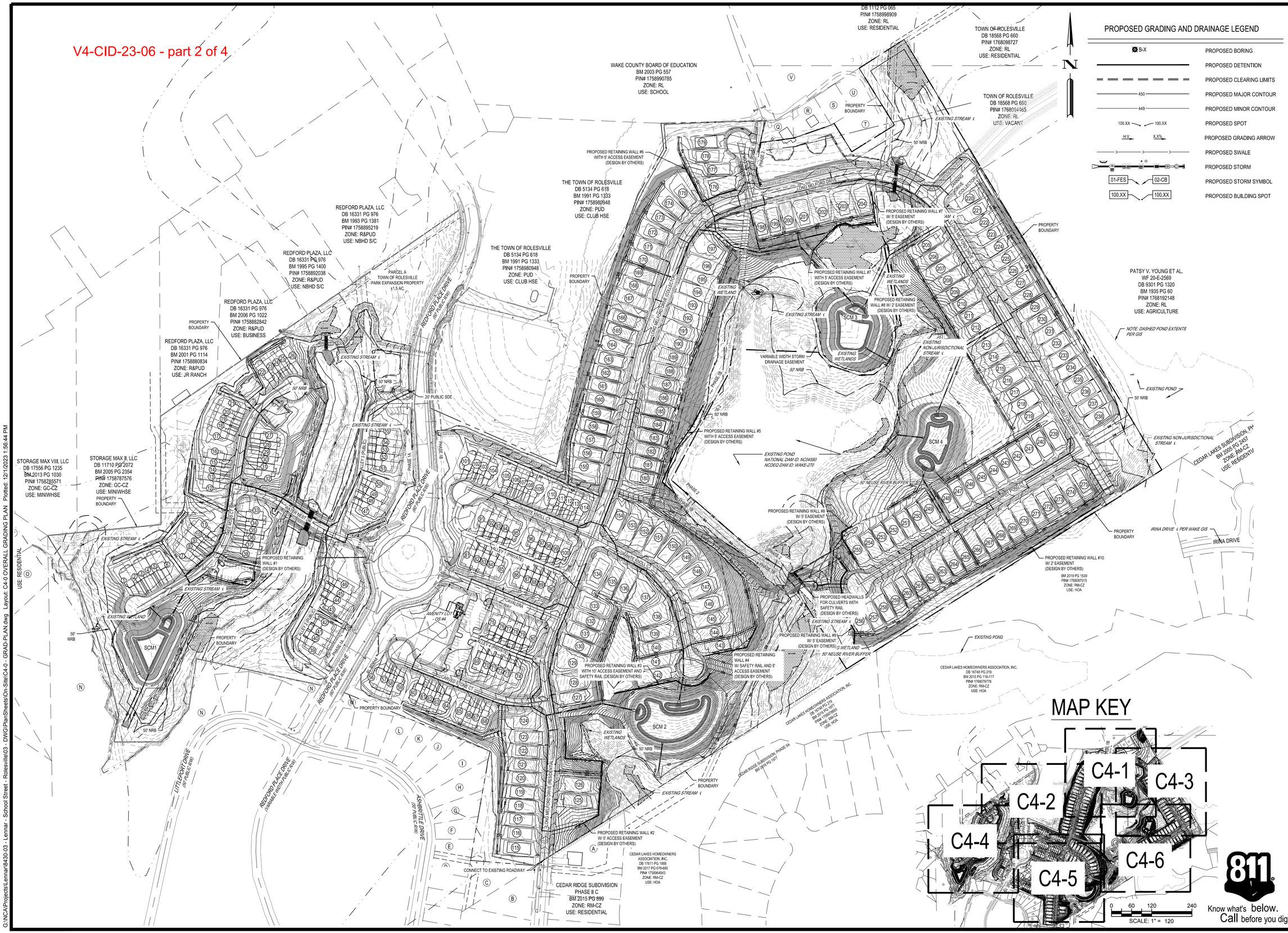
V4-CID-23-06 - part 2 of 4




| REV | DATE | DESCRIPTION |
|---|---|---|
| 4 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 1 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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NC LICENSE #C-4397


LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

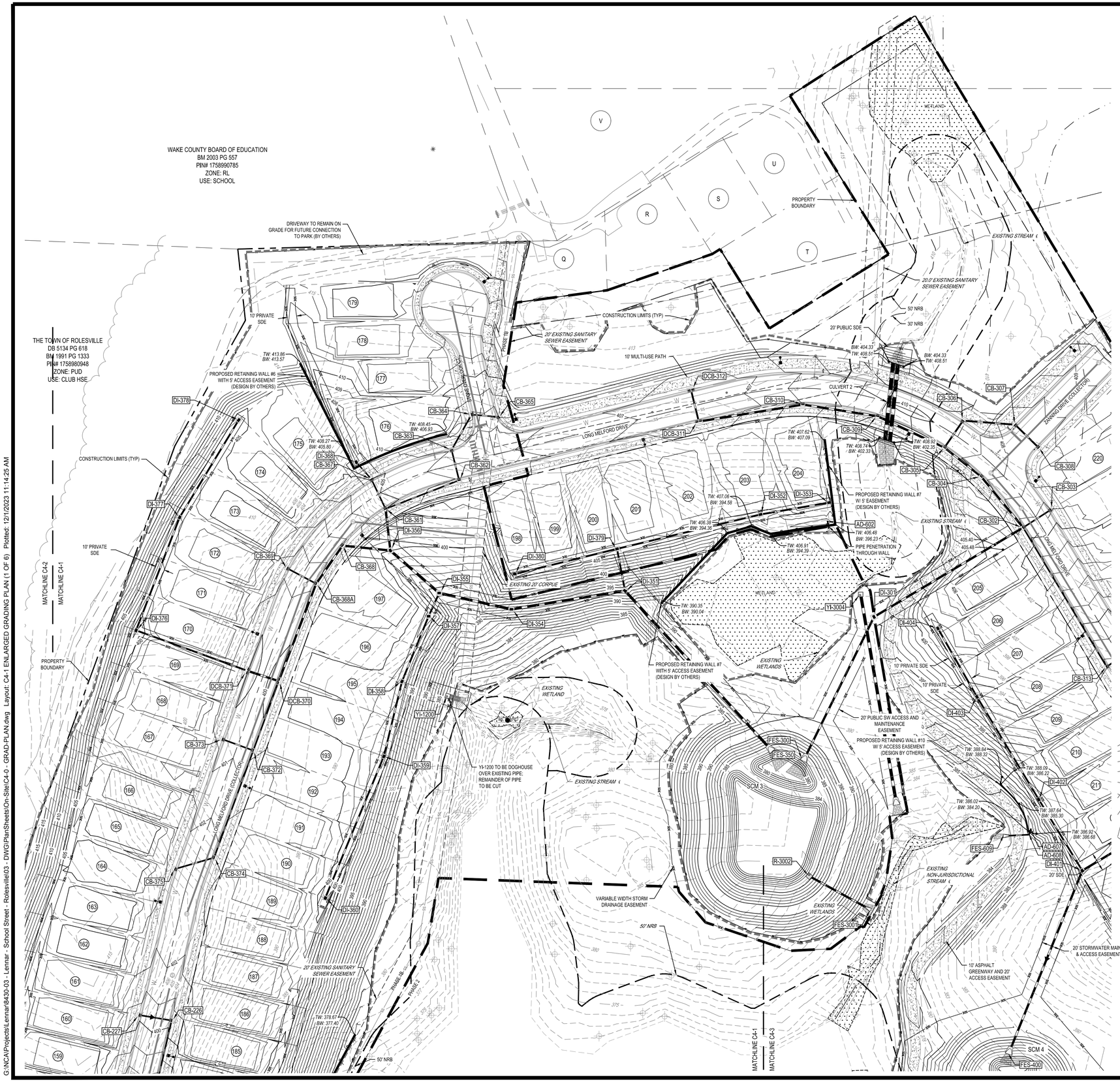
OVERALL GRADING PLAN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-0

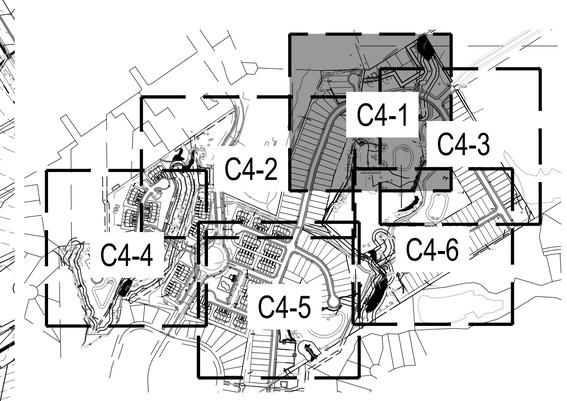
811 Know what's below. Call before you dig.

