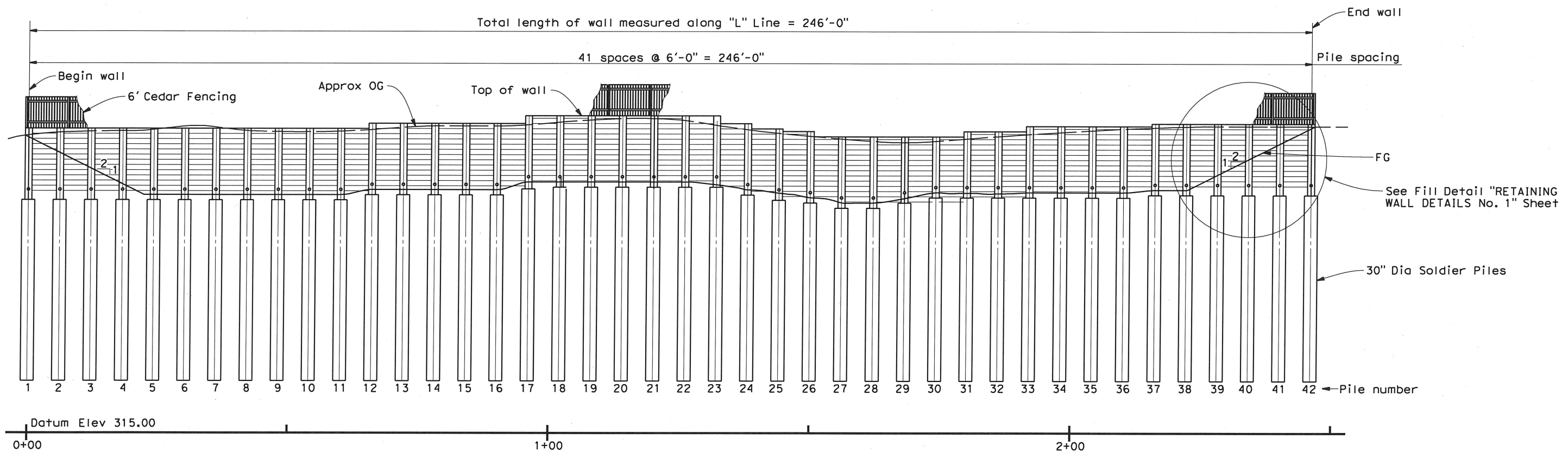


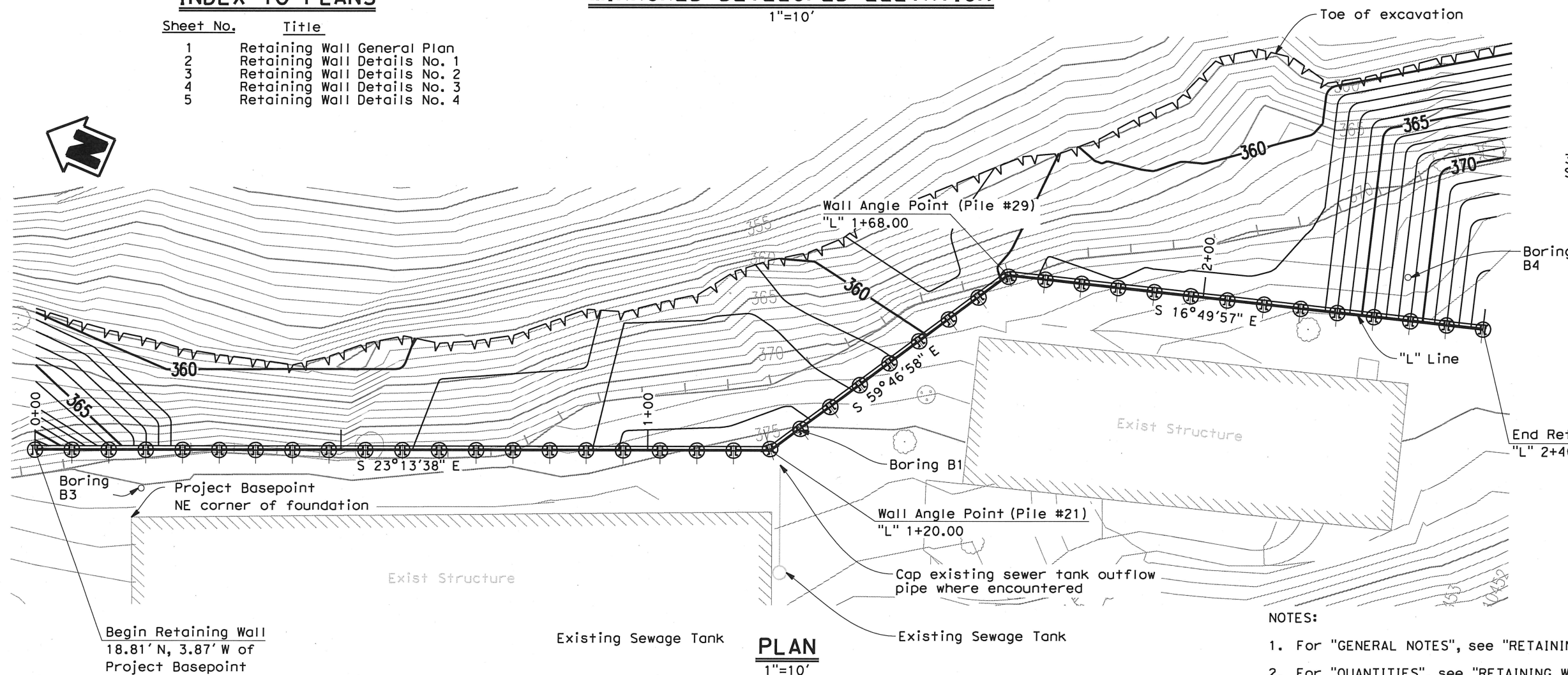


INDEX TO PLANS

Sheet No.	Title
1	Retaining Wall General Plan
2	Retaining Wall Details No. 1
3	Retaining Wall Details No. 2
4	Retaining Wall Details No. 3
5	Retaining Wall Details No. 4

MIRRORED DEVELOPED ELEVATION

1"=10'



PLAN

1"=10'

Technical drawing of a retaining wall cross-section. The wall consists of a concrete base and a lagging section. Key features and dimensions include:

- Top Section:** 6' Cedar Fencing, 2'-0" height, FG = OG (Finished Grade equals Original Ground).
- Wall Structure:**
 - Limits of Lean Concrete:** Indicated on the left side.
 - Limits of 6" x 12" Treated Timber Lagging:** Indicated on the left side, with a note: "see 'RETAINING WALL DETAILS No. 3' sheet".
 - Approximate OG:** Original Ground line.
 - FG:** Finished Grade line.
 - Bottom of Logging:** Indicated on the left side.
 - 4'-0" Section:** A section of the wall 4 feet high, with a note: "D, see Note 1".
 - 1'-0" Section:** A section of the wall 1 foot high, with a note: "Δ, see Note 2".
 - CL Tieback:** Centerline of a tieback rod.
 - DETAIL M:** A detail view of the wall base.
- Base Section:**
 - Elev = 340:** Elevation of the base of the lagging section.
 - Class 3300 Concrete:** Indicated on the left side.
 - 30" Dia drilled hole with 2-MC18x42.7 Steel Soldier Piles:** Indicated at the bottom of the wall.
 - Bottom of Pile Elev = 325.00:** Elevation of the bottom of the soldier pile.
 - 3" Cir:** 3-inch circular dimension at the bottom right.
- Right Side Notes:**
 - Limits of payment for Steel Soldier Piling MC 18x42.7**
 - Limits of payment for Drilled Shaft Excavation, 30in diameter**

