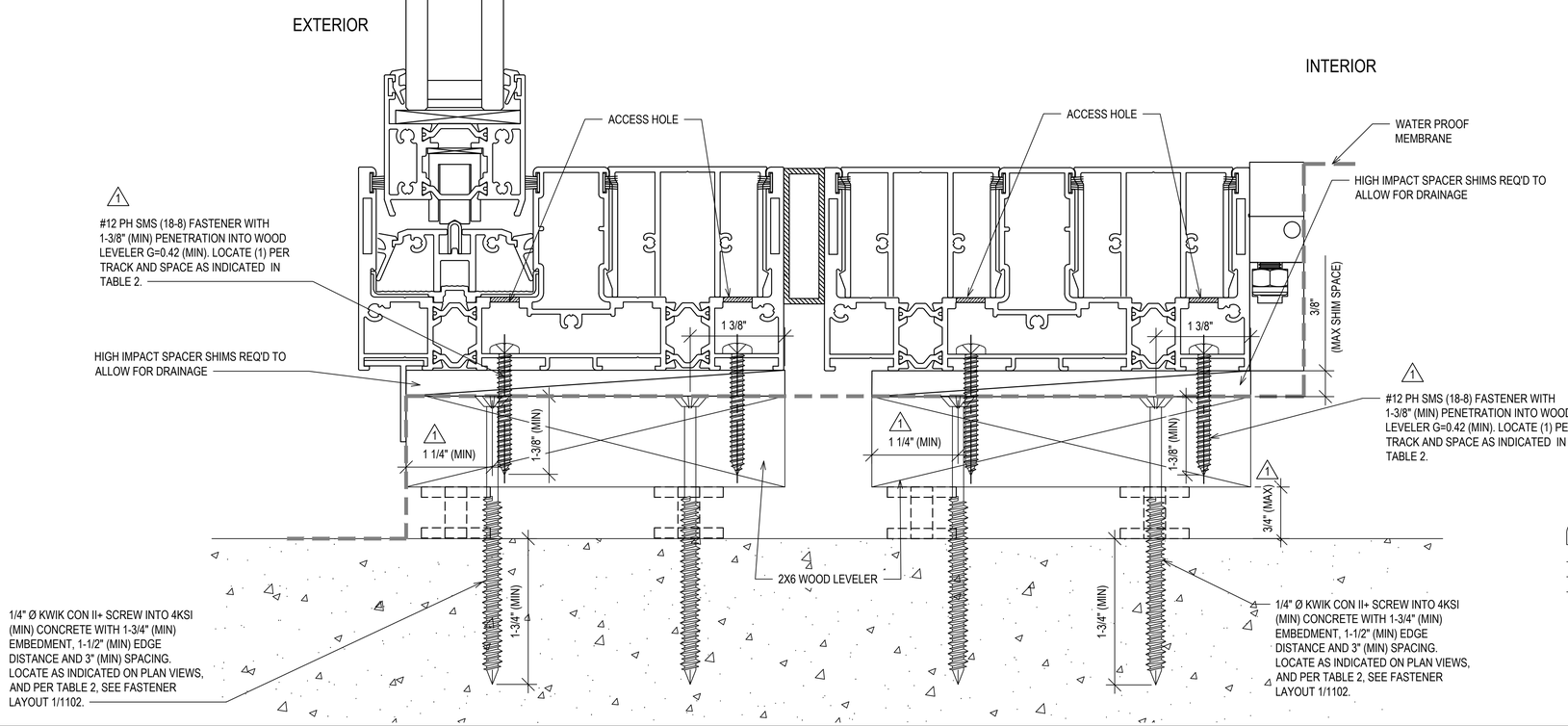
ARCH REF:	N/A	
STRUC REF:	N/A	



2 3 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



3 4 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

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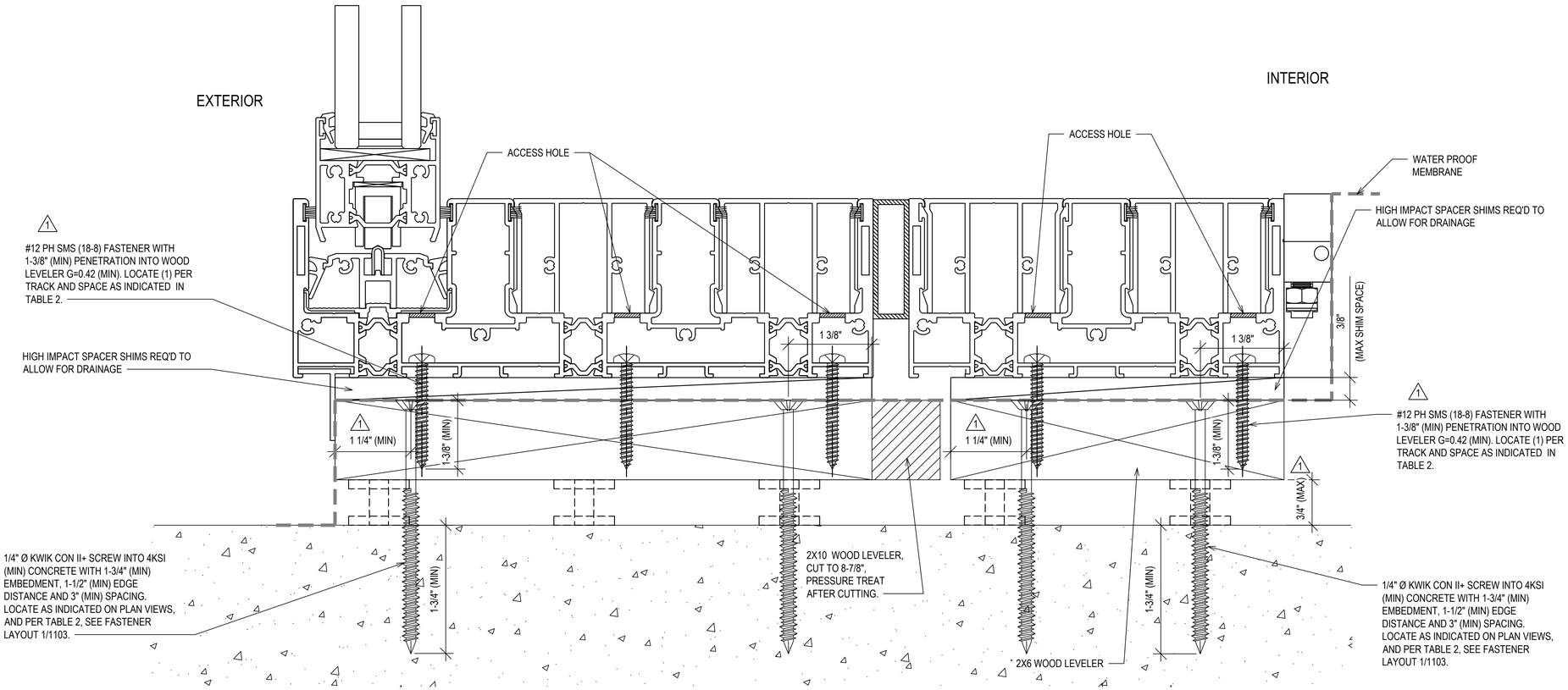
LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1106