G:\NC-A\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C4-0 - GRAD-PLAN.dwg Layout: C4-0 OVERALL GRADING PLAN Plotted: 12/1/2023 1:56:44 PM




## PROPOSED GRADING AND DRAINAGE LEGEND

| | |
|---|---|
| B-X | PROPOSED BORING |
| | PROPOSED DETENTION |
| | PROPOSED CLEARING LIMITS |
| 450 | PROPOSED MAJOR CONTOUR |
| 449 | PROPOSED MINOR CONTOUR |
| 100.XX 100.XX | PROPOSED SPOT |
| H:V X.X% | PROPOSED GRADING ARROW |
| | PROPOSED SWALE |
| | PROPOSED STORM |
| 01-FES 02-CB | PROPOSED STORM SYMBOL |
| 100.XX 100.XX | PROPOSED BUILDING SPOT |
| | PRESERVED TREE |
| | PRESERVED TREE CLOSE TO CONSTRUCTION LIMIT (CRITICAL ROOT ZONE SHOWN) |




0 25' 50' 100'
SCALE: 1" = 50'

811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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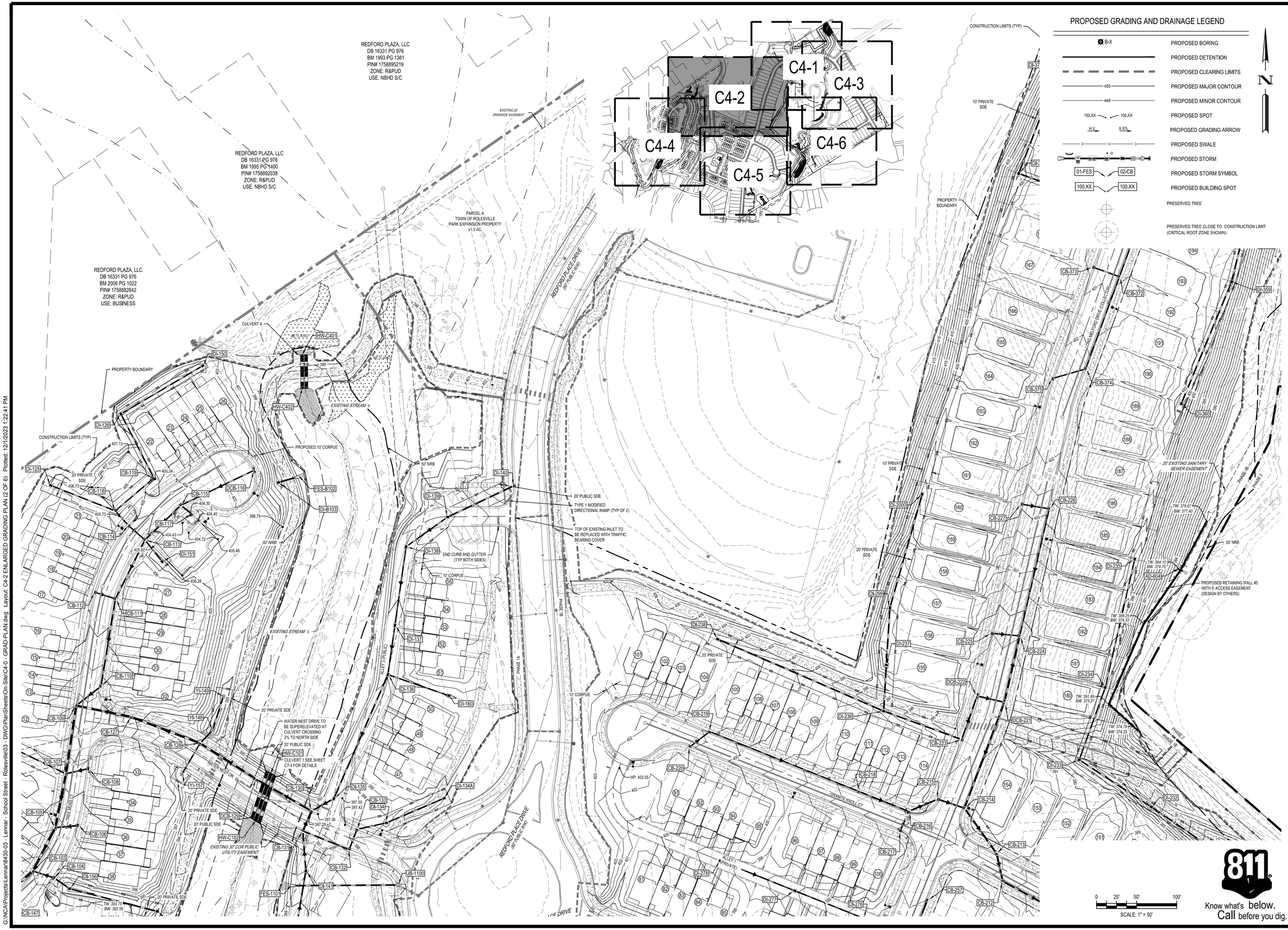
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED GRADING PLAN (1 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-1

G:\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C4.0 - GRAD-PLAN.dwg Layout: C4-1 ENLARGED GRADING PLAN (1 OF 6) Plotted: 12/12/2023 11:14:25 AM




811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
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# ENLARGED GRADING PLAN (2 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

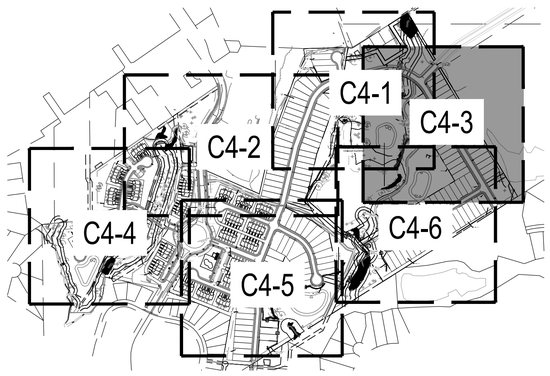
FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-2


PATSY V. YOUNG ET AL.
WF 20-E-2569
DB 9301 PG 1320
BM 1935 PG 60
PIN# 1768192148
ZONE: RL
USE: AGRICULTURE

N

## PROPOSED GRADING AND DRAINAGE LEGEND

| | |
|---|---|
| B-X | PROPOSED BORING |
| | PROPOSED DETENTION |
| | PROPOSED CLEARING LIMITS |
| 450 | PROPOSED MAJOR CONTOUR |
| 449 | PROPOSED MINOR CONTOUR |
| 100.XX 100.XX | PROPOSED SPOT |
| H-V X.X% | PROPOSED GRADING ARROW |
| | PROPOSED SWALE |
| | PROPOSED STORM |
| 01-FES 02-CB | PROPOSED STORM SYMBOL |
| 100.XX 100.XX | PROPOSED BUILDING SPOT |




0 25' 50' 100'
SCALE: 1" = 50'

811
Know what's below.
Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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# ENLARGED GRADING PLAN (3 OF 6)

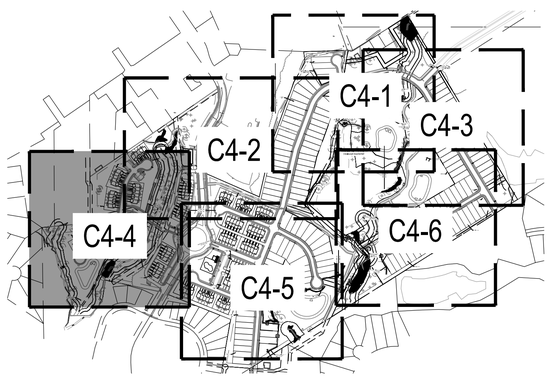
NORTH CAROLINA PROFESSIONAL ENGINEER DEBRA M. FERM
12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-3

G:\NC-A\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C4-0 - GRAD-PLAN.dwg Layout: C4-3 ENLARGED GRADING PLAN (3 OF 6) Plotted: 12/1/2023 11:49:53 AM


## PROPOSED GRADING AND DRAINAGE LEGEND

| | |
|---|---|
| B-X | PROPOSED BORING |
| | PROPOSED DETENTION |
| | PROPOSED CLEARING LIMITS |
| 450 | PROPOSED MAJOR CONTOUR |
| 449 | PROPOSED MINOR CONTOUR |
| 100.XX 100.XX | PROPOSED SPOT |
| H-V X.X% | PROPOSED GRADING ARROW |
| | PROPOSED SWALE |
| | PROPOSED STORM |
| 01-FES 02-CB | PROPOSED STORM SYMBOL |
| 100.XX 100.XX | PROPOSED BUILDING SPOT |




0 25' 50' 100'
SCALE: 1" = 50'

Know what's below. Call before you dig.

| REV | DATE | |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
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REVIEWED BY: DF

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# ENLARGED GRADING PLAN (4 OF 6)

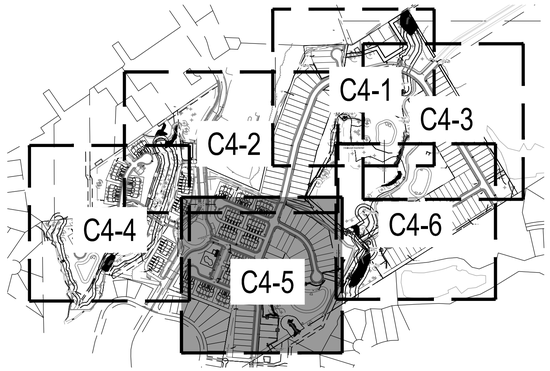
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERRELL 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-4

G:\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C4-0 - GRAD-PLAN.dwg Layout: C4-4 ENLARGED GRADING PLAN (4 OF 6) Plotted: 12/1/2023 12:21:35 PM


## PROPOSED GRADING AND DRAINAGE LEGEND

| | |
|---|---|
| B-X | PROPOSED BORING |
| | PROPOSED DETENTION |
| | PROPOSED CLEARING LIMITS |
| 450 | PROPOSED MAJOR CONTOUR |
| 449 | PROPOSED MINOR CONTOUR |
| 100.XX 100.XX | PROPOSED SPOT |
| H.V X.X% | PROPOSED GRADING ARROW |
| | PROPOSED SWALE |
| | PROPOSED STORM |
| 01-FES 02-CB | PROPOSED STORM SYMBOL |
| 100.XX 100.XX | PROPOSED BUILDING SPOT |




SCALE: 1" = 50'