*Except at angle points

WALL SECTION

No Scale

Notes:

1. See "PILE DATA TABLE" on "RETAINING WALL DETAILS No. 3" sheet for D and 4.

$$\frac{\text{Top of Lagging} - \text{Top of Wall}}{\text{Top of piling}}$$

Pull prefabricated drainage composite through lowest gap in lagging above FG

Do not excavate
below this level
until tiebacks are
tested and locked
off

Install these members after
testing and locking off
tieback

DETAIL M

No Scale

Note: Trim excavation neat to back of lagging

Compact fill only
as far as directed
by Engineer

LEGEND:

 Structure Excavation

 Selected General Backfill

EXCAVATION LIMITS

No Scale

QUANTITIES

CLSM	1	LS
Structure Excavation	1560	CUYD
Drilled Shaft Excavation, 30in Diameter	2030	FT
General Structural Concrete, Class 3300	1	LS
Steel Soldier Piling MC 18x42.7	4101	FT
Timber Lagging	18.9	MFBM
Tieback Anchor (45ft Unbonded Length)	8	FT
Tieback Anchor (50ft Unbonded Length)	28	FT
Tieback Anchor (60ft Unbonded Length)	6	FT

—Prefabricated Drainage Composite

— Backfill voids behind Timber Lagging with pea gravel to 8'-0" Min above tieback and 2'-0" Min below the tieback immediately after installation of lagging and prior to testing and locking off tieback

↳ $\mathbb{Q}$ Tieback

"L" Line

Top of Wall

— Back of lagging

Varies

1'-0" →

1'-6" →

1'-6"

End of wall

Finish grade

Finish grade

Note: This detail typical for both ends of wall

 Selected General Backfill

FILL DETAIL

No Scale

SUBJECT

2 OF 5

BERRYHILL PARK APARTMENTS
RETAINING WALL DETAILS No. 1

PREPARED UNDER THE SUPERVISION OF :