NANAWALL

FASTENER LAYOUT



1 5 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

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LTS ENGINEER	NB
DATE	3.25.22

1107

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FASTENER LAYOUT

Appendix II: cero III

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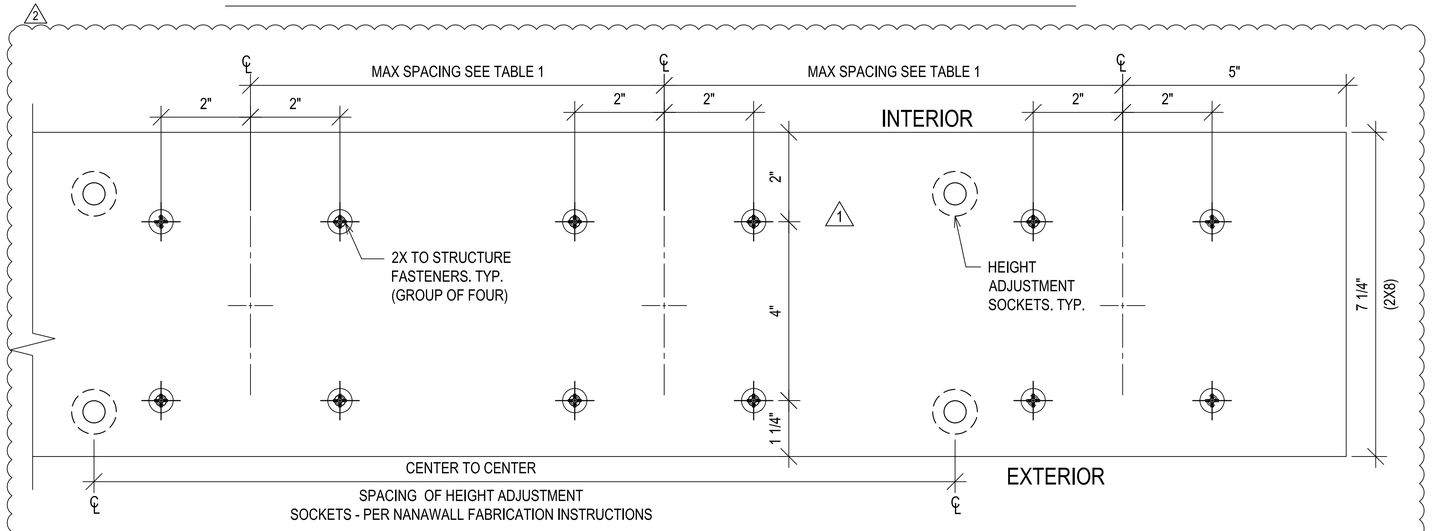
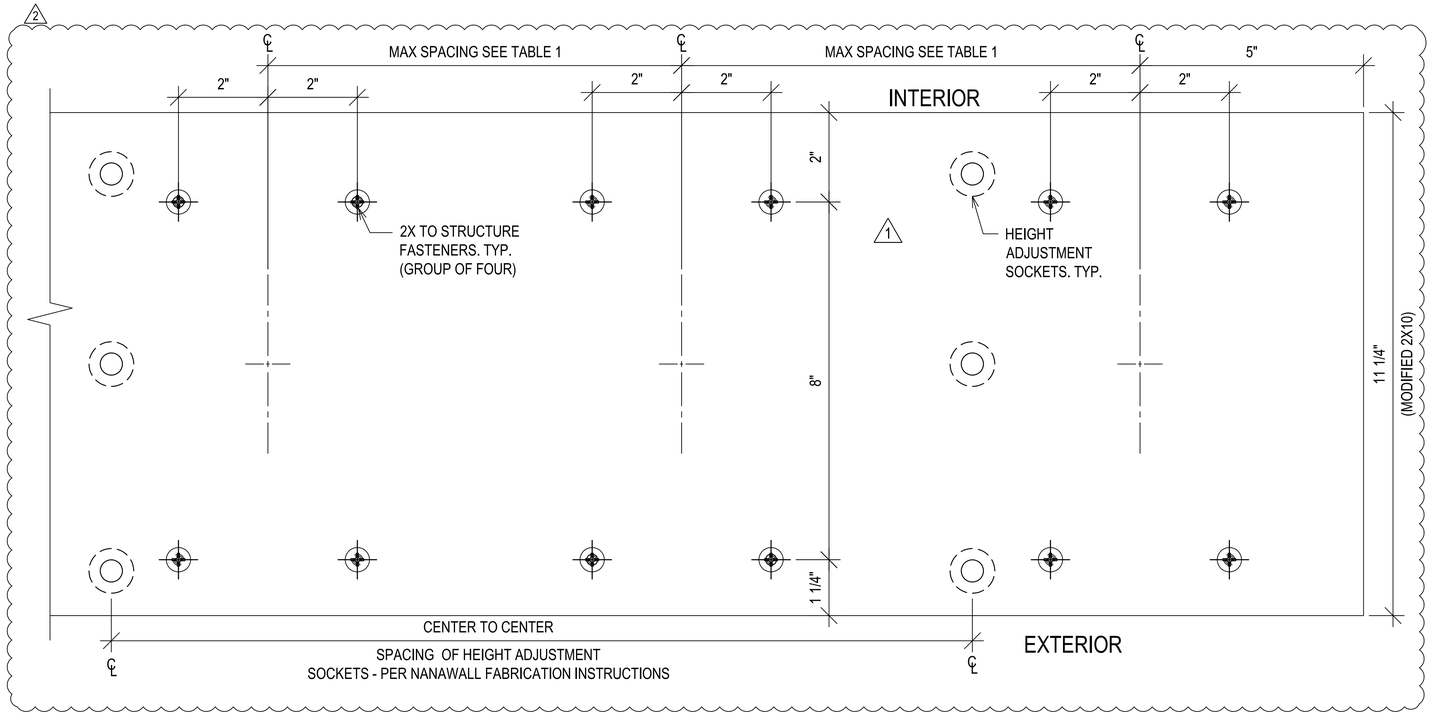
PLAN VIEWS FOR CERO III SYSTEM



1 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 2 TRACK PANEL

SERIES: CERO III
ARCH REF: N/A
STRUC REF: N/A
N.T.S.