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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# ENLARGED GRADING PLAN (5 OF 6)

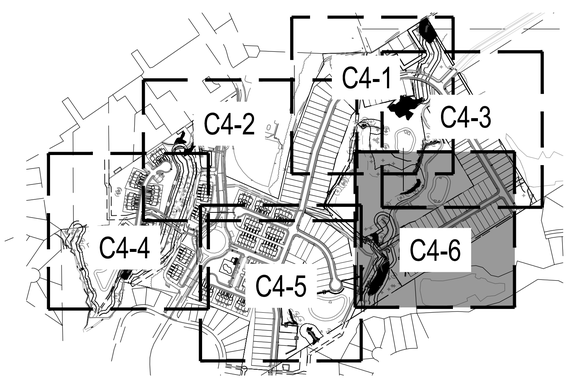
NORTH CAROLINA PROFESSIONAL ENGINEER DEBRA M. FOX 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-5

G:\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C4-0 - GRAD-PLAN.dwg Layout: C4-5 ENLARGED GRADING PLAN (5 OF 6) Plotted: 12/1/2023 12:51:55 PM


## PROPOSED GRADING AND DRAINAGE LEGEND

| | |
|---|---|
| B-X | PROPOSED BORING |
| | PROPOSED DETENTION |
| | PROPOSED CLEARING LIMITS |
| 450 | PROPOSED MAJOR CONTOUR |
| 449 | PROPOSED MINOR CONTOUR |
| 100.XX 100.XX | PROPOSED SPOT |
| H:V X.X% | PROPOSED GRADING ARROW |
| | PROPOSED SWALE |
| | PROPOSED STORM |
| 01-FES 02-CB | PROPOSED STORM SYMBOL |
| 100.XX 100.XX | PROPOSED BUILDING SPOT |




0 25' 50' 100'
SCALE: 1" = 50'

811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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# ENLARGED GRADING PLAN (6 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERRI
PRELIMINARY
12-01-23
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-6

## SCM 1

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| CB-101 | 393.56 | 36"<br>15" | 383.05 (NW)<br>385.73 (NE) | 383.05 (SW) | 36" | FES-100 |
| CB-103 | 397.43 | 30"<br>18" | 384.21 (NE)<br>384.28 (E) | 384.01 (SW) | 36" | TCB-102 |
| CB-104 | 396.91 | 18" | 384.62 (SE) | 384.42 (W) | 18" | CB-103 |
| CB-105 | 398.98 | 18"<br>30" | 392.36 (E)<br>384.51 (N) | 384.51 (SW) | 30" | CB-103 |
| CB-106 | 399.33 | | | 392.50 (W) | 18" | CB-105 |
| CB-107 | 400.83 | 18"<br>30"<br>15" | 391.93 (E)<br>384.95 (N)<br>390.94 (NW) | 384.85 (S) | 30" | CB-105 |
| CB-108 | 401.10 | | | 392.50 (W) | 18" | CB-107 |
| CB-109 | 402.99 | 18"<br>30" | 393.61 (NE)<br>385.38 (E) | 385.38 (S) | 30" | CB-107 |
| CB-110 | 403.70 | 18" | 394.01 (N) | 393.81 (SW) | 18" | CB-109 |
| CB-111 | 405.79 | 18"<br>15" | 394.76 (NE)<br>400.04 (W) | 394.56 (S) | 18" | CB-110 |
| CB-112 | 405.81 | | | 400.55 (E) | 15" | CB-111 |
| CB-113 | 405.45 | 15"<br>18"<br>15" | 398.09 (NW)<br>395.37 (NE)<br>399.13 (SE) | 395.17 (SW) | 18" | CB-111 |
| CB-114 | 405.45 | 15" | 398.33 (NW) | 398.23 (SE) | 15" | CB-113 |
| CB-115 | 404.61 | 18"<br>15" | 399.45 (SE)<br>395.88 (NE) | 395.69 (SW) | 18" | CB-113 |
| CB-117 | 404.75 | | | 399.56 (NW) | 18" | CB-115 |
| CB-118 | 406.15 | 15"<br>15" | 398.68 (W)<br>398.60 (NE) | 398.48 (SE) | 15" | CB-114 |
| CB-119 | 405.42 | 15" | 399.14 (NW) | 398.94 (SW) | 15" | CB-118 |
| CB-127 | 400.57 | 30" | 385.84 (E) | 385.84 (W) | 30" | CB-109 |
| CB-128 | 397.88 | 30"<br>15"<br>18" | 386.51 (SE)<br>388.75 (SW)<br>388.25 (NE) | 386.40 (W) | 30" | CB-127 |
| CB-130 | 397.63 | 24"<br>18" | 387.62 (SW)<br>389.50 (NE) | 387.60 (NW) | 24" | DCB-129 |
| CB-131 | 398.07 | 18"<br>18" | 388.26 (S)<br>388.88 (E) | 387.76 (NE) | 24" | CB-130 |

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| CB-132 | 397.89 | 18" | 389.50 (N) | 389.50 (W) | 18" | CB-131 |
| CB-133 | 397.89 | 15" | 391.20 (E) | 391.00 (S) | 18" | CB-132 |
| CB-147 | 396.04 | 18" | 387.38 (E) | 387.18 (SW) | 15" | CB-101 |
| CB-153 | 396.67 | 18" | 385.20 (SW) | 385.00 (SE) | 18" | FES-152 |
| CB-153A | 396.35 | | | 388.00 (NE) | 18" | CB-153 |
| CB-154 | 393.79 | 18" | 388.00 (E) | 387.80 (W) | 18" | CB-147 |
| CB-155 | 392.91 | | | 388.41 (W) | 18" | CB-154 |
| DCB-116 | 402.87 | | | 397.75 (SW) | 15" | CB-115 |
| DCB-129 | 397.06 | 24" | 387.15 (SE) | 386.92 (NW) | 30" | CB-128 |
| DDI-143 | 393.03 | 15"<br>15" | 389.58 (SW)<br>389.58 (SE) | 389.48 (NE) | 18" | DI-142 |
| DI-120 | 394.70 | 15"<br>18" | 386.64 (W)<br>386.64 (NE) | 386.44 (SE) | 15" | TCB-102 |
| DI-121 | 394.97 | | | 387.53 (E) | 15" | DI-120 |
| DI-122 | 389.93 | | | 385.50 (W) | 18" | DI-156 |
| DI-123 | 400.24 | 15" | 391.67 (N) | 391.57 (SE) | 15" | CB-107 |
| DI-124 | 401.67 | | | 395.04 (S) | 15" | DI-123 |
| DI-125 | 405.20 | | | 399.11 (E) | 15" | CB-118 |
| DI-126 | 403.09 | 15" | 400.15 (NE) | 399.95 (SE) | 15" | CB-119 |
| DI-134 | 397.76 | 15" | 391.94 (NE) | 391.94 (W) | 15" | CB-133 |
| DI-134A | 398.97 | | | 392.35 (SW) | 15" | DI-134 |
| DI-135 | 397.35 | 18" | 389.87 (NE) | 389.77 (SW) | 18" | CB-130 |
| DI-136 | 399.05 | 15"<br>15" | 391.00 (N)<br>391.00 (E) | 390.75 (SW) | 18" | DI-135 |