Brett William Karnes
REGISTERED CIVIL ENGINEER

REGISTERED CIVIL ENGINEER

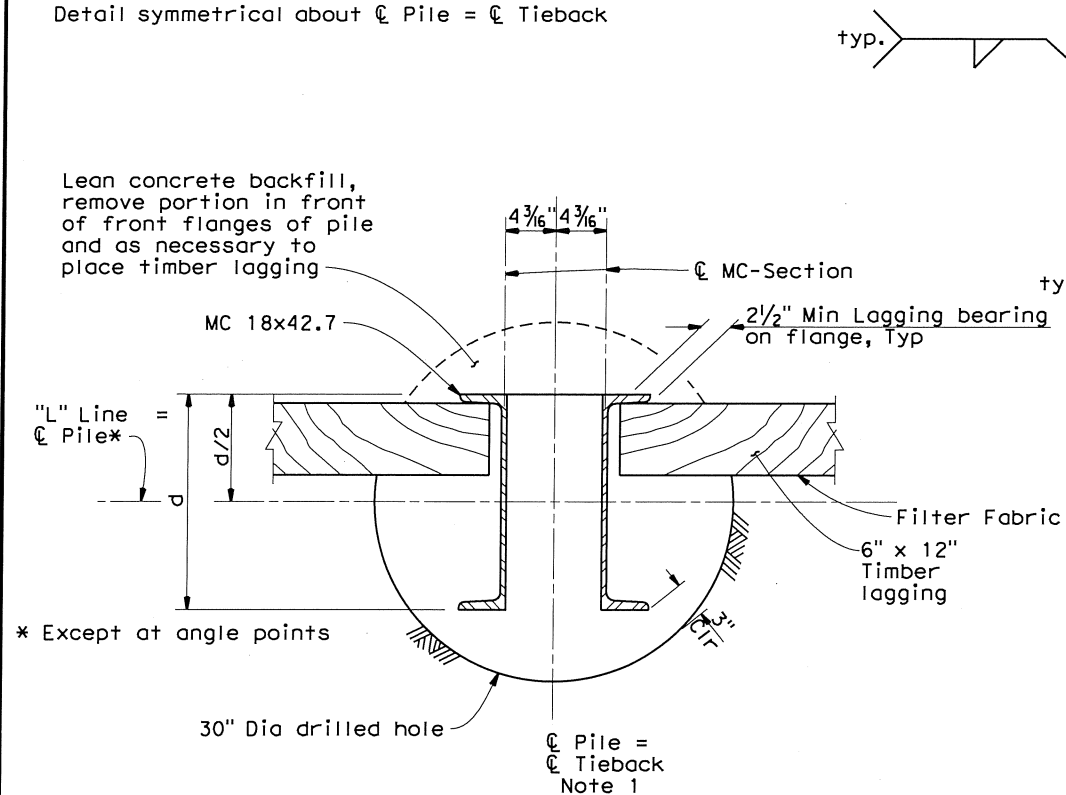
REGISTERED CIVIL ENGINEER
EXP. 6/30/17

NOISE

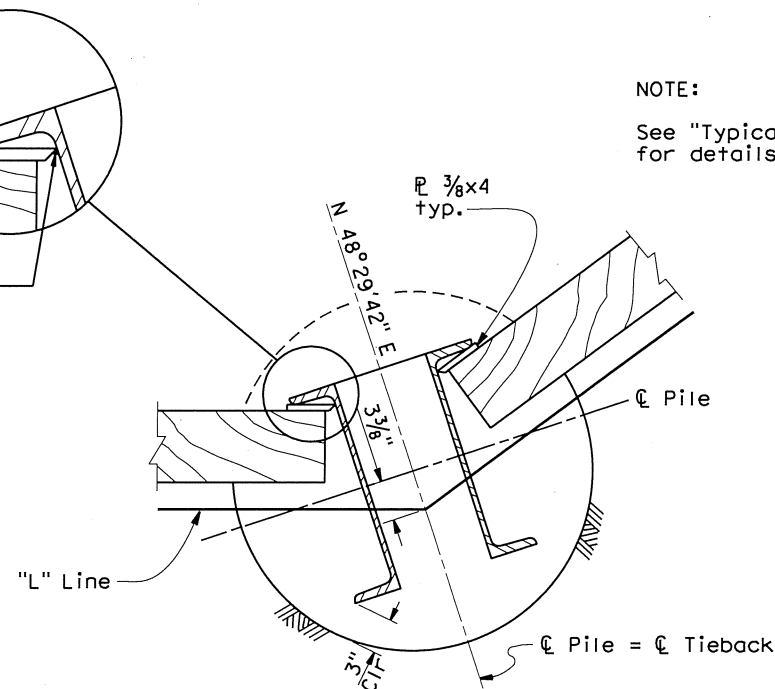
CHECKED:	J. Goodall	DRAWN:	P. Kenney
Lab No:	S77-200	DATE:	3/25/16

