

## 9/7/2021

MEMORANDUM TO: Tommy Dudeck, P.E.

Stantec, Inc.

FROM: Jeremy R. Hamm, P.E.

Geotechnical Department Manager

Falcon Engineering, Inc.

STATE PROJECT: 34554.1.3 TIP: R-3833C COUNTY: Iredell

DESCRIPTION: Brawley School Road (SR 1100) from Talbert Road (SR 1116)

to 1000' East of US 21

SUBJECT: Foundation Recommendations for Noise Wall No. 2

Falcon Engineering has received the proposed Noise Wall No. 2 for the referenced project, completed the subsurface investigation, and recommends the following noise wall foundation table:

Pile Excavation Depths for Sound Barrier Wall No. 2

Begin Wall Station	End Wall Station	Max. Front Slope	Wall Height (ft)	Pile Excavation Depths, "D" (ft)		
				S = 10  ft	S = 15  ft	S = 20  ft
-NW2- 10+00	-NW2- 12+25	6:1	7	8	9	10
-NW2- 12+25	-NW2- 12+85	3:1	8	8	10	11
-NW2- 12+85	-NW2- 13+00	3:1	9	9	12	11
-NW2- 13+00	-NW2- 14+65	2:1	10-11	10	12	13
-NW2- 14+65	-NW2- 14+95	2:1	12	11	12	13
-NW2- 14+95	-NW2- 15+10	2:1	11	10	12	13
-NW2- 15+10	-NW2- 15+55	2:1	12	11	12	13
-NW2- 15+55	-NW2- 17+35	2:1	13	11	12	14
-NW2- 17+35	-NW2- 17+95	3:1	12	9	10	12
-NW2- 17+95	-NW2- 18+40	4:1	11	9	10	11
-NW2- 18+40	-NW2- 20+05	None	10-11	8	9	10

2 R-3833C Noisewall 9/7/2021 Iredell County, NC

Notes: 1. Pile Excavation Depths, "D" are based on 36" dia. holes shown on STD. NO. SBW1.

2. S = Pile Spacing

Please include the standard SMU PSP028, Sound Barrier Wall provision in the contract.

Please contact us at 919-871-0800 if there are any questions concerning this memorandum.

Prepared by,

W. Scott Hunsberger, P.E.

Falcon Engineering, Inc.

Geotechnical Engineer

9/7/2021

DocuSigned by:

Jeremy R. Hamm, PE

Geotechnical Services Manager

Falcon Engineering, Inc.