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| DI-137 | 399.66 | 15" | 391.87 (N) | 391.77 (S) | 15" | DI-136 |
| DI-138 | 400.66 | 15" | 392.55 (NE) | 392.45 (S) | 15" | DI-137 |
| DI-139 | 401.80 | 18" | 392.97 (NE) | 392.87 (SW) | 15" | DI-138 |
| DI-140 | 405.20 | | | 393.44 (SW) | 18" | DI-139 |
| DI-141 | 396.00 | 18" | 388.51 (S) | 388.51 (N) | 18" | CB-131 |
| DI-142 | 393.89 | 18" | 389.05 (SW) | 388.94 (N) | 18" | DI-141 |
| DI-144 | 393.90 | 15" | 390.20 (S) | 390.10 (NE) | 15" | DDI-143 |
| DI-145 | 394.35 | | | 390.73 (N) | 15" | DI-144 |
| DI-146 | 395.22 | | | 390.16 (NW) | 15" | DDI-143 |
| DI-150 | 403.69 | | | 400.75 (SW) | 15" | DI-126 |
| DI-151 | 404.38 | | | 400.13 (NW) | 15" | CB-113 |
| DI-156 | 393.67 | 18" | 384.94 (E) | 384.74 (NW) | 18" | CB-104 |
| DI-158 | 395.92 | | | 389.00 (SW) | 18" | DI-120 |
| DI-160 | 399.84 | | | 394.41 (W) | 15" | DI-136 |
| FES-100 | | 36" | 382.49 (NE) | | | |
| FES-152 | | 18" | 384.50 (NW) | | | |
| TCB-102 | 395.80 | 36"<br>15" | 383.19 (NE)<br>385.81 (NW) | 383.19 (SE) | 36" | CB-101 |
| YI-148 | 393.42 | 18" | 388.85 (N) | 388.75 (SW) | 18" | CB-128 |
| YI-149 | 394.56 | | | 391.20 (S) | 18" | YI-148 |
| YI-157 | 394.95 | | | 389.00 (NE) | 15" | CB-128 |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| DCB-129 TO CB-130 | 24" | 79.74' | 0.56% | RCP |
| CB-130 TO DI-135 | 18" | 31.87' | 0.85% | RCP |
| DI-135 TO DI-136 | 18" | 168.54' | 0.52% | RCP |
| DI-136 TO DI-137 | 15" | 61.91' | 1.24% | RCP |
| DI-137 TO DI-138 | 15" | 98.90' | 0.59% | RCP |
| DI-138 TO DI-139 | 15" | 63.69' | 0.50% | RCP |
| CB-130 TO CB-131 | 24" | 27.01' | 0.52% | RCP |
| CB-131 TO DI-141 | 18" | 49.93' | 0.50% | RCP |
| DI-141 TO DI-142 | 18" | 85.84' | 0.50% | RCP |
| DI-142 TO DDI-143 | 18" | 86.04' | 0.50% | RCP |
| DDI-143 TO DI-144 | 15" | 104.03' | 0.50% | RCP |
| DI-144 TO DI-145 | 15" | 45.07' | 1.17% | RCP |
| CB-128 TO DCB-129 | 30" | 82.74' | 0.50% | RCP |
| CB-110 TO CB-111 | 18" | 110.53' | 0.50% | RCP |
| CB-111 TO CB-113 | 18" | 82.07' | 0.50% | RCP |
| CB-115 TO DCB-116 | 15" | 101.81' | 1.83% | RCP |
| CB-113 TO CB-115 | 18" | 62.12' | 0.51% | RCP |
| CB-114 TO CB-118 | 15" | 24.76' | 0.62% | RCP |
| CB-111 TO CB-112 | 15" | 27.01' | 1.88% | RCP |
| CB-109 TO CB-110 | 18" | 39.10' | 0.50% | RCP |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| CB-109 TO CB-127 | 30" | 70.28' | 0.65% | RCP |
| CB-107 TO CB-108 | 18" | 28.99' | 1.95% | RCP |
| CB-105 TO CB-107 | 30" | 68.34' | 0.50% | RCP |
| CB-105 TO CB-106 | 18" | 28.91' | 0.50% | RCP |
| CB-103 TO CB-105 | 30" | 60.86' | 0.50% | RCP |
| TCB-102 TO CB-103 | 36" | 107.87' | 0.76% | RCP |
| FES-100 TO CB-101 | 36" | 112.55' | 0.50% | RCP |
| CB-113 TO CB-114 | 15" | 27.05' | 0.51% | RCP |
| CB-103 TO CB-104 | 18" | 28.22' | 0.50% | RCP |
| CB-127 TO CB-128 | 30" | 91.63' | 0.61% | RCP |
| CB-115 TO CB-117 | 18" | 17.58' | 0.66% | 18" RCP |
| CB-107 TO CB-109 | 30" | 85.91' | 0.50% | RCP |
| CB-128 TO YI-157 | 15" | 44.84' | 0.56% | RCP |
| CB-128 TO YI-148 | 18" | 22.76' | 2.20% | RCP |
| CB-101 TO TCB-102 | 36" | 27.02' | 0.50% | RCP |
| YI-148 TO YI-149 | 18" | 44.05' | 5.33% | RCP |
| DI-139 TO DI-140 | 18" | 91.26' | 0.51% | RCP |
| CB-131 TO CB-132 | 18" | 62.17' | 1.00% | RCP |
| CB-132 TO CB-133 | 18" | 27.00' | 5.56% | RCP |
| CB-118 TO DI-125 | 15" | 86.36' | 0.50% | RCP |

## SCM 2

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| CB-203 | 380.74 | 24"<br>18"<br>15" | 371.00 (N)<br>358.19 (NE)<br>374.84 (W) | 357.10 (S) | 30" | DCB-202 |
| CB-204 | 381.22 | 18" | 359.00 (E) | 358.90 (SW) | 18" | CB-203 |
| CB-205 | 383.23 | 24"<br>15" | 375.27 (N)<br>379.07 (NE) | 375.17 (S) | 24" | CB-203 |
| CB-206 | 383.52 | | | 379.50 (SW) | 15" | CB-205 |
| CB-207 | 385.66 | 24"<br>15" | 378.70 (NW)<br>380.78 (NE) | 378.60 (S) | 24" | CB-205 |
| CB-208 | 385.73 | | | 380.92 (SW) | 15" | CB-207 |
| CB-209 | 389.06 | 24"<br>15" | 384.54 (NW)<br>383.51 (NE) | 382.46 (SE) | 24" | CB-207 |
| CB-210 | 389.07 | | | 383.81 (SW) | 15" | CB-209 |
| CB-212 | 391.93 | 24" | 385.07 (N) | 385.07 (SE) | 24" | CB-209 |
| CB-213 | 392.62 | 24" | 385.73 (NW) | 385.53 (S) | 24" | CB-212 |
| CB-214 | 394.54 | 18"<br>24" | 387.30 (W)<br>386.75 (N) | 386.65 (SE) | 24" | CB-213 |
| CB-215 | 394.59 | 18" | 389.80 (SW) | 387.70 (E) | 18" | CB-214 |
| CB-216 | 395.29 | 18"<br>15" | 390.80 (W)<br>390.90 (SW) | 390.80 (NE) | 18" | CB-215 |
| CB-217 | 395.27 | | | 391.17 (NE) | 15" | CB-216 |
| CB-218 | 396.74 | 15" | 392.37 (W) | 392.12 (E) | 18" | CB-216 |
| CB-219 | 401.16 | 15" | 396.16 (SW) | 396.16 (E) | 15" | CB-218 |
| CB-220 | 401.51 | | | 396.41 (NE) | 15" | CB-219 |
| CB-223 | 393.22 | 18" | 389.03 (W) | 388.93 (N) | 18" | DCB-222 |
| CB-224 | 394.48 | 15"<br>15" | 390.07 (W)<br>390.90 (N) | 389.00 (S) | 24" | DCB-221 |
| CB-225 | 394.37 | | | 390.25 (E) | 15" | CB-224 |

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| CB-226 | 400.65 | 15" | 396.57 (W) | 396.47 (S) | 15" | CB-224 |
| CB-227 | 400.58 | | | 396.75 (E) | 15" | CB-226 |
| CB-252 | 384.35 | 30"<br>24" | 373.28 (W)<br>376.79 (N) | 373.08 (E) | 30" | DI-251 |
| CB-253 | 386.49 | 24" | 379.40 (N) | 379.40 (S) | 24" | CB-252 |
| CB-254 | 389.23 | 24" | 382.40 (NE) | 382.30 (S) | 24" | CB-253 |
| CB-255 | 390.68 | 24"<br>24" | 384.85 (W)<br>384.28 (N) | 384.28 (SW) | 24" | CB-254 |
| CB-256 | 391.87 | 15"<br>18" | 386.66 (NW)<br>385.41 (N) | 385.41 (S) | 24" | CB-255 |
| CB-257 | 393.39 | | | 387.54 (S) | 18" | CB-256 |
| CB-259 | 391.20 | 15"<br>18" | 386.37 (S)<br>386.47 (W) | 386.37 (E) | 18" | DCB-258 |
| CB-260 | 391.21 | | | 387.02 (N) | 15" | CB-259 |
| CB-261 | 394.52 | 18" | 389.96 (NW) | 389.86 (E) | 18" | CB-259 |
| CB-262 | 396.88 | 15"<br>15" | 392.45 (S)<br>392.64 (W) | 392.45 (SE) | 18" | CB-261 |
| CB-263 | 396.86 | 15" | 392.83 (S) | 392.73 (N) | 15" | CB-262 |
| CB-264 | 396.56 | | | 393.04 (N) | 15" | CB-263 |
| CB-265 | 397.85 | 15" | 393.42 (S) | 393.42 (E) | 15" | CB-262 |
| CB-266 | 397.84 | | | 393.70 (N) | 15" | CB-265 |
| CB-267 | 384.33 | 24"<br>24" | 373.75 (S)<br>373.60 (NW) | 373.50 (E) | 30" | CB-252 |
| CB-270 | 385.94 | 15"<br>15" | 378.12 (E)<br>377.68 (S) | 377.48 (N) | 15" | TCB-268 |
| CB-271 | 385.88 | 15" | 379.33 (E) | 378.32 (W) | 15" | CB-270 |
| CB-272 | 391.61 | 15" | 378.77 (E) | 378.57 (N) | 15" | CB-270 |

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| CB-273 | 391.63 | 15" | 380.60 (E) | 378.90 (W) | 15" | CB-272 |
| CB-279 | 386.77 | 24"<br>18" | 374.20 (N)<br>378.86 (W) | 374.00 (SE) | 24" | CB-267 |
| CB-280 | 386.78 | 18" | 379.10 (NE) | 374.50 (S) | 24" | CB-279 |
| CB-281 | 385.90 | 15" | 379.57 (N) | 379.57 (SW) | 18" | CB-280 |
| CB-282 | 387.00 | 15" | 380.74 (NW) | 380.74 (S) | 15" | CB-281 |
| CB-283 | 390.51 | 18"<br>18" | 383.07 (W)<br>379.85 (S) | 379.65 (E) | 18" | CB-279 |
| CB-285 | 392.15 | 18" | 385.49 (W) | 385.49 (E) | 18" | CB-283 |
| CB-286 | 393.69 | 15"<br>15" | 387.95 (NE)<br>387.74 (W) | 387.74 (E) | 18" | CB-285 |
| CB-287 | 393.67 | 15" | 388.20 (N) | 388.10 (SW) | 15" | CB-286 |
| CB-288 | 393.22 | | | 389.15 (S) | 15" | CB-287 |
| CB-289 | 396.85 | 15" | 390.35 (N) | 390.15 (E) | 15" | CB-286 |
| CB-2006 | 396.44 | 15" | 391.75 (NE) | 390.51 (S) | 15" | CB-289 |
| DCB-202 | 379.46 | 30" | 353.32 (N) | 353.22 (S) | 30" | DI-201 |
| DCB-221 | 393.48 | 18"<br>24" | 388.29 (W)<br>388.32 (N) | 388.09 (S) | 24" | CB-214 |
| DCB-222 | 393.48 | 18" | 388.69 (S) | 388.47 (E) | 18" | DCB-221 |
| DCB-258 | 390.67 | 18" | 385.25 (W) | 385.15 (E) | 24" | CB-255 |
| DCB-269 | 384.04 | | | 374.45 (W) | 24" | TCB-268 |
| DI-201 | 362.46 | 30" | 352.10 (N) | 352.00 (S) | 30" | FES-200 |
| DI-228 | 378.71 | 18" | 360.15 (NE) | 360.05 (W) | 18" | CB-204 |
| DI-229 | 367.52 | 18" | 360.66 (N) | 360.46 (SW) | 18" | DI-228 |

