

FILL VOLUMES DO NOT INCLUDE THE 8" DGA DRIVEWAY MATERIAL.
CUT VOLUMES ARE TAKEN TO DRIVEWAY SUBGRADE.
VIEWPOINT: CROSS SECTIONS ARE LOOKING UP-STATION

FILL VOLUME CALCULATIONS

SECTION	C OR F AREA	AVERAGE AREA	DISTANCE BETWEEN SECTIONS	C OR F VOLUME	CUMULATIVE VOLUME
0+00	C 6.57 S.F.		50 FT.	C 319.5 C.F.	C 319.5 C.F.
0+50	C 6.21 S.F.		50 FT.	C 310.5 C.F.	C 630.0 C.F.
1+00	F 14.23 S.F.		50 FT.	F 711.5 C.F.	C 630.0 C.F.
1+50	F 21.5 S.F.		50 FT.	F 1075.0 C.F.	C 630.0 C.F.
2+00	F 33.0 S.F.		50 FT.	F 1650.0 C.F.	C 630.0 C.F.
2+28	C 20.45 S.F.		28 FT.	F 572.6 C.F.	F 2122.6 C.F.

PROPOSED CUT & FILL CALCULATION

CROSS SECTIONS – SHEET 1

Sheet C-2

PROPOSED SITE IMPROVEMENTS

MONTCLAIR STABLES

TAX LOTS 176, 179 & 186 BLOCK 152.02

TAX MAP SHEET 77

THE TOWNSHIP OF WEST ORANGE

ESSEX COUNTY, NEW JERSEY

Cunningham Engineering & Design, PLLC

Certificate of Professional Engineer, No. 2154282000

213 NEWTON SMARTSWOOD ROAD, NEWTON, NEW JERSEY 07860

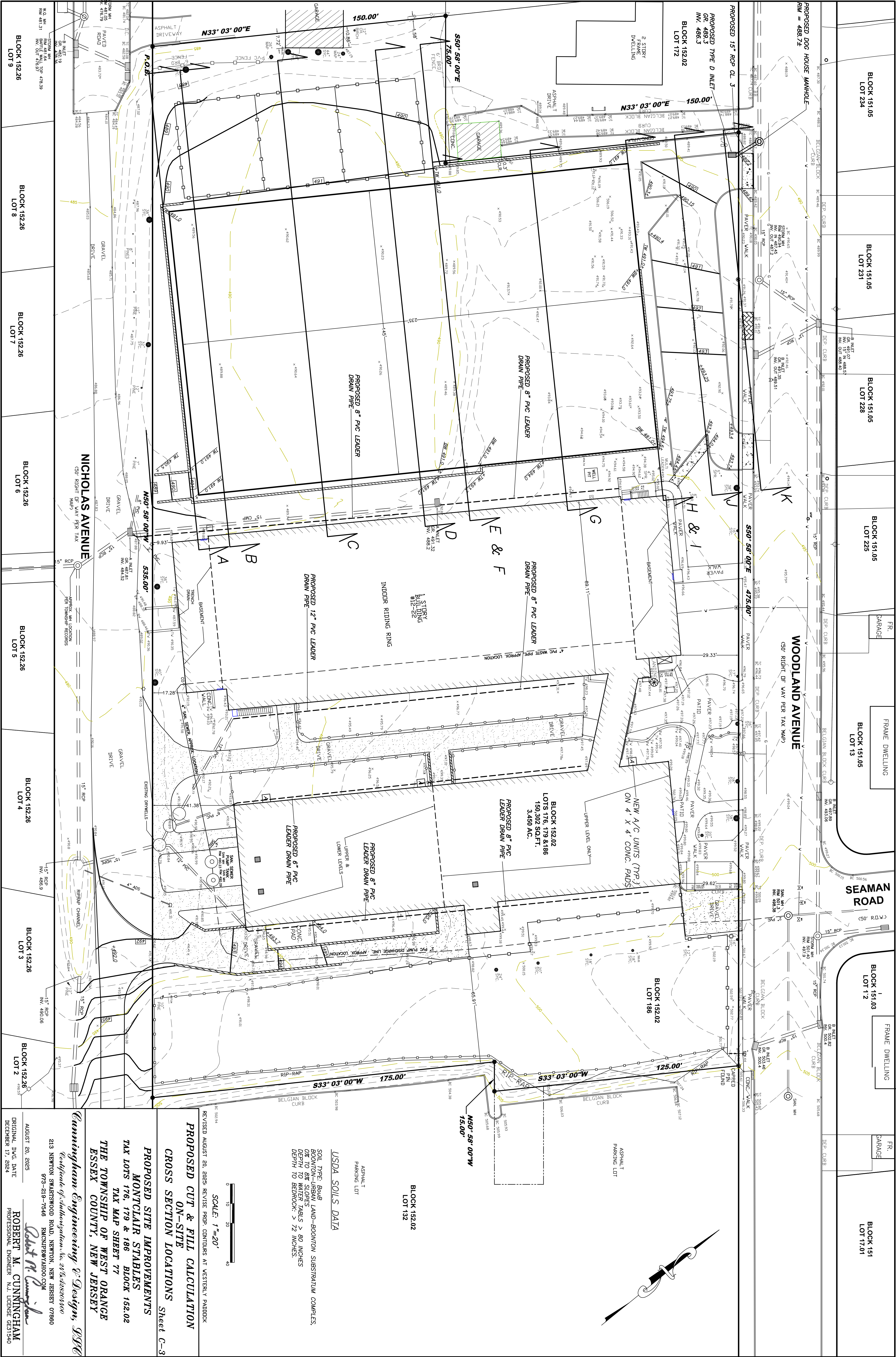
973-219-7546 RMCNPE@YAHOO.COM

JANUARY 10, 2025

ORIGINAL DWG. DATE

ROBERT M. CUNNINGHAM

PROFESSIONAL ENGINEER N.J. LICENSE GE31540



USDA SOILS DATA

SOL TYPE: BOUR
SLOTON: B-BOONTON SUBSTRATUM COMPLEX,
0% TO 8% SLOPES
DEPTH TO WATER TABLE: > 80 INCHES
DEPTH TO BEDROCK: > 72 INCHES

SCALE: 1"=20'