DATE	3-10-03	BY
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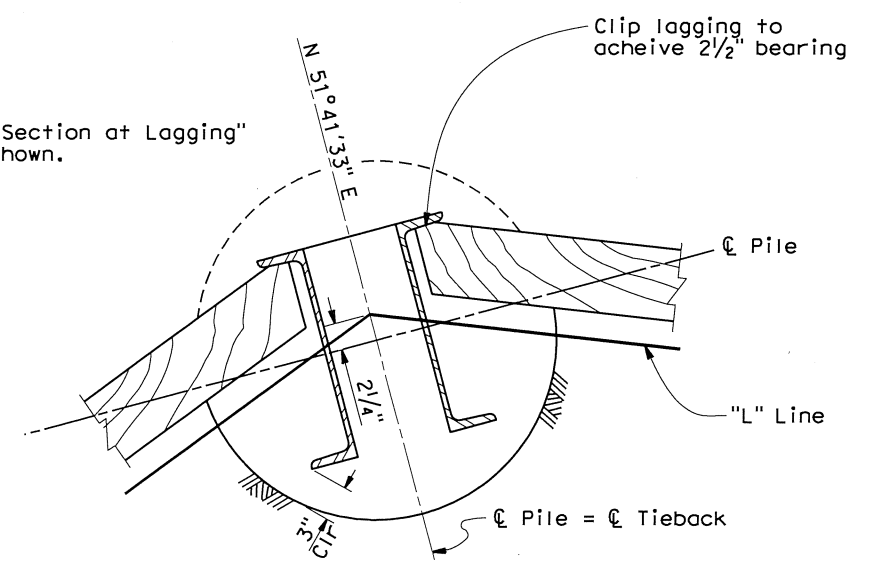
NOTE:
Detail symmetrical about C Pile = C Tieback