STRUCTURE DATA TABLE

| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
|---|---|---|---|---|---|---|
| DI-230 | 368.95 | 18" | 361.50 (NW) | 361.40 (S) | 18" | DI-229 |
| DI-231 | 376.32 | 18" | 370.50 (NW) | 370.40 (SE) | 18" | DI-230 |
| DI-232 | 381.75 | 18" | 375.50 (NW) | 375.40 (SE) | 18" | DI-231 |
| DI-233 | 386.68 | 15" | 381.75 (N) | 381.50 (SE) | 18" | DI-232 |
| DI-234 | 392.69 | 15" | 385.58 (N) | 385.38 (S) | 15" | DI-233 |
| DI-235 | 398.24 | | | 393.03 (S) | 15" | DI-234 |
| DI-236 | 397.48 | 18"<br>18" | 389.65 (N)<br>391.78 (NW) | 389.55 (E) | 18" | CB-223 |
| DI-237 | 394.74 | 18" | 391.10 (N) | 389.90 (S) | 18" | DI-236 |
| DI-238 | 402.00 | | | 398.50 (SE) | 18" | DI-236 |
| DI-251 | 373.56 | 30"<br>15" | 362.00 (W)<br>365.00 (N) | 355.00 (E) | 30" | FES-250 |
| DI-274 | 385.65 | | | 381.00 (W) | 15" | CB-273 |
| DI-275 | 382.94 | | | 380.00 (W) | 15" | CB-271 |
| DI-276 | 393.28 | 15" | 388.58 (W) | 388.48 (SE) | 15" | CB-256 |
| DI-277 | 396.12 | 15" | 391.95 (W) | 391.85 (E) | 15" | DI-276 |
| DI-278 | 398.33 | | | 394.10 (E) | 15" | DI-277 |
| DI-290 | 388.14 | 15" | 383.53 (W) | 383.53 (SE) | 15" | CB-282 |
| DI-291 | 390.96 | 15" | 386.98 (W) | 386.98 (E) | 15" | DI-290 |
| DI-292 | 394.59 | | | 390.75 (E) | 15" | DI-291 |
| DI-293 | 383.89 | 15"<br>18" | 380.60 (W)<br>380.41 (S) | 380.21 (N) | 18" | CB-283 |
| DI-294 | 388.87 | 15" | 385.24 (W) | 385.14 (E) | 15" | DI-293 |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| CB-203 TO CB-205 | 24" | 81.43' | 5.12% | RCP |
| CB-205 TO CB-206 | 15" | 28.49' | 1.50% | RCP |
| CB-205 TO CB-207 | 24" | 76.88' | 4.33% | RCP |
| CB-207 TO CB-209 | 24" | 106.77' | 3.52% | RCP |
| CB-209 TO CB-212 | 24" | 95.23' | 0.56% | RCP |
| CB-207 TO CB-208 | 15" | 27.34' | 0.51% | RCP |
| CB-209 TO CB-210 | 15" | 27.00' | 1.12% | RCP |
| CB-270 TO CB-272 | 15" | 178.50' | 0.50% | RCP |
| CB-268 TO CB-270 | 15" | 120.16' | 1.02% | RCP |
| CB-267 TO CB-268 | 24" | 45.61' | 0.66% | RCP |
| CB-270 TO CB-271 | 15" | 27.04' | 0.74% | RCP |
| CB-268 TO CB-269 | 24" | 26.97' | 1.11% | RCP |
| CB-286 TO CB-289 | 15" | 146.68' | 1.64% | RCP |
| CB-286 TO CB-287 | 15" | 27.01' | 0.56% | RCP |
| CB-285 TO CB-286 | 18" | 74.03' | 3.04% | RCP |
| CB-283 TO CB-285 | 18" | 69.27' | 3.50% | RCP |
| CB-279 TO CB-283 | 18" | 89.27' | 0.88% | RCP |
| CB-279 TO CB-280 | 24" | 27.00' | 1.11% | RCP |
| CB-267 TO CB-279 | 24" | 48.64' | 0.82% | RCP |
| CB-280 TO CB-281 | 18" | 44.85' | 1.05% | RCP |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| CB-253 TO CB-254 | 24" | 134.60' | 2.15% | RCP |
| CB-262 TO CB-265 | 15" | 78.98' | 0.99% | RCP |
| CB-261 TO CB-262 | 18" | 75.26' | 3.31% | RCP |
| CB-259 TO CB-261 | 18" | 82.20' | 4.12% | RCP |
| CB-258 TO CB-259 | 18" | 40.62' | 2.76% | RCP |
| CB-255 TO CB-258 | 24" | 35.00' | 0.86% | RCP |
| CB-254 TO CB-255 | 24" | 77.88' | 2.41% | RCP |
| CB-262 TO CB-263 | 15" | 35.02' | 0.80% | RCP |
| CB-259 TO CB-260 | 15" | 35.00' | 1.86% | RCP |
| CB-255 TO CB-256 | 24" | 61.65' | 1.83% | RCP |
| CB-214 TO CB-215 | 18" | 35.06' | 1.14% | RCP |
| CB-215 TO CB-216 | 18" | 39.35' | 2.54% | RCP |
| CB-216 TO CB-218 | 18" | 66.89' | 1.97% | RCP |
| CB-218 TO CB-219 | 15" | 200.10' | 1.89% | RCP |
| CB-219 TO CB-220 | 15" | 31.34' | 0.80% | RCP |
| CB-216 TO CB-217 | 15" | 27.01' | 1.01% | RCP |
| CB-214 TO DCB-221 | 24" | 140.96' | 0.95% | RCP |
| DCB-221 TO CB-224 | 24" | 84.89' | 0.80% | RCP |
| CB-224 TO CB-226 | 15" | 162.56' | 3.43% | RCP |
| DCB-221 TO DCB-222 | 18" | 35.00' | 0.51% | RCP |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| CB-224 TO CB-225 | 15" | 35.32' | 0.50% | RCP |
| CB-226 TO CB-227 | 15" | 35.07' | 0.50% | RCP |
| CB-263 TO CB-264 | 15" | 26.33' | 0.80% | RCP |
| CB-287 TO CB-288 | 15" | 24.78' | 3.83% | RCP |
| CB-281 TO CB-282 | 15" | 59.41' | 1.97% | RCP |
| DI-290 TO DI-291 | 15" | 68.73' | 5.02% | RCP |
| DI-291 TO DI-292 | 15" | 88.66' | 4.25% | RCP |
| DI-277 TO DI-278 | 15" | 100.00' | 2.15% | RCP |
| CB-256 TO CB-257 | 18" | 78.86' | 2.70% | RCP |
| DI-276 TO DI-277 | 15" | 93.80' | 3.49% | RCP |
| CB-212 TO CB-213 | 24" | 35.51' | 1.30% | RCP |
| CB-265 TO CB-266 | 15" | 35.01' | 0.80% | RCP |
| CB-256 TO DI-276 | 15" | 69.90' | 2.60% | RCP |
| CB-272 TO CB-273 | 15" | 26.99' | 0.50% | RCP |
| CB-213 TO CB-214 | 24" | 69.24' | 1.32% | RCP |
| CB-252 TO CB-267 | 30" | 27.03' | 0.81% | RCP |
| FES-250 TO DI-251 | 30" | 97.68' | 3.58% | RCP |
| DI-251 TO CB-252 | 30" | 146.60' | 7.56% | RCP |
| CB-252 TO CB-253 | 24" | 115.30' | 2.27% | RCP |
| CB-282 TO DI-290 | 15" | 34.75' | 8.03% | RCP |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| CB-223 TO DI-236 | 18" | 103.44' | 0.50% | RCP |
| DI-236 TO DI-238 | 18" | 225.44' | 2.98% | RCP |
| DI-236 TO DI-237 | 18" | 57.56' | 0.43% | RCP |
| CB-283 TO DI-293 | 18" | 77.38' | 0.47% | RCP |
| DI-201 TO CB-202 | 30" | 22.49' | 5.00% | RCP |
| CB-202 TO CB-203 | 30" | 78.32' | 4.83% | RCP |
| FES-200 TO DI-201 | 30" | 61.26' | 0.82% | RCP |
| DCB-222 TO CB-223 | 18" | 57.61' | 0.42% | RCP |
| DI-295 TO DI-296 | 15" | 140.31' | 3.18% | RCP |
| DI-294 TO DI-295 | 15" | 114.04' | 2.40% | RCP |
| DI-293 TO DI-294 | 15" | 58.16' | 7.81% | RCP |
| CB-273 TO DI-274 | 15" | 79.57' | 0.50% | RCP |
| DI-232 TO DI-233 | 18" | 107.21' | 5.60% | RCP |
| DI-231 TO DI-232 | 18" | 125.29' | 3.91% | RCP |
| DI-230 TO DI-231 | 18" | 123.32' | 7.22% | RCP |
| DI-229 TO DI-230 | 18" | 147.46' | 0.50% | RCP |
| DI-228 TO DI-229 | 18" | 62.68' | 0.50% | RCP |
| CB-204 TO DI-228 | 18" | 137.00' | 0.77% | RCP |
| CB-203 TO CB-204 | 18" | 28.28' | 2.53% | RCP |
| CB-271 TO DI-275 | 15" | 133.35' | 0.50% | RCP |