REVISED AUGUST 20, 2025 REVISE PROP. CONTIGUOUS AT WESTERN PADDOCK

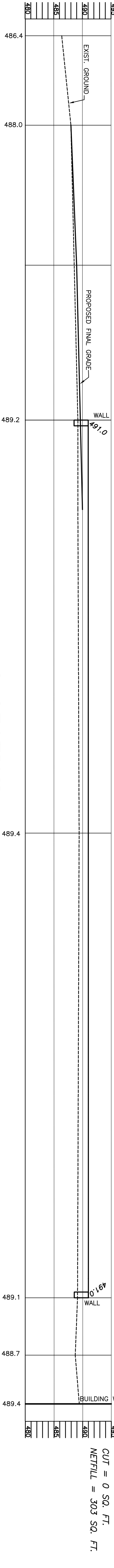
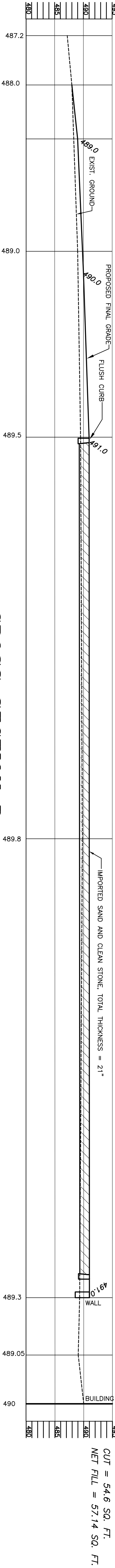
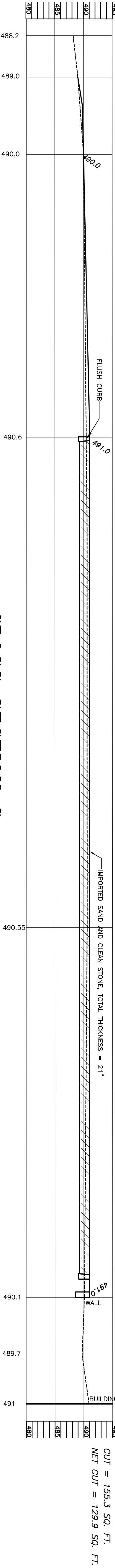
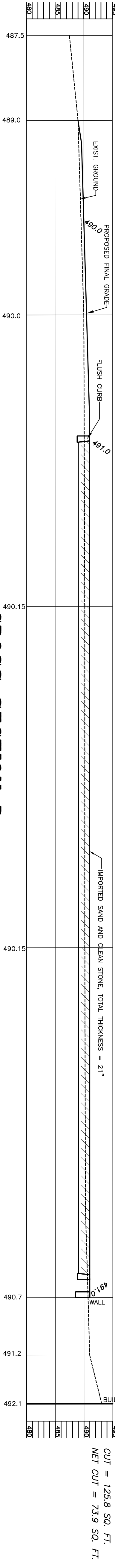
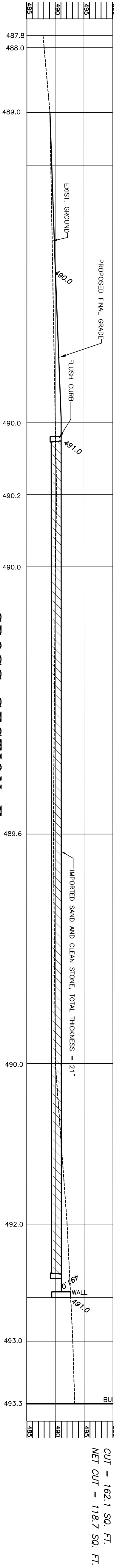
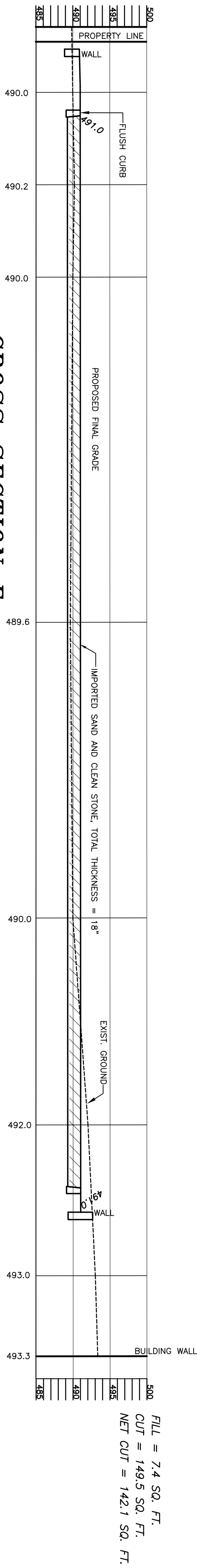
PROPOSED CUT & FILL CALCULATION
ON-SITE
CROSS SECTION LOCATIONS Sheet C-3

PROPOSED SITE IMPROVEMENTS
MONTCLAIR STABLES
TAX LOTS 176, 179 & 186 BLOCK 152.02
TAX MAP SHEET 77
THE TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

Cunningham Engineering & Design, LLC
Certificate of Incorporation No. 21542330100