2 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 3 TRACK PANEL

SERIES: CERO III
ARCH REF: N/A
STRUC REF: N/A
N.T.S.

GENERAL NOTES

1. LTS DRAFTING & ENGINEERING ("LTS") WILL ASSUME NO RESPONSIBILITY FOR ERRORS RESULTING FROM THE USE OF THESE DRAWINGS BY OTHER TRADES. LTS DRAFTING & ENGINEERING WILL ASSUME NO RESPONSIBILITY FOR DIMENSIONAL ERRORS OR CHANGES RESULTING FROM ACTUAL FIELD CONDITIONS THAT VARY FROM THESE DRAWINGS.
2. ALL FRAMING SYSTEMS SHALL BE FABRICATED & INSTALLED PER THE NANAWALL INSTRUCTIONS.
3. PERIMETER SUBSTRATE MUST BE CAPABLE OF WITHSTANDING REACTION FORCES IMPOSED BY DESIGN LOADS.
4. LAWS AND BUILDING AND SAFETY CODES GOVERNING THE DESIGN AND USE OF GLAZING ENTRANCE, WINDOW AND CURTAIN WALL PRODUCTS VARY WIDELY. LTS DOES NOT CONTROL THE SELECTION OF PRODUCT CONFIGURATIONS, OPERATING HARDWARE OR GLAZING MATERIALS AND ASSUMES NO RESPONSIBILITY FOR SAME.
5. DRAWINGS ONLY DETERMINE THE FASTENER REQUIREMENTS FOR SILL CONDITION.

WOOD LEVELER SPECIFICATIONS:

1. ALL DIMENSIONAL LUMBER USED FOR IN THESE SHOP DRAWINGS SHALL CONFORM TO ANSI, AWC AND NDS.
2. ALL DIMENSIONAL LUMBER SHALL BE PRESSURE TREATED ACCORDING TO AWPA STANDARD U1 TO THE REQUIREMENTS OF USE CATEGORY 2 (UC2).
3. ALL DIMENSIONAL LUMBER IS ASSUMED TO BE SPRUCE-PINE-FIR (SPECIFIC GRAVITY = 0.42 MIN OR DENSER)

TABLE 1 (2&3 TRACK SYSTEM)

WIND PRESSURE	MAX SPACING FOR SILL TRACK TO WOOD LEVELER	MAX SPACING FOR WOOD LEVELER TO WOOD STRUCTURE	MAX SPACING FOR WOOD LEVELER TO CONCRETE STRUCTURE
0 - 30 (PSF)	17 (IN)	30 (IN)	36 (IN)
31 - 45 (PSF)	11 (IN)	20 (IN)	25 (IN)
46 - 60 (PSF)	8 (IN)	15 (IN)	19 (IN)
61 - 75 (PSF)	7 (IN)	12 (IN)	15 (IN)
76 - 90 (PSF)	6 (IN)	10 (IN)	13 (IN)

1

TABLE 2 (4&5 TRACK SYSTEM)

WIND PRESSURE	MAX SPACING FOR SILL TRACK TO WOOD LEVELER	MAX SPACING FOR WOOD LEVELER TO WOOD STRUCTURE	MAX SPACING FOR WOOD LEVELER TO CONCRETE STRUCTURE
0 - 30 (PSF)	34 (IN)	36 (IN)	36 (IN)
31 - 45 (PSF)	23 (IN)	36 (IN)	36 (IN)
46 - 60 (PSF)	17 (IN)	30 (IN)	36 (IN)
61 - 75 (PSF)	14 (IN)	24 (IN)	31 (IN)
76 - 90 (PSF)	11 (IN)	20 (IN)	25 (IN)

1

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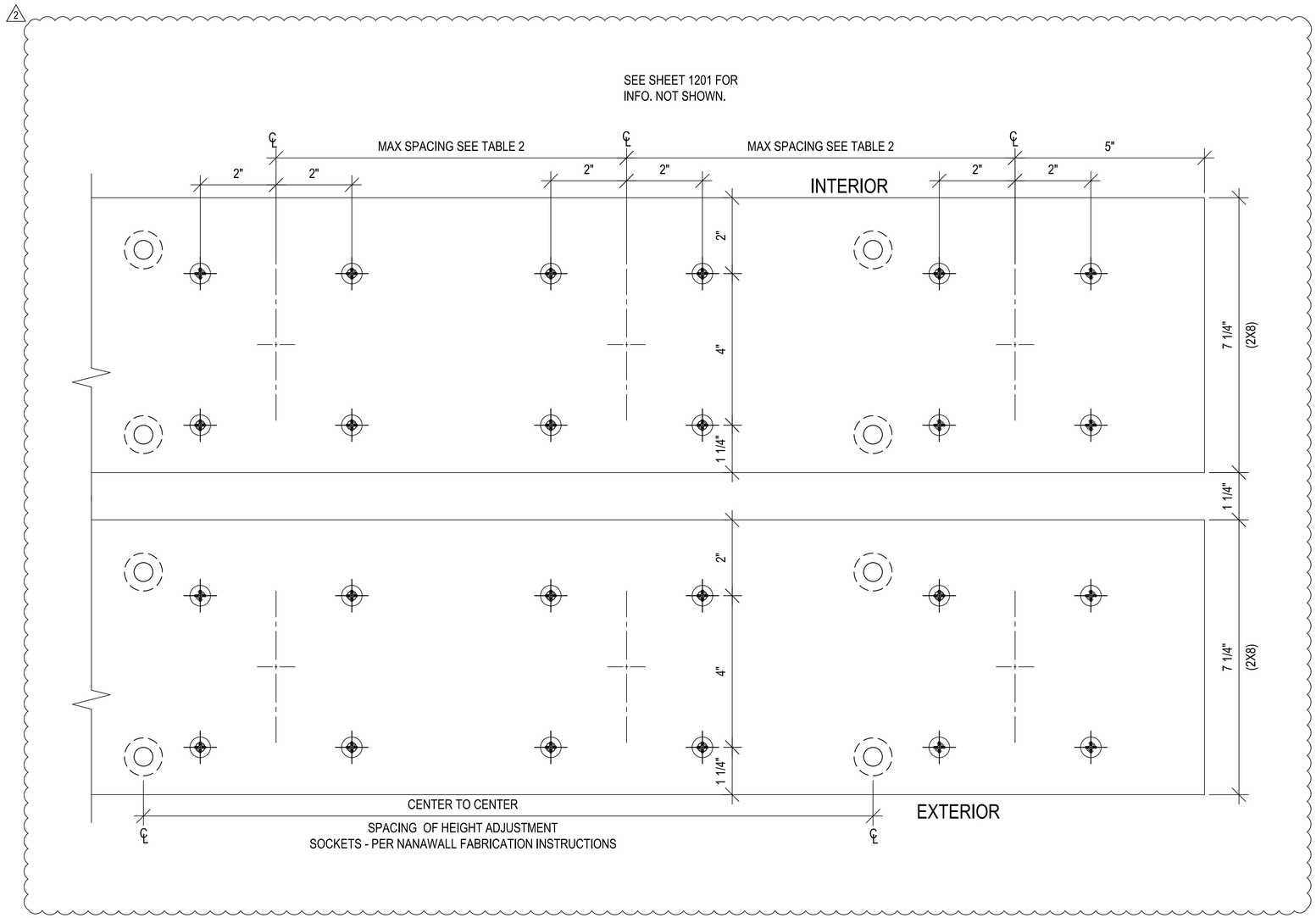
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1201
NANAWALL
DETAILS