PIPE TABLE

| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
|---|---|---|---|---|
| DI-233 TO DI-234 | 15" | 95.83' | 3.78% | RCP |
| DI-234 TO DI-235 | 15" | 163.99' | 4.54% | RCP |
| DI-293 TO DI-297 | 18" | 89.62' | 1.22% | RCP |
| DI-297 TO DI-298 | 18" | 147.46' | 9.36% | RCP |
| DI-237 TO DI-299 | 18" | 71.53' | 0.55% | RCP |
| DI-299 TO DI-2000 | 18" | 146.78' | 3.95% | RCP |
| DI-2004 TO DI-2005 | 15" | 132.01' | 3.95% | RCP |
| DI-251 TO DI-2001 | 15" | 112.50' | 6.04% | RCP |
| DI-2001 TO DI-2002 | 15" | 116.23' | 5.33% | RCP |
| DI-2002 TO DI-2003 | 15" | 50.45' | 15.86% | RCP |
| CB-203 TO DI-2004 | 15" | 140.78' | 0.50% | RCP |
| CB-289 TO CB-2006 | 15" | 31.52' | 0.50% | RCP |
| CB-2006 TO DI-2007 | 15" | 19.83' | 3.78% | RCP |

RIP RAP DISSIPATOR SUMMARY TABLE

| OUTLET | MEDIAN STONE DIAMETER ($D_{50}$) | MINIMUM APRON LENGTH | WIDTH AT PIPE | WIDTH AT END | MAX STONE DIAMETER | STONE CLASS |
|---|---|---|---|---|---|---|
| FES100 | 7 IN | 19.00 FT | 9.00 FT | 22.00 FT | 11 IN | B |
| FES152 | 3 IN | 9.00 FT | 4.50 FT | 10.50 FT | 5 IN | B |
| FES200 | 10 IN | 19.00 FT | 9.00 FT | 22.00 FT | 15 IN | 1 |
| FES250 | 8 IN | 12.00 FT | 7.50 FT | 14.50 FT | 12 IN | B |
| FES300 | 10 IN | 19.00 FT | 9.00 FT | 22.00 FT | 15 IN | 1 |
| FES350 | 10 IN | 19.00 FT | 9.00 FT | 22.00 FT | 15 IN | 1 |
| FES400 | 7 IN | 11.00 FT | 6.00 FT | 13.00 FT | 10 IN | B |
| FES450 | 10 IN | 16.00 FT | 7.50 FT | 18.50 FT | 15 IN | 1 |
| FES1000 | 7 IN | 18.00 FT | 6.00 FT | 20.00 FT | 11 IN | B |
| FES2000 | 6 IN | 35.00 FT | 9.00 FT | 38.00 FT | 9 IN | B |
| FES3001 | 7 IN | 19.00 FT | 9.00 FT | 22.00 FT | 11 IN | B |
| HW4000 | 5 IN | 12.00 FT | 6.00 FT | 14.00 FT | 7 IN | B |

MINIMUM RIP RAP BY PIPE SIZE

| OUTLET | MEDIAN STONE DIAMETER ($D_{50}$) | MINIMUM APRON LENGTH | WIDTH AT PIPE | WIDTH AT END | MAX STONE DIAMETER | STONE CLASS |
|---|---|---|---|---|---|---|
| 12" | 3 IN | 5.00 FT | 3.00 FT | 8.00 FT | 5 IN | B |
| 15" | 4 IN | 8.00 FT | 3.75 FT | 11.75 FT | 6 IN | B |
| 18" | 6 IN | 9.00 FT | 4.50 FT | 13.50 FT | 9 IN | B |

NOTE: Any outlet not listed above shall conform to minimum dissipation per pipe size above. Design of energy dissipators for culverts is not included in this sheet.

STORM STRUCTURE NOTES:

- FES = FLARED END SECTION
- DI = GRATED YARD INLET
- CB = CATCH BASIN
- DCB = DOUBLE CATCH BASIN
- TCB = TRIPLE CATCH BASIN
- HW = HEADWALL

1. ALL YARD INLETS SHALL HAVE 4'X4' INSIDE DIMENSION UNLESS OTHERWISE NOTED.
2. RIM ELEVATION GIVEN FOR DI IS FLOW LINE.
3. RIM ELEVATION GIVEN FOR YI IS FLOW LINE, NOT TOP OF SLAB.
4. RIM ELEVATION GIVEN FOR CB IS TOP OF CURB, NOT FLOW LINE.
5. PIPE LENGTH INCLUDES FES LENGTH.

NOTE: HP STORM (POLYPROPYLENE) PIPE THAT EXCEEDS OR MEETS ASTM F2881 AND AASHTO M330 MAY BE USED IN LIEU OF RCP IN ALL AREAS EXCEPT SCM OUTLET PIPE.

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397


LENNAR CORPORATION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

STORM SEWER TABLE (1 OF 2)

NORTH CAROLINA PROFESSIONAL ENGINEER SEBRA M. FERRI 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-7

## SCM 3

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| CB-302 | 405.95 | 15"<br>15"<br>24" | 398.70 (NE)<br>391.72 (SE)<br>394.58 (NW) | 391.52 (SW) | 24" | DI-301 |
| CB-303 | 405.97 | | | 399.00 (SW) | 15" | CB-302 |
| CB-304 | 408.60 | 24" | 396.00 (NW) | 396.00 (SE) | 24" | CB-302 |
| CB-305 | 409.78 | 18"<br>24" | 399.62 (NE)<br>397.00 (NW) | 397.00 (SE) | 24" | CB-304 |
| CB-306 | 409.58 | 18" | 400.00 (E) | 399.80 (SW) | 18" | CB-305 |
| CB-307 | 407.46 | 18" | 401.00 (SE) | 400.80 (W) | 18" | CB-306 |
| CB-308 | 407.46 | | | 401.43 (NW) | 18" | CB-307 |
| CB-309 | 410.01 | 24" | 397.50 (W) | 397.40 (SE) | 24" | CB-305 |
| CB-310 | 408.40 | 24" | 398.20 (W) | 398.10 (E) | 24" | CB-309 |
| CB-313 | 398.03 | 15" | 393.22 (NE) | 393.02 (NW) | 15" | CB-302 |
| CB-314 | 398.15 | | | 393.40 (SW) | 15" | CB-313 |
| CB-361 | 404.94 | 15"<br>15" | 397.60 (E)<br>394.82 (NW) | 389.24 (S) | 24" | DI-356 |
| CB-362 | 406.15 | 15" | 399.00 (N) | 398.80 (W) | 15" | CB-361 |
| CB-363 | 406.17 | 15" | 399.30 (NE) | 399.20 (S) | 15" | CB-362 |
| CB-364 | 408.24 | 15" | 399.73 (E) | 399.63 (SW) | 15" | CB-363 |
| CB-365 | 407.88 | | | 399.90 (W) | 15" | CB-364 |
| CB-367 | 405.04 | 12" | 399.70 (NW) | 395.18 (SE) | 15" | CB-361 |
| CB-368 | 403.12 | 24" | 389.88 (SW) | 389.78 (E) | 24" | DI-356 |
| CB-368A | 401.60 | 15"<br>24" | 391.01 (NW)<br>390.24 (S) | 390.14 (NE) | 24" | CB-368 |
| CB-369 | 401.62 | | | 391.19 (SE) | 15" | CB-368A |

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| CB-372 | 400.83 | 15"<br>15" | 392.06 (W)<br>392.16 (S) | 391.96 (N) | 15" | DCB-370 |
| CB-373 | 400.83 | | | 392.23 (E) | 15" | CB-372 |
| CB-374 | 402.60 | 15" | 397.58 (W) | 397.04 (N) | 15" | CB-372 |
| CB-375 | 402.82 | | | 397.80 (E) | 15" | CB-374 |
| DCB-311 | 406.58 | 18" | 399.32 (N) | 398.83 (E) | 24" | CB-310 |
| DCB-312 | 406.58 | | | 399.50 (S) | 18" | DCB-311 |
| DCB-370 | 400.19 | 15"<br>24" | 391.55 (S)<br>390.90 (W) | 390.80 (N) | 24" | CB-368A |
| DCB-371 | 400.18 | 18" | 392.80 (W) | 391.25 (E) | 24" | DCB-370 |
| DI-301 | 395.35 | 24" | 386.50 (NE) | 386.30 (SW) | 24" | FES-300 |
| DI-351 | 393.85 | 30"<br>18" | 384.78 (W)<br>386.00 (N) | 384.68 (SE) | 30" | FES-350 |
| DI-352 | 404.95 | 18" | 400.06 (E) | 399.86 (W) | 18" | DI-379 |
| DI-353 | 407.60 | | | 401.09 (W) | 18" | DI-352 |
| DI-354 | 393.12 | 30" | 387.98 (W) | 387.88 (E) | 30" | DI-351 |
| DI-355 | 394.37 | 30"<br>18" | 388.48 (NW)<br>389.80 (SW) | 388.38 (E) | 30" | DI-354 |
| DI-356 | 400.02 | 24"<br>24" | 388.93 (N)<br>389.33 (W) | 388.83 (SE) | 30" | DI-355 |
| DI-357 | 398.73 | 18" | 390.20 (S) | 390.10 (NE) | 18" | DI-355 |
| DI-358 | 398.44 | 18" | 390.85 (S) | 390.75 (N) | 18" | DI-357 |
| DI-359 | 396.81 | 18" | 392.08 (S) | 391.88 (N) | 18" | DI-358 |
| DI-360 | 399.15 | | | 395.50 (N) | 18" | DI-359 |
| DI-368 | 406.90 | | | 400.00 (SE) | 12" | CB-367 |