TYPICAL PILE SECTION AT LAGGING
No Scale



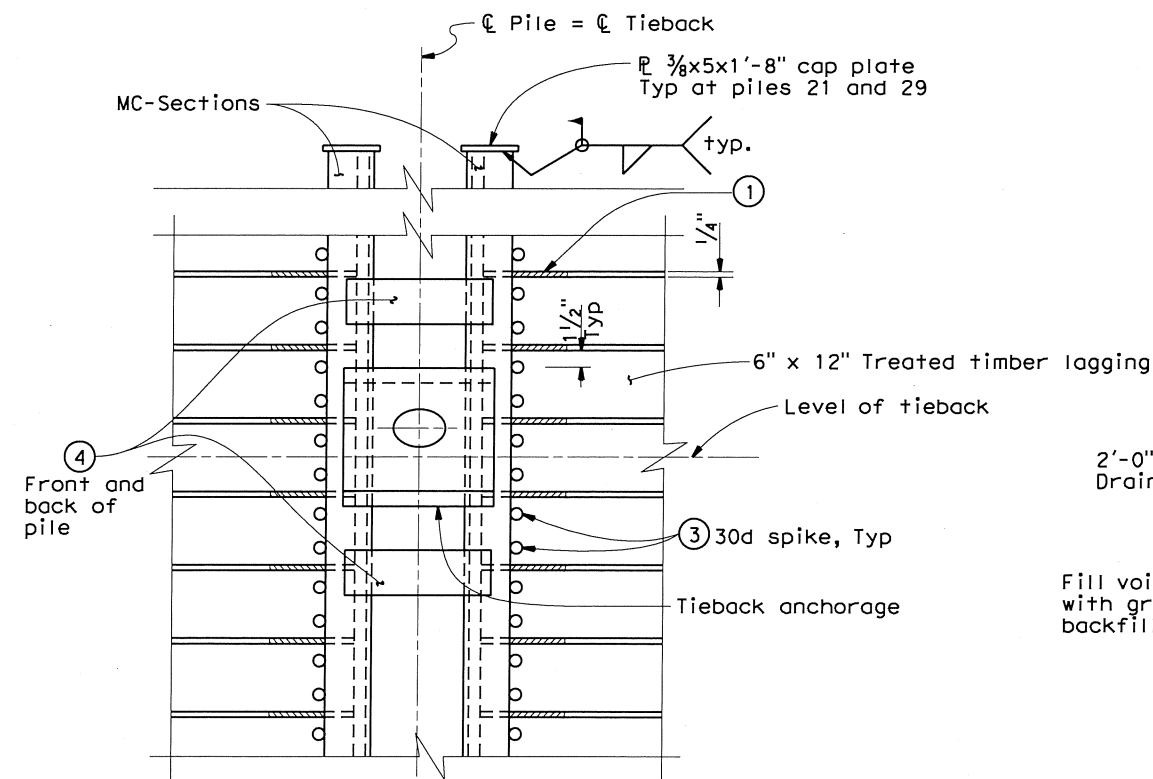
PILE #21 SECTION
No Scale



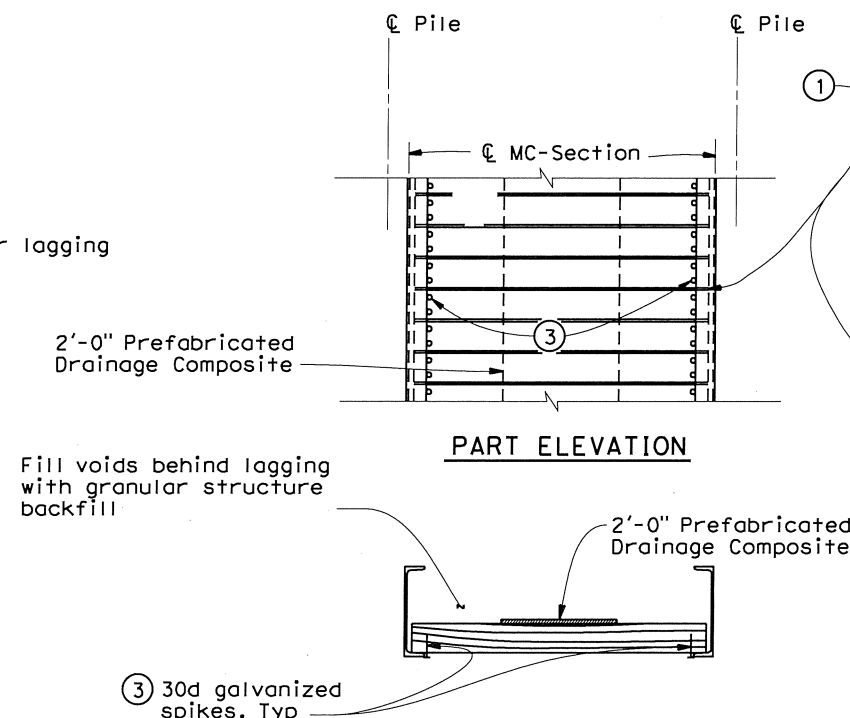
PILE #29 SECTION
No Scale

○ 1/4" x 6" Polyethylene pad between lagging members at ends secured with 2 - 12d galvanized nails, typical. Width of pad to match lagging thickness.

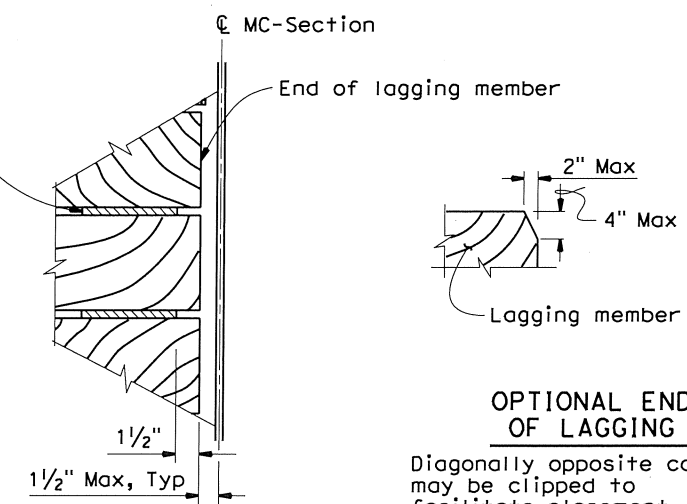
- ③ 30d spike (galvanized), 2 at each end of lagging member.
- ④ Stay plate, 8 total minimum. 4 per tieback, 2 at top of pile, 2 at bottom of pile, and others as required to maintain alignment. Location to be approved by Engineer, see "STAY PLATE DETAIL" on "RETAINING WALL DETAILS No. 3" sheet.