213 NEWTON SMARTWOOD ROAD, NEWTON, NEW JERSEY 07860
973-219-7546 RMCNP@YAHOO.COM

AUGUST 20, 2025
ORIGINAL DWG. DATE
DECEMBER 17, 2024

Robert M. Cunningham
ROBERT M. CUNNINGHAM
PROFESSIONAL ENGINEER N.J. LICENSE GE31540



FILL VOLUME CALCULATIONS

SECTION	C OR F AREA	AVERAGE AREA	DISTANCE BETWEEN SECTIONS	C OR F VOLUME	CUMULATIVE VOLUME
A	F 303 S.F.				
B	F 571 S.F.	F 180.05 S.F.	15 FT.	F 2,700.25 C.F.	F 2,700.25 C.F.
C	C 729.9 S.F.	C 36.4 S.F.	50 FT.	C 1,820 C.F.	F 880.25 C.F.
D	C 739 S.F.	C 101.9 S.F.	50 FT.	C 5,095 C.F.	C 4,214.75 C.F.
E	C 118.7 S.F.	C 96.3 S.F.	23 FT.	C 2,214.9 C.F.	C 6,429.65 C.F.
F	C 142.1 S.F.	C 130.4 S.F.	0 FT.	C 0 C.F.	C 6,429.65 C.F.