PLAN VIEWS FOR CERO III SYSTEM



1 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 4 TRACK PANEL

N.T.S.

SERIES: CERO III
ARCH REF: N/A
STRUC REF: N/A

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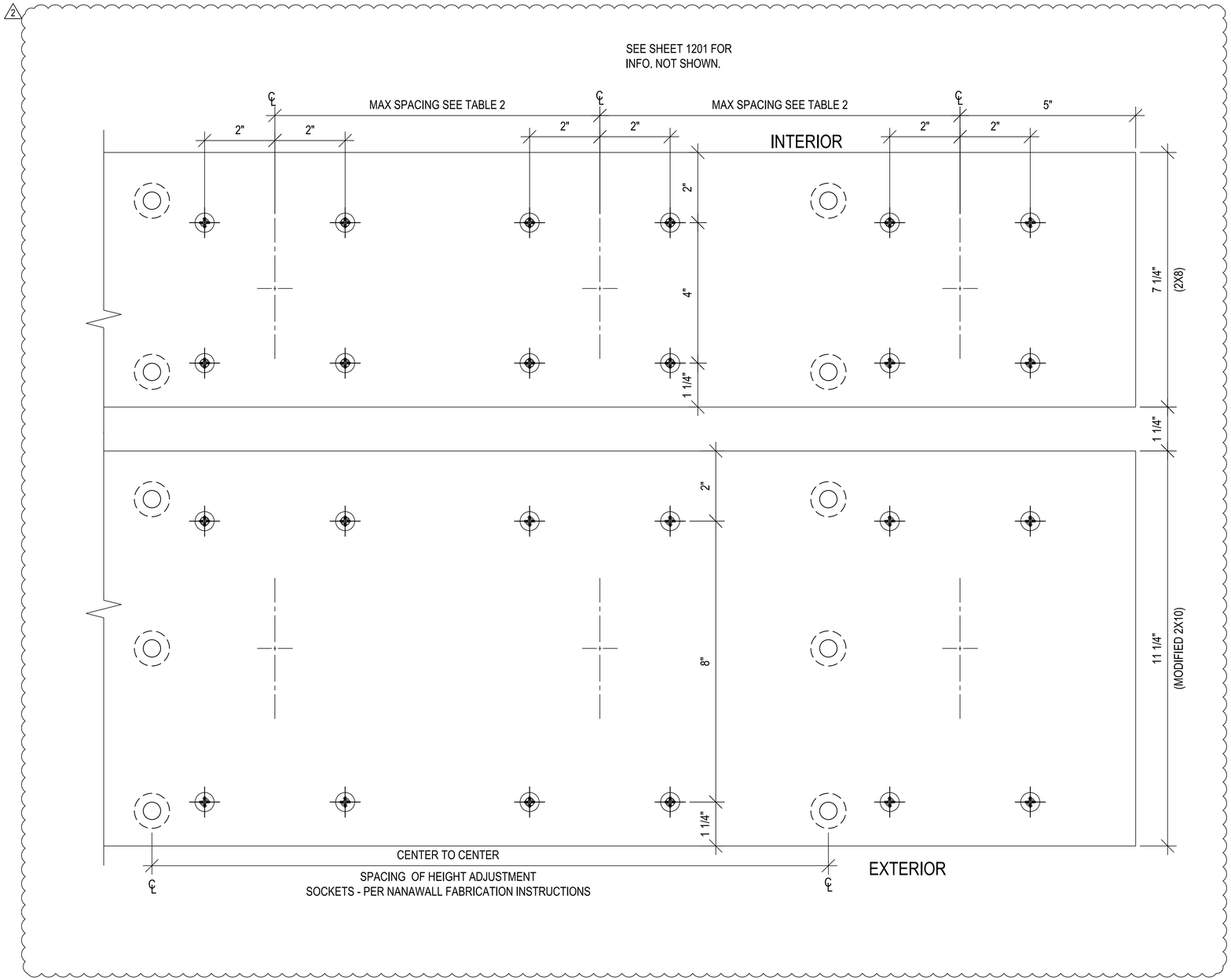
SHOP DRAWINGS FOR:

LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1202
NANAWALL
DETAILS

PLAN VIEWS FOR CERO III SYSTEM



1 WOOD LEVEL TO WOOD/CONCRETE SUBSTRATE FASTENER LAYOUT FOR 5 TRACK PANEL

SERIES: CERO III FULL
ARCH REF: N/A
STRUC REF: N/A

FIELD VERIFY ALL DIMENSIONS

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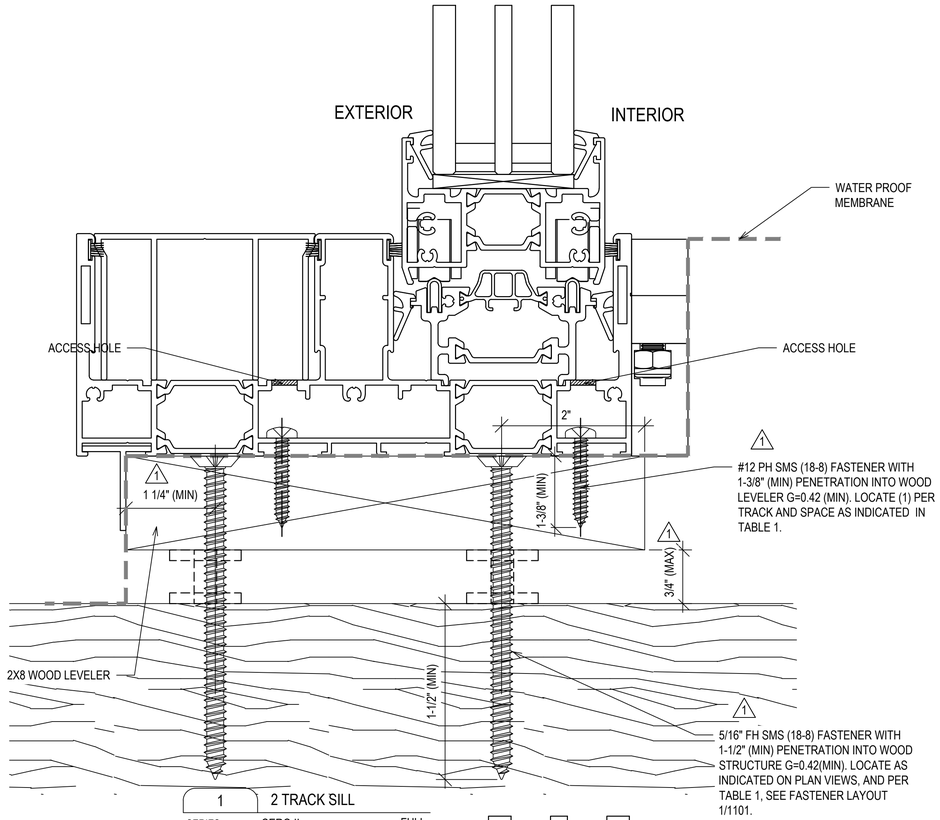
ARCHITECT:

GLAZING SUBCONTRACTOR:

SHOP DRAWINGS FOR:

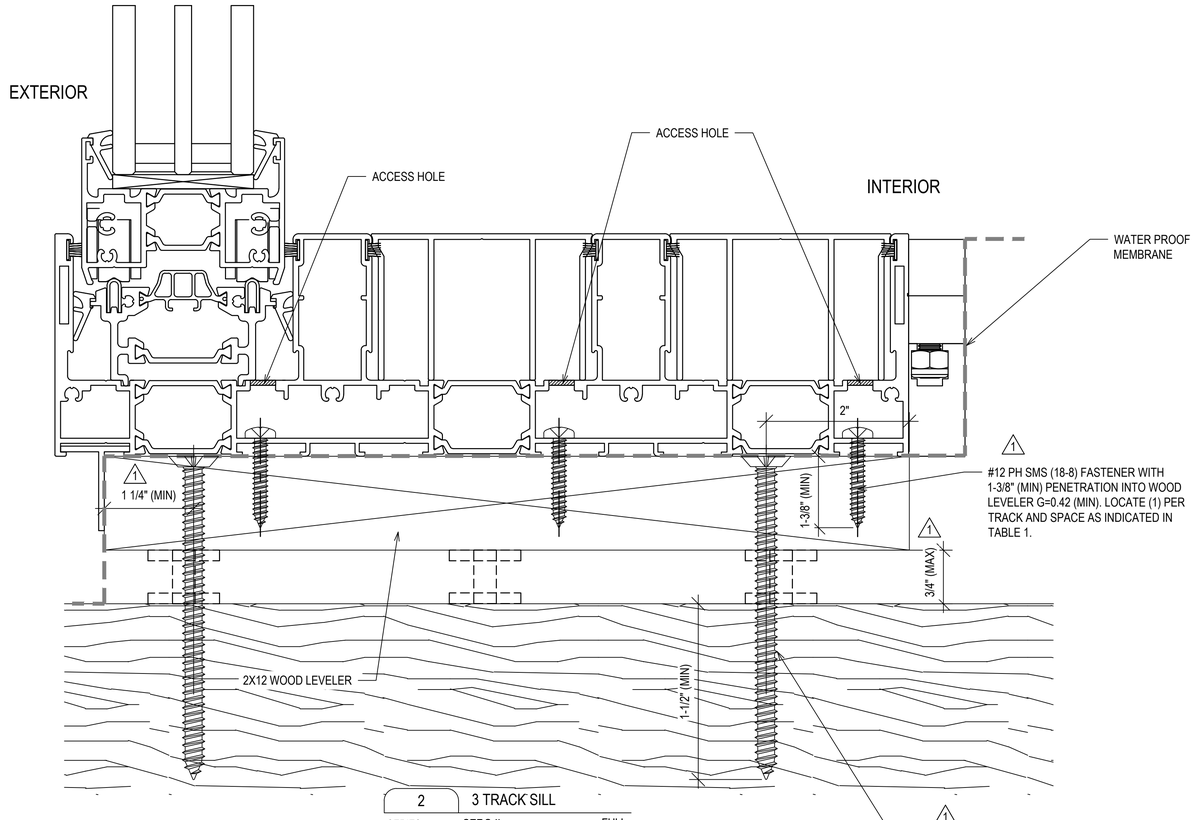
LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1203
NANAWALL
DETAILS