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| DI-376 | 398.87 | 18" | 393.64 (N) | 393.43 (E) | 18" | DCB-371 |
| DI-377 | 402.97 | 18" | 394.50 (NE) | 394.40 (S) | 18" | DI-376 |
| DI-378 | 404.73 | | | 397.47 (SW) | 18" | DI-377 |
| DI-379 | 406.25 | 18"<br>18" | 398.30 (W)<br>389.37 (E) | 389.17 (S) | 18" | DI-351 |
| DI-380 | 404.63 | | | 400.13 (E) | 18" | DI-379 |
| FES-300 | | 24" | 384.50 (NE) | | | |
| FES-350 | | 30" | 383.51 (NW) | | | |
| FES-3001 | | 24" | 376.00 (NW) | | | |
| FES-3003 | | 36" | 380.00 (N) | | | |
| R-3002 | 384.50 | | | 379.00 (SE) | 24" | FES-3001 |
| YI-3004 | 396.06 | | | 381.14 (S) | 36" | FES-3003 |

| PIPE TABLE | | | | |
|---|---|---|---|---|
| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
| FES-300 TO DI-301 | 24" | 171.78' | 1.05% | RCP |
| DI-301 TO CB-302 | 24" | 186.13' | 2.70% | RCP |
| CB-302 TO CB-303 | 15" | 35.00' | 0.86% | RCP |
| CB-302 TO CB-313 | 15" | 173.95' | 0.75% | RCP |
| CB-313 TO CB-314 | 15" | 35.14' | 0.50% | RCP |
| CB-302 TO CB-304 | 24" | 70.79' | 2.01% | RCP |
| CB-305 TO CB-309 | 24" | 79.23' | 0.50% | RCP |
| CB-304 TO CB-305 | 24" | 50.05' | 2.00% | RCP |
| CB-363 TO CB-364 | 15" | 43.52' | 0.76% | RCP |
| CB-362 TO CB-363 | 15" | 33.50' | 0.60% | RCP |
| CB-310 TO DCB-311 | 24" | 112.90' | 0.55% | RCP |
| CB-372 TO CB-374 | 15" | 122.19' | 3.99% | RCP |
| DCB-370 TO CB-372 | 15" | 79.15' | 0.52% | RCP |
| CB-374 TO CB-375 | 15" | 43.43' | 0.50% | RCP |
| CB-372 TO CB-373 | 15" | 35.00' | 0.50% | RCP |
| DCB-370 TO DCB-371 | 24" | 35.10' | 1.00% | RCP |
| CB-368A TO DCB-370 | 24" | 111.73' | 0.50% | RCP |
| CB-368 TO CB-368A | 24" | 49.62' | 0.52% | RCP |
| CB-361 TO CB-362 | 15" | 84.50' | 1.42% | RCP |
| CB-368A TO CB-369 | 15" | 34.94' | 0.51% | RCP |

| PIPE TABLE | | | | |
|---|---|---|---|---|
| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
| CB-361 TO CB-367 | 15" | 35.21' | 1.02% | RCP |
| CB-364 TO CB-365 | 15" | 29.18' | 0.58% | RCP |
| DCB-371 TO DI-376 | 18" | 126.99' | 0.50% | RCP |
| DCB-311 TO DCB-312 | 18" | 35.00' | 0.50% | RCP |
| CB-305 TO CB-306 | 18" | 35.01' | 0.50% | RCP |
| CB-306 TO CB-307 | 18" | 56.05' | 1.43% | RCP |
| CB-307 TO CB-308 | 18" | 35.00' | 1.23% | RCP |
| DI-356 TO CB-361 | 24" | 44.87' | 0.68% | RCP |
| DI-355 TO DI-356 | 30" | 69.34' | 0.50% | RCP |
| FES-350 TO DI-351 | 30" | 233.35' | 0.50% | RCP |
| DI-351 TO DI-354 | 30" | 123.21' | 2.52% | RCP |
| FES-3001 TO R-3002 | 24" | 74.83' | 4.01% | RCP |
| FES-3003 TO YI-3004 | 36" | 228.63' | 0.50% | RCP |
| CB-309 TO CB-310 | 24" | 80.77' | 0.74% | RCP |
| DI-355 TO DI-357 | 18" | 27.30' | 1.10% | RCP |
| DI-357 TO DI-358 | 18" | 75.44' | 0.73% | RCP |
| DI-358 TO DI-359 | 18" | 82.57' | 1.25% | RCP |
| DI-359 TO DI-360 | 18" | 164.14' | 2.08% | RCP |
| DI-354 TO DI-355 | 30" | 79.21' | 0.50% | RCP |
| DI-379 TO DI-352 | 18" | 157.97' | 6.65% | RCP |

## SCM 4

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| CB-405 | 394.69 | 15"<br>18"<br>15" | 388.75 (SE)<br>389.45 (NE)<br>389.34 (NW) | 388.00 (SW) | 24" | DI-401 |
| CB-406 | 394.69 | 18" | 390.08 (NW) | 389.80 (SW) | 18" | CB-405 |
| CB-407 | 394.71 | 18" | 390.41 (NE) | 390.21 (SE) | 18" | CB-406 |
| CB-408 | 395.58 | 15" | 390.45 (NE) | 390.25 (SE) | 15" | CB-405 |
| CB-409 | 395.63 | | | 390.80 (SW) | 15" | CB-408 |
| CB-410 | 395.73 | 15" | 389.53 (SE) | 389.33 (NW) | 15" | CB-405 |
| CB-411 | 396.56 | 15" | 391.93 (E) | 391.73 (NW) | 15" | CB-410 |
| CB-412 | 396.96 | | | 392.21 (W) | 15" | CB-411 |
| CB-452 | 391.82 | 18"<br>24"<br>18" | 380.10 (SW)<br>382.05 (NE)<br>382.50 (SE) | 380.00 (NW) | 30" | DI-451 |
| CB-453 | 391.82 | 18" | 382.82 (NE) | 382.72 (NW) | 18" | CB-452 |
| CB-454 | 392.19 | 18" | 382.87 (SE) | 382.87 (SW) | 18" | CB-453 |
| CB-455 | 385.73 | 15" | 381.13 (S) | 380.88 (NE) | 18" | CB-452 |
| CB-456 | 384.76 | | | 381.30 (N) | 15" | CB-455 |
| CB-457 | 395.52 | 18"<br>15" | 383.29 (NE)<br>387.87 (SE) | 382.79 (SW) | 24" | CB-452 |
| CB-458 | 395.52 | | | 388.01 (NW) | 15" | CB-457 |
| CB-459 | 398.37 | 15"<br>18" | 391.54 (SE)<br>384.17 (NE) | 384.07 (SW) | 18" | CB-457 |
| CB-460 | 398.37 | | | 391.68 (NW) | 15" | CB-459 |
| CB-461 | 398.54 | 18" | 384.66 (NE) | 384.56 (SW) | 18" | CB-459 |
| CB-462 | 397.25 | 15"<br>15" | 385.16 (SE)<br>389.75 (N) | 385.06 (SW) | 18" | CB-461 |
| CB-463 | 397.22 | 15" | 385.40 (SE) | 385.30 (NW) | 15" | CB-462 |

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| CB-464 | 398.44 | | | 393.59 (S) | 15" | CB-462 |
| CB-466 | 394.87 | 15" | 385.74 (SE) | 385.64 (NW) | 15" | CB-463 |
| CB-467 | 390.35 | 15"<br>15" | 386.35 (NE)<br>387.50 (SW) | 386.15 (NW) | 15" | CB-466 |
| CB-468 | 389.69 | | | 386.53 (SW) | 15" | CB-467 |
| CB-4022 | 377.86 | | | 365.00 (W) | 18" | DI-4021 |
| DI-401 | 393.75 | 24"<br>18" | 382.65 (NE)<br>385.00 (NW) | 382.55 (S) | 24" | FES-400 |
| DI-402 | 391.48 | 18" | 386.79 (NW) | 386.59 (SE) | 18" | DI-401 |
| DI-403 | 398.87 | 18" | 393.04 (NW) | 392.84 (SE) | 18" | DI-402 |
| DI-404 | 401.75 | | | 397.32 (SE) | 18" | DI-403 |
| DI-415 | 394.78 | 18" | 391.77 (SE) | 391.57 (SW) | 18" | CB-407 |
| DI-416 | 396.45 | | | 393.03 (NW) | 18" | DI-415 |
| DI-451 | 386.93 | 30"<br>18" | 379.21 (SE)<br>380.21 (SW) | 379.11 (N) | 30" | FES-450 |
| DI-469 | 392.33 | 15" | 389.35 (SW) | 389.15 (NE) | 15" | CB-467 |
| DI-470 | 389.98 | 15"<br>15" | 384.26 (NE)<br>383.57 (SW) | 383.52 (NW) | 18" | CB-454 |
| DI-471 | 391.68 | 15" | 386.00 (NE) | 385.80 (SW) | 15" | DI-470 |
| DI-472 | 387.06 | | | 384.12 (NE) | 15" | DI-470 |
| DI-473 | 394.47 | | | 388.02 (SW) | 15" | DI-471 |
| DI-474 | 395.49 | | | 390.57 (NE) | 15" | DI-469 |
| DI-476 | 392.51 | 15" | 386.22 (NE) | 384.00 (NW) | 15" | FES-475 |
| DI-477 | 394.56 | 15" | 389.13 (NE) | 388.93 (SW) | 15" | DI-476 |