FILL VOLUMES DO NOT INCLUDE THE PAVING MATERIALS OR RIDING ARENA MATERIALS.
CUT VOLUMES ARE TAKEN TO PARKING LOT OR RIDING ARENA SUBGRADE SUBGRADE.
VIEWPOINT: CROSS SECTIONS ARE LOOKING NORTH

REVISED AUGUST 20, 2025; REVISE CROSS SECTIONS & CUT / FILL CALCULATIONS

PROPOSED CUT & FILL CALCULATION

CROSS SECTIONS – SHEET 2

Sheet C-4

PROPOSED SITE IMPROVEMENTS

MONTCLAIR STABLES

TAX LOTS 176, 179 & 186 BLOCK 152.02

TAX MAP SHEET 77

THE TOWNSHIP OF WEST ORANGE

ESSEX COUNTY, NEW JERSEY

Cunningham Engineering & Design, PLLC

Geoffrey A. Cunningham, No. 245422201100

213 NEWTON SMARTSWOOD ROAD, NEWTON, NEW JERSEY 07860

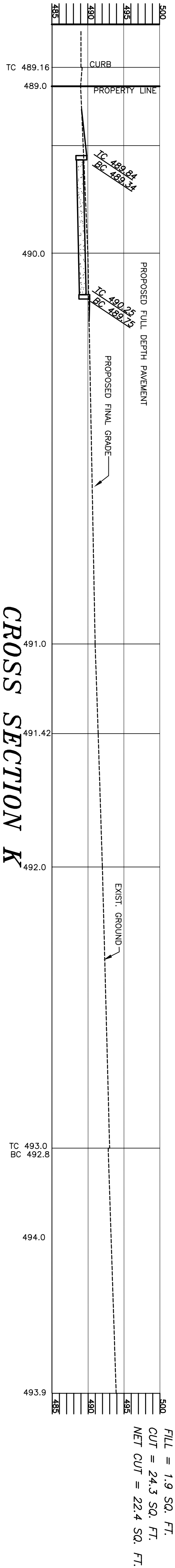
973-219-7546 BCONJPE@YAHOO.COM

AUGUST 20, 2025

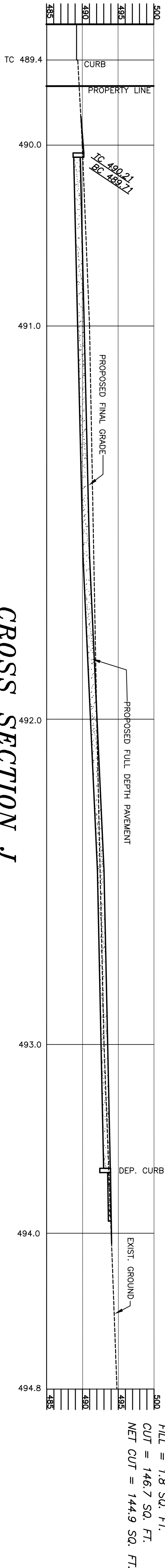
ORIGINAL DWG. DATE

ROBERT M. CUNNINGHAM

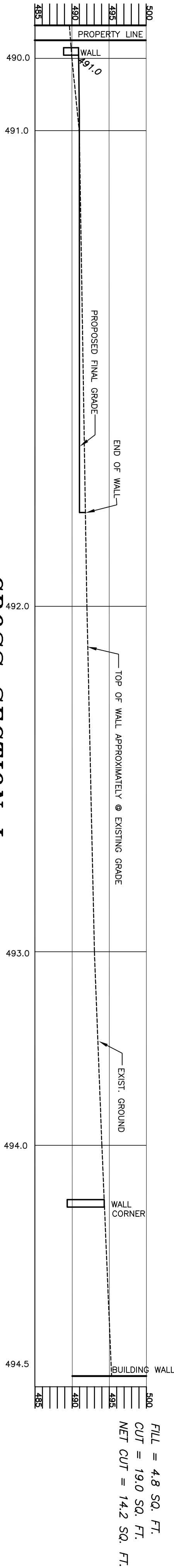
PROFESSIONAL ENGINEER N.J. LICENSE GE31540



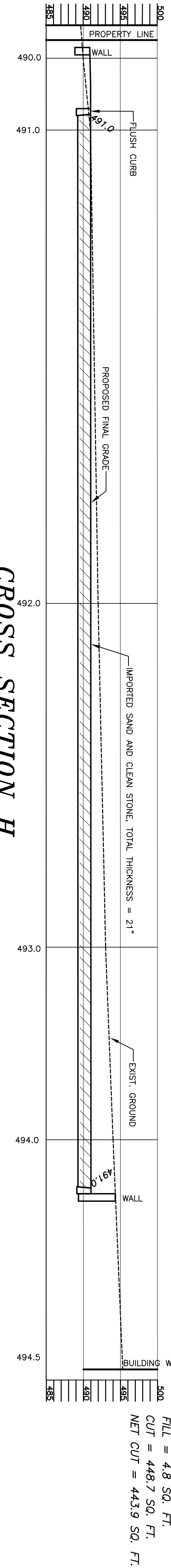
CROSS SECTION K
SCALE: 1" = 10' HOR., 1" = 10' VERT.