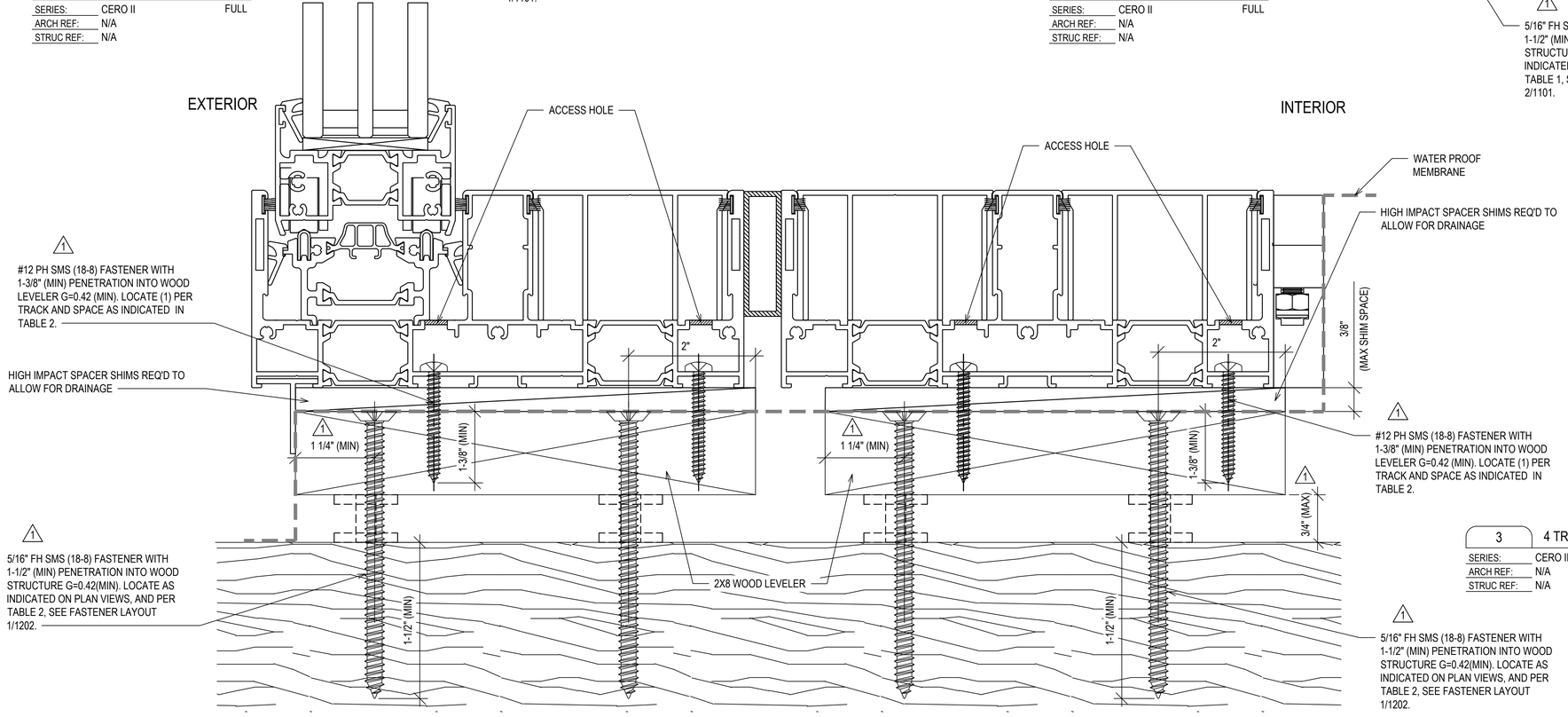
1 2 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



2 3 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



3 4 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

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GLAZING SUBCONTRACTOR:

SHOP DRAWINGS FOR:

LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

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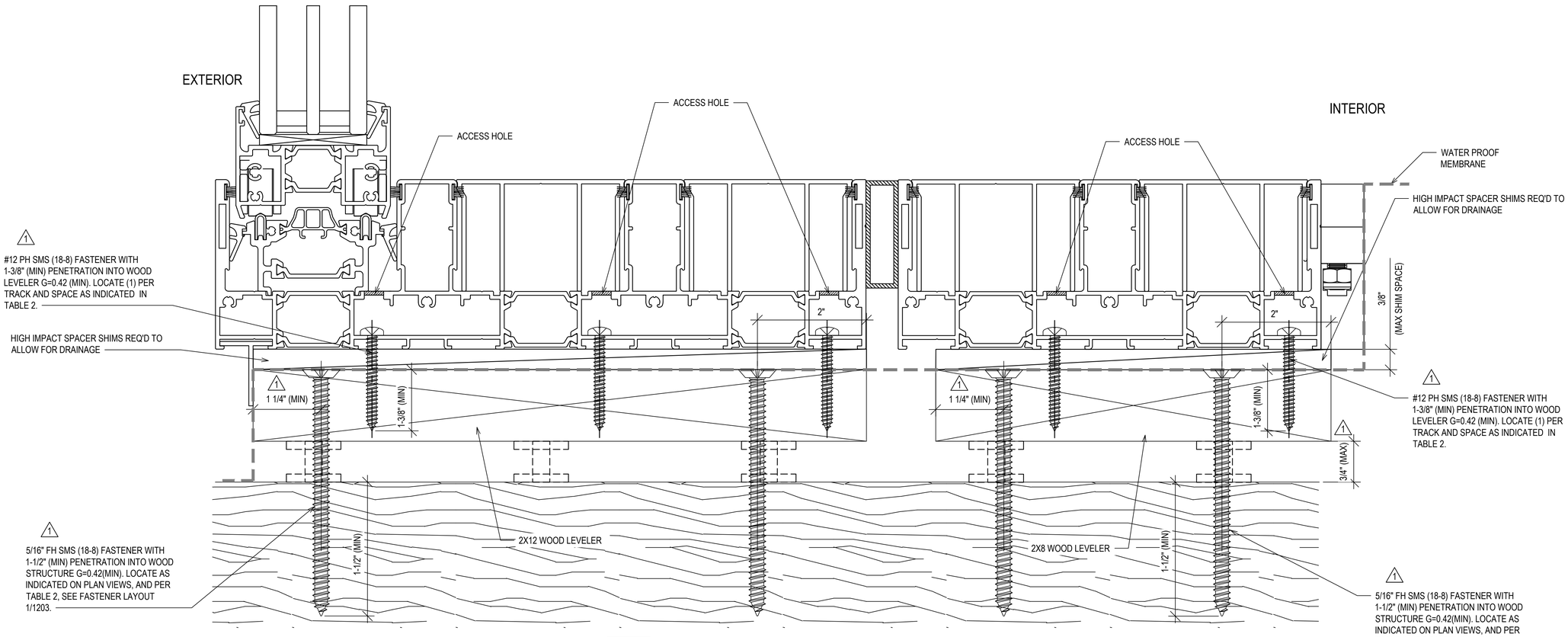
NANAWALL DETAILS



1 5 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

FIELD VERIFY ALL DIMENSIONS

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SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1205