PART ELEVATION OF SOLDIER PILE
No Scale



PART PLAN OF LAGGING MEMBER



END OF LAGGING

LAGGING DETAILS
No Scale

OPTIONAL END OF LAGGING
Diagonally opposite corners may be clipped to facilitate placement

PREPARED UNDER THE SUPERVISION OF :

Brett William Karnes
REGISTERED CIVIL ENGINEER

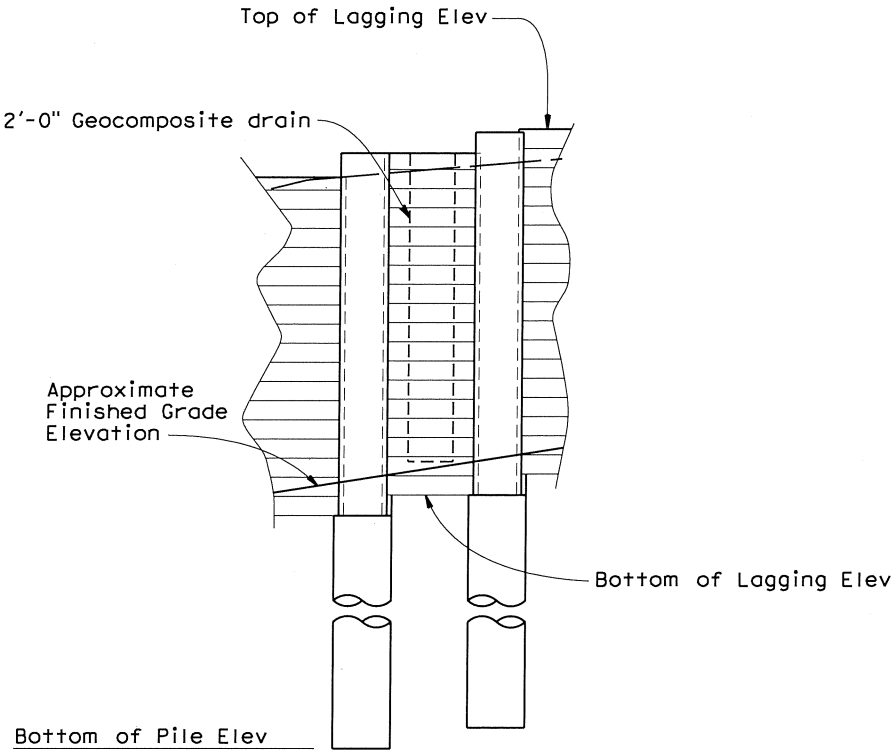
BERRYHILL PARK APARTMENTS
RETAINING WALL DETAILS No. 2

SHEET
3 OF 5

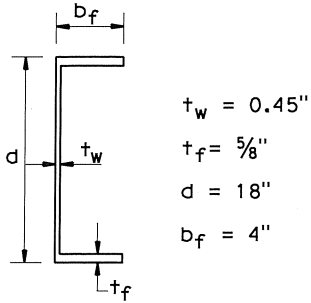
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PILE DATA TABLE