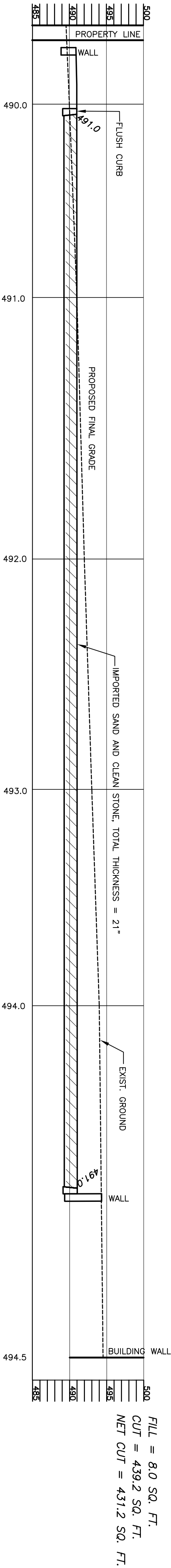
CROSS SECTION J
SCALE: 1" = 10' HOR., 1" = 10' VERT.



CROSS SECTION I
SCALE: 1" = 10' HOR., 1" = 10' VERT.



CROSS SECTION H
SCALE: 1" = 10' HOR., 1" = 10' VERT.



CROSS SECTION G
SCALE: 1" = 10' HOR., 1" = 10' VERT.

FILL VOLUME CALCULATIONS

SECTION	C OR F AREA	AVERAGE AREA	DISTANCE BETWEEN SECTIONS	C OR F VOLUME	CUMULATIVE VOLUME
F	C 142.1 S.F.				C 6,429.65 C.F.
G	C 431.2 S.F.	C 286.65 S.F.	50 FT.	C 14,332.5 C.F.	C 20,762.15 C.F.
H	C 443.9 S.F.	C 437.55 S.F.	50 FT.	F 21,877.5 C.F.	C 42,639.65 C.F.
I	C 14.2 S.F.	C 223.05 S.F.	0 FT.	C 0 C.F.	C 42,639.65 C.F.
J	C 144.9 S.F.	C 79.55 S.F.	25 FT.	C 1,988.7 C.F.	C 44,628.35 C.F.
K	C 22.4 S.F.	C 83.65 S.F.	25 FT.	C 2,091.3 C.F.	C 46,719.65 C.F.
				NET CUT	1,730.4 C.Y.

OF THE 1,730.4 C.Y. CUT, APPROXIMATELY 505 C.Y. IS THE SAND FROM THE EXISTING RIDING RING.

FILL VOLUMES DO NOT INCLUDE THE PAVING MATERIALS OR RIDING ARENA MATERIALS.
CUT VOLUMES ARE TAKEN TO PARKING LOT OR RIDING ARENA SUBGRADE.
VIEWPOINT: CROSS SECTIONS ARE LOOKING NORTH

REVISED AUGUST 20, 2025, REVISE CROSS SECTIONS & CUT / FILL CALCULATIONS

PROPOSED CUT & FILL CALCULATION
CROSS SECTIONS – SHEET 3
Sheet C-5

PROPOSED SITE IMPROVEMENTS
MONTCLAIR STABLES
TAX LOTS 176, 179 & 186 BLOCK 162.02
TAX MAP SHEET 77
THE TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

Cunningham Engineering & Design, PLLC
Certified by: *William J. Cunningham, No. 217642820/100*
213 NEWTON SMARTSWOOD ROAD, NEWTON, NEW JERSEY 07860
973-219-7546 RMCONJP@YAHOO.COM
AUGUST 20, 2025
ORIGINAL DWG. DATE
JANUARY 6, 2025
ROBERT M. CUNNINGHAM
PROFESSIONAL ENGINEER N.J. LICENSE GE317940