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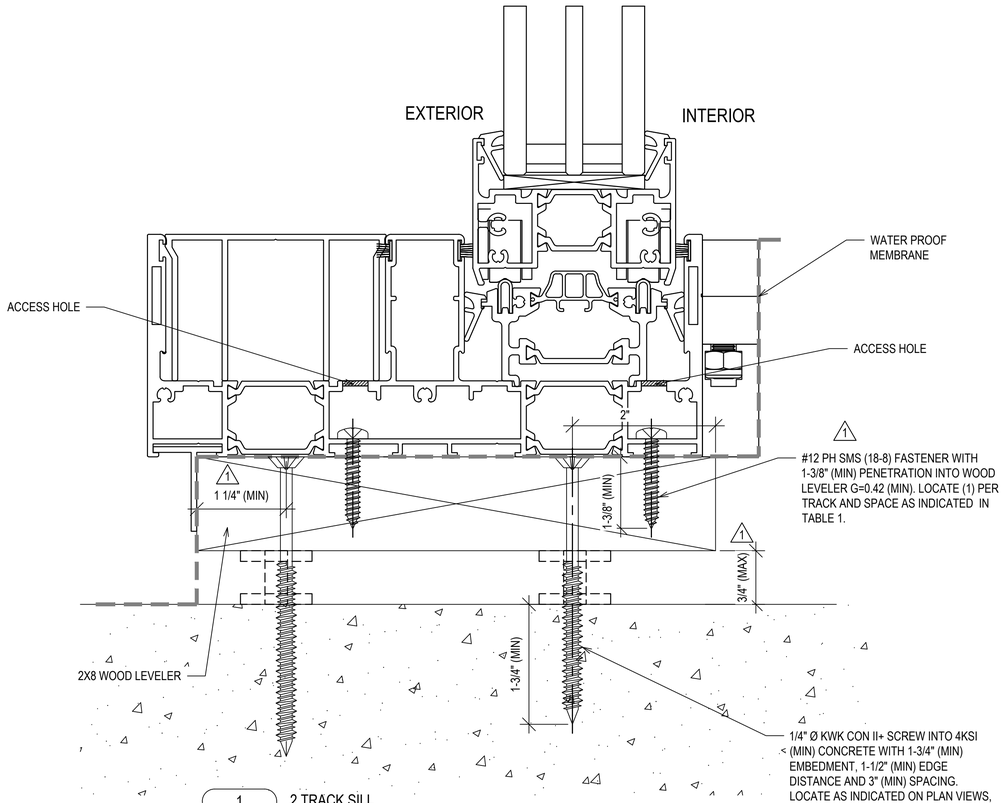
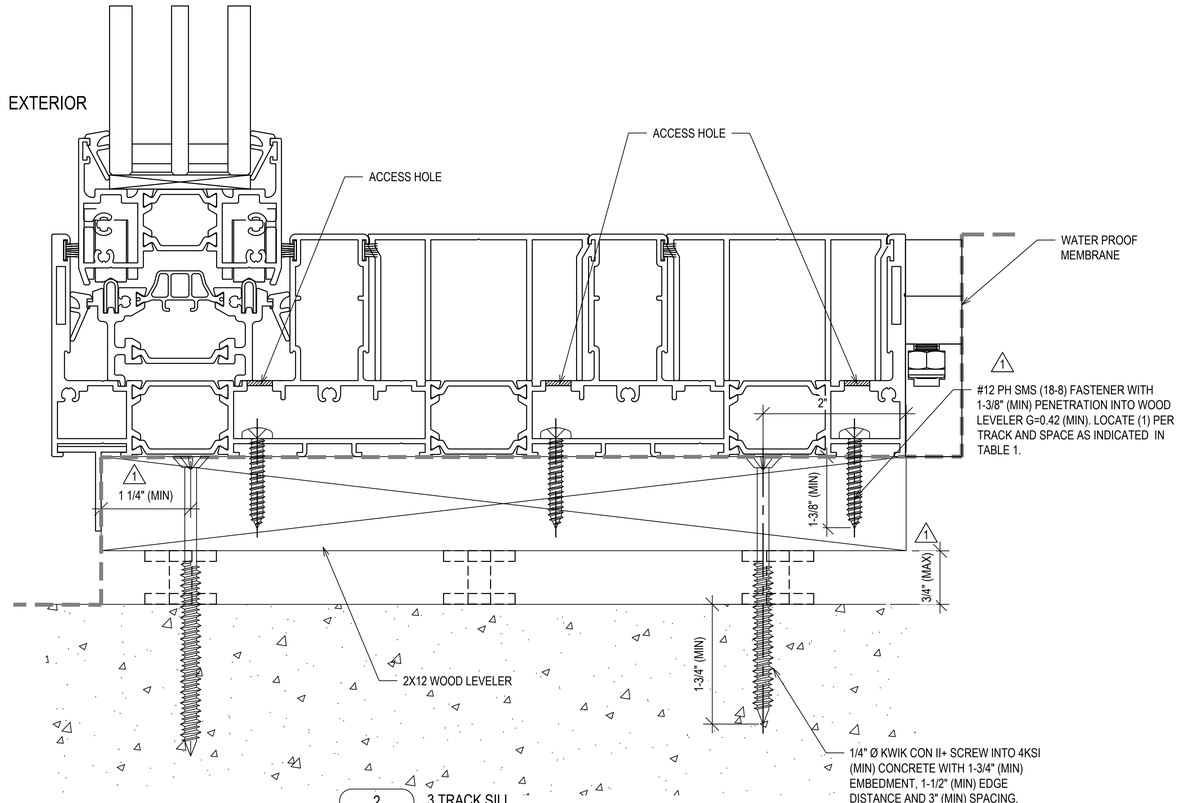
DETAILS