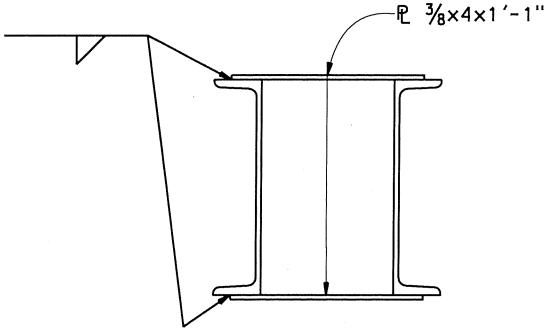
Pile No.	Top of Pile Elev (ft)	T (kips)	Unbonded Length (ft)	D (ft)	Δ (degrees)
1	373.50	171	50	11.75	20
2	373.50	171	50	11.75	20
3	373.50	171	50	11.75	20
4	373.50	171	50	11.75	20
5	373.50	171	50	11.75	20
6	373.50	171	50	11.75	20
7	373.50	171	50	11.75	20
8	373.50	171	50	11.75	20
9	373.50	171	50	11.75	20
10	373.50	171	50	11.75	20
11	373.50	171	50	11.75	20
12	374.50	171	50	11.75	20
13	374.50	171	50	11.75	20
14	374.50	171	50	11.75	20
15	374.50	171	50	11.75	20
16	374.50	171	50	11.75	20
17	376.00	171	50	11.75	20
18	376.00	171	50	11.75	20
19	376.00	171	50	11.75	20
20	376.00	171	50	11.75	20
21	376.00	171	50	11.75	20
22	376.00	178	50	11.75	25
23	376.00	178	50	11.75	25
24	374.50	178	50	11.75	25
25	373.50	178	50	11.75	25
26	373.00	178	50	11.75	25
27	372.00	178	50	11.75	25
28	372.00	178	50	11.75	25
29	372.00	170	60	10.75	19
30	372.00	167	60	9.75	15
31	373.00	167	60	10.75	15
32	373.00	167	60	10.75	15
33	374.00	167	60	11.75	15
34	374.00	167	60	11.75	15
35	374.00	167	45	11.75	15
36	374.00	167	45	11.75	15
37	374.50	167	45	11.75	15
38	374.50	167	45	11.75	15
39	374.50	167	45	11.75	15
40	374.50	167	45	11.75	15
41	374.50	167	45	11.75	15
42	374.50	167	45	11.75	15



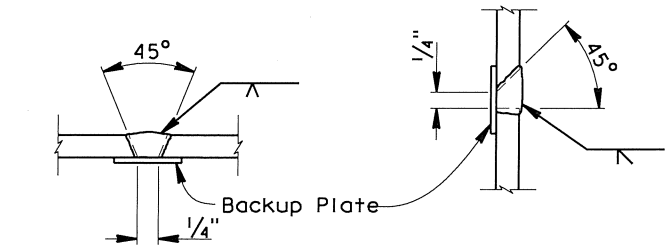
PART ELEVATION
No Scale



ALTERNATIVE PILE SECTION
No Scale

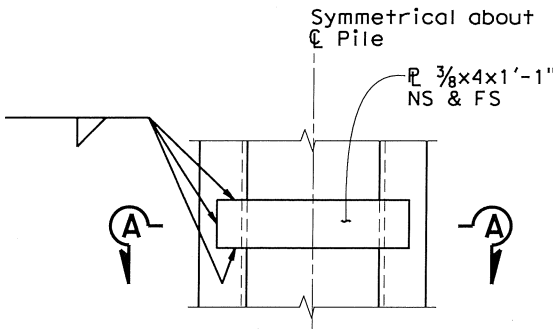


SECTION A-A
No Scale



SINGLE VEE-GROOVE SINGLE BEVEL-GROOVE
PILE WELDING DETAIL - BUTT JOINTS
No Scale

- Notes:
1. Single Vee-groove permitted for all positions.
 2. Single Bevel-Groove permitted for horizontal joints only.



STAY PLATE DETAIL
No Scale

REVISION	
DATE: 3/25/16	BY: J. Goodall
JOB NO: S77-200	DATE: 3/25/16
PREPARED UNDER THE SUPERVISION OF:	
Brett William Karnes REGISTERED CIVIL ENGINEER	
EX-62017	
BERRYHILL PARK APARTMENTS RETAINING WALL DETAILS No. 3	
SHEET 4 OF 5	4/15/2016 3:46:23 PM

FOR REDUCED PLANS
3 ORIGINAL SCALE IS IN INCHES
2
1
0