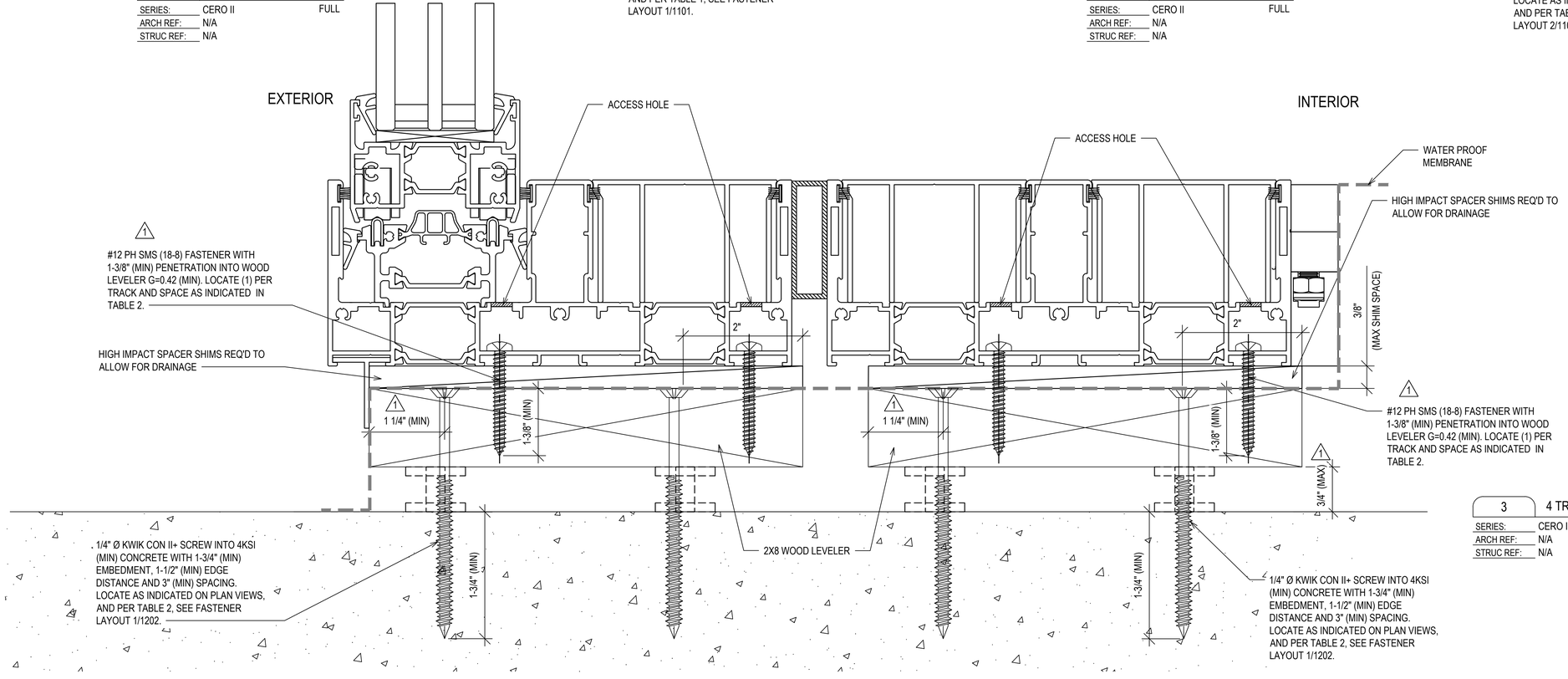
1 2 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



2 3 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	



3 4 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
STRUC REF:	N/A	

FIELD VERIFY ALL DIMENSIONS

DRAFTING LTS ENGINEERING

8670 CONCORD CENTER DRIVE
ENGLEWOOD, CO 80112
PHONE: 303.858.9858
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WWW.LTSDRAFTING.COM

REVISIONS		
1	3.25.22	PER CLIENT COMMENTS
2	02.07.23	PER CLIENT COMMENTS

ARCHITECT:

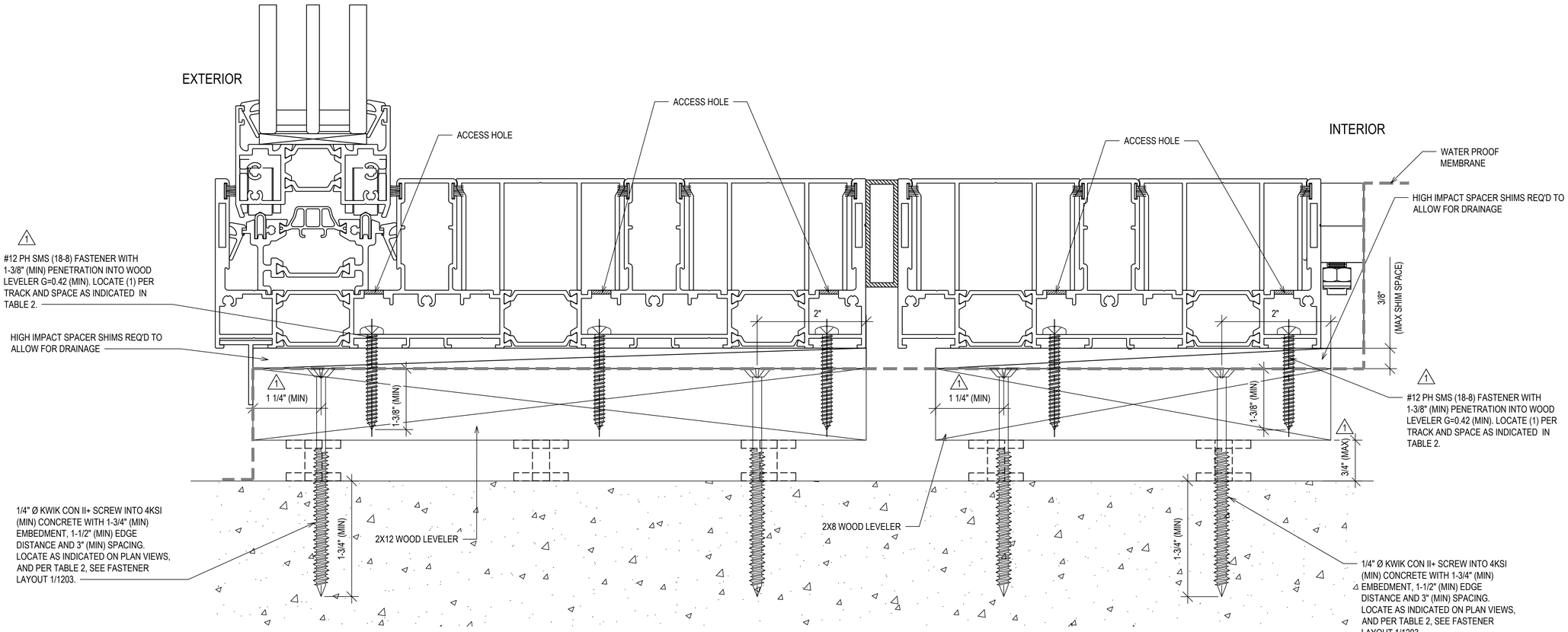
GLAZING SUBCONTRACTOR:

SHOP DRAWINGS FOR:

LTS PROJECT	19-0147
SCALE	FULL
LTS PM	
LTS ENGINEER	NB
DATE	3.25.22

1206

NANAWALL DETAILS



1 5 TRACK SILL

SERIES:	CERO II	FULL
ARCH REF:	N/A	
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NANAWALL
DETAILS