| STRUCTURE DATA TABLE | | | | | | |
|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT TO NODE |
| DI-478 | 398.12 | | | 392.68 (SW) | 15" | DI-477 |
| DI-479 | 388.15 | 18" | 381.25 (SW) | 381.05 (NE) | 18" | DI-451 |
| DI-480 | 385.25 | | | 381.75 (NE) | 18" | DI-479 |
| DI-4021 | 360.75 | 24"<br>18" | 357.00 (N)<br>357.00 (E) | 356.80 (W) | 24" | HW-4020 |
| DI-4023 | 367.74 | 18" | 361.00 (NE) | 357.90 (S) | 24" | DI-4021 |
| DI-4024 | 379.72 | | | 366.00 (SW) | 18" | DI-4023 |
| DI-4101 | 375.98 | | | 371.30 (W) | 15" | FES-4100 |
| FES-400 | 384.24 | 24" | 380.50 (N) | | | |
| FES-450 | 382.01 | 30" | 378.99 (S) | | | |
| FES-475 | 382.44 | 15" | 380.50 (SE) | | | |
| FES-4100 | 370.28 | 15" | 368.35 (E) | | | |
| HW-4020 | 357.75 | 24" | 355.00 (E) | | | |

| PIPE TABLE | | | | |
|---|---|---|---|---|
| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
| CB-452 TO CB-455 | 18" | 133.49' | 0.58% | RCP |
| CB-452 TO CB-457 | 24" | 133.00' | 0.56% | RCP |
| CB-455 TO CB-456 | 15" | 34.00' | 0.50% | RCP |
| CB-452 TO CB-453 | 18" | 27.00' | 0.81% | RCP |
| CB-457 TO CB-458 | 15" | 27.02' | 0.50% | RCP |
| FES-400 TO DI-401 | 24" | 211.73' | 0.97% | RCP |
| DI-401 TO CB-405 | 24" | 134.57' | 3.98% | RCP |
| CB-405 TO CB-410 | 15" | 93.29' | 0.62% | RCP |
| CB-405 TO CB-408 | 15" | 91.00' | 1.00% | RCP |
| CB-408 TO CB-409 | 15" | 35.08' | 1.00% | RCP |
| CB-405 TO CB-406 | 18" | 35.00' | 1.00% | RCP |
| CB-466 TO CB-467 | 15" | 81.60' | 0.50% | RCP |
| CB-463 TO CB-466 | 15" | 47.08' | 0.50% | RCP |
| CB-462 TO CB-463 | 15" | 27.00' | 0.50% | RCP |
| CB-461 TO CB-462 | 18" | 80.71' | 0.50% | RCP |
| CB-462 TO CB-464 | 15" | 47.55' | 8.08% | RCP |
| CB-411 TO CB-412 | 15" | 39.92' | 0.71% | RCP |
| CB-410 TO CB-411 | 15" | 40.11' | 5.48% | RCP |
| CB-459 TO CB-461 | 18" | 78.01' | 0.50% | RCP |
| CB-457 TO CB-459 | 18" | 123.74' | 0.63% | RCP |

| PIPE TABLE | | | | |
|---|---|---|---|---|
| NAME | SIZE | LENGTH | SLOPE | MATERIAL |
| CB-459 TO CB-460 | 15" | 27.00' | 0.50% | RCP |
| DI-451 TO CB-452 | 30" | 158.96' | 0.50% | RCP |
| DI-4023 TO DI-4024 | 18" | 49.80' | 10.04% | RCP |
| FES-450 TO DI-451 | 30" | 23.51' | 0.50% | RCP |
| DI-4021 TO CB-4022 | 18" | 47.21' | 16.94% | RCP |
| DI-4021 TO DI-4023 | 24" | 106.33' | 0.85% | RCP |
| CB-467 TO CB-468 | 15" | 35.02' | 0.50% | RCP |
| CB-407 TO DI-415 | 18" | 115.97' | 1.00% | RCP |
| CB-406 TO CB-407 | 18" | 13.25' | 1.00% | RCP |
| DI-415 TO DI-416 | 18" | 126.25' | 1.00% | RCP |
| CB-454 TO DI-470 | 18" | 125.59' | 0.52% | RCP |
| CB-453 TO CB-454 | 18" | 9.96' | 0.50% | RCP |
| HW-4020 TO DI-4021 | 24" | 40.27' | 4.47% | RCP |
| CB-467 TO DI-469 | 15" | 23.64' | 6.98% | RCP |
| DI-470 TO DI-471 | 15" | 87.27' | 1.76% | RCP |
| DI-470 TO DI-472 | 15" | 107.31' | 0.52% | RCP |
| DI-401 TO DI-402 | 18" | 89.29' | 1.78% | RCP |
| DI-402 TO DI-403 | 18" | 128.27' | 4.72% | RCP |
| DI-403 TO DI-404 | 18" | 84.41' | 5.07% | RCP |
| FES-4100 TO DI-4101 | 15" | 67.57' | 4.37% | RCP |

## ISOLATED STRUCTURES

| STRUCTURE DATA TABLE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT LENGTH (LF) | PIPE OUT SLOPE | PIPE OUT TO NODE |
| AD-600 | 372.43 | | | 361.50 (E) | 15" | 6.68 | 7.49% | |
| AD-602 | 405.31 | | | 396.33 (S) | 15" | 7.60 | 6.49% | |
| AD-604 | 383.79 | | | 370.75 (SE) | 15" | 6.50 | 4.61% | |
| AD-605 | 377.65 | | | 374.71 (NW) | 15" | 18.66 | 2.46% | FES-606 |
| AD-607 | 384.69 | | | 381.75 (W) | 15" | 27.66 | 0.50% | FES-608 |
| DI-B103 | 396.96 | | | 393.75 (E) | 18" | 30.17 | 0.49% | FES-B102 |
| DI-B105 | 386.68 | | | 383.50 (E) | 12" | 23.93 | 0.63% | FES-B104 |
| DI-B107 | 360.88 | | | 357.94 (E) | 15" | 27.73 | 0.50% | FES-B106 |
| FES-606 | | 15" | 374.25 (SE) | | | | | |
| FES-608 | | 15" | 381.61 (E) | | | | | |
| FES-1000 | | 24" | 378.23 (NE) | | | | | |
| FES-1101 | | 18" | 391.50 (E) | | | | | |
| FES-2000 | | 24" | 345.00 (N) | | | | | |
| FES-B102 | | 18" | 393.60 (W) | | | | | |
| FES-B104 | | 12" | 383.35 (W) | | | | | |
| FES-B106 | | 15" | 357.80 (W) | | | | | |
| HW-4000 | | 24" | 374.00 (E) | | | | | |
| HW-C101 | | | | 390.81 (S) | 48" | 61.92 | 0.50% | HW-C102 |
| HW-C102 | | 48" | 390.50 (N) | | | | | |
| HW-C201 | | 48" | 403.20 (N) | | | | | |

| STRUCTURE DATA TABLE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| STRUCTURE NAME | RIM ELEV. | PIPE IN SIZE | INV. IN | INV. OUT | PIPE OUT SIZE | PIPE OUT LENGTH (LF) | PIPE OUT SLOPE | PIPE OUT TO NODE |
| HW-C202 | | | | 403.70 (S) | 48" | 82.41 | 0.61% | HW-C201 |
| HW-C301 | | | | | | | | |
| HW-C302 | | | | | | | | |
| HW-C401 | | | | 393.20 (S) | 48" | 42.21 | 0.90% | HW-C402 |
| HW-C402 | | 48" | 392.82 (N) | | | | | |
| JB-1100 | 396.21 | | | 394.00 (W) | 18" | 133.48 | 1.87% | FES-1101 |
| OCS-1001 | 387.90 | | | 379.00 (SW) | 24" | 153.18 | 0.50% | FES-1000 |
| OCS-2001 | 354.30 | | | 346.00 (S) | 24" | 87.00 | 1.15% | FES-2000 |
| OCS-4001 | 384.00 | | | 375.00 (W) | 24" | 78.11 | 1.28% | HW-4000 |
| YI-1200 | 382.35 | | | | | | | |

STORM STRUCTURE NOTES:

- FES = FLARED END SECTION
- DI = GRATED YARD INLET
- CB = CATCH BASIN
- DCB = DOUBLE CATCH BASIN
- TCB = TRIPLE CATCH BASIN
- HW = HEADWALL

1. ALL YARD INLETS SHALL HAVE 4'X4' INSIDE DIMENSION UNLESS OTHERWISE NOTED.
2. RIM ELEVATION GIVEN FOR DI IS FLOW LINE.
3. RIM ELEVATION GIVEN FOR YI IS FLOW LINE, NOT TOP OF SLAB.
4. RIM ELEVATION GIVEN FOR CB IS TOP OF CURB, NOT FLOW LINE.
5. PIPE LENGTH INCLUDES FES LENGTH.

NOTE: HP STORM (POLYPROPYLENE) PIPE THAT EXCEEDS OR MEETS ASTM F2881 AND AASHTO M330 MAY BE USED IN LIEU OF RCP IN ALL AREAS EXCEPT SCM OUTLET PIPE.

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 4 | | |
| 3 | | |
| 2 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 1 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| REV | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH, NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397


LENNAR CORPORATION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

STORM SEWER TABLE (2 OF 2)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERRI 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C4-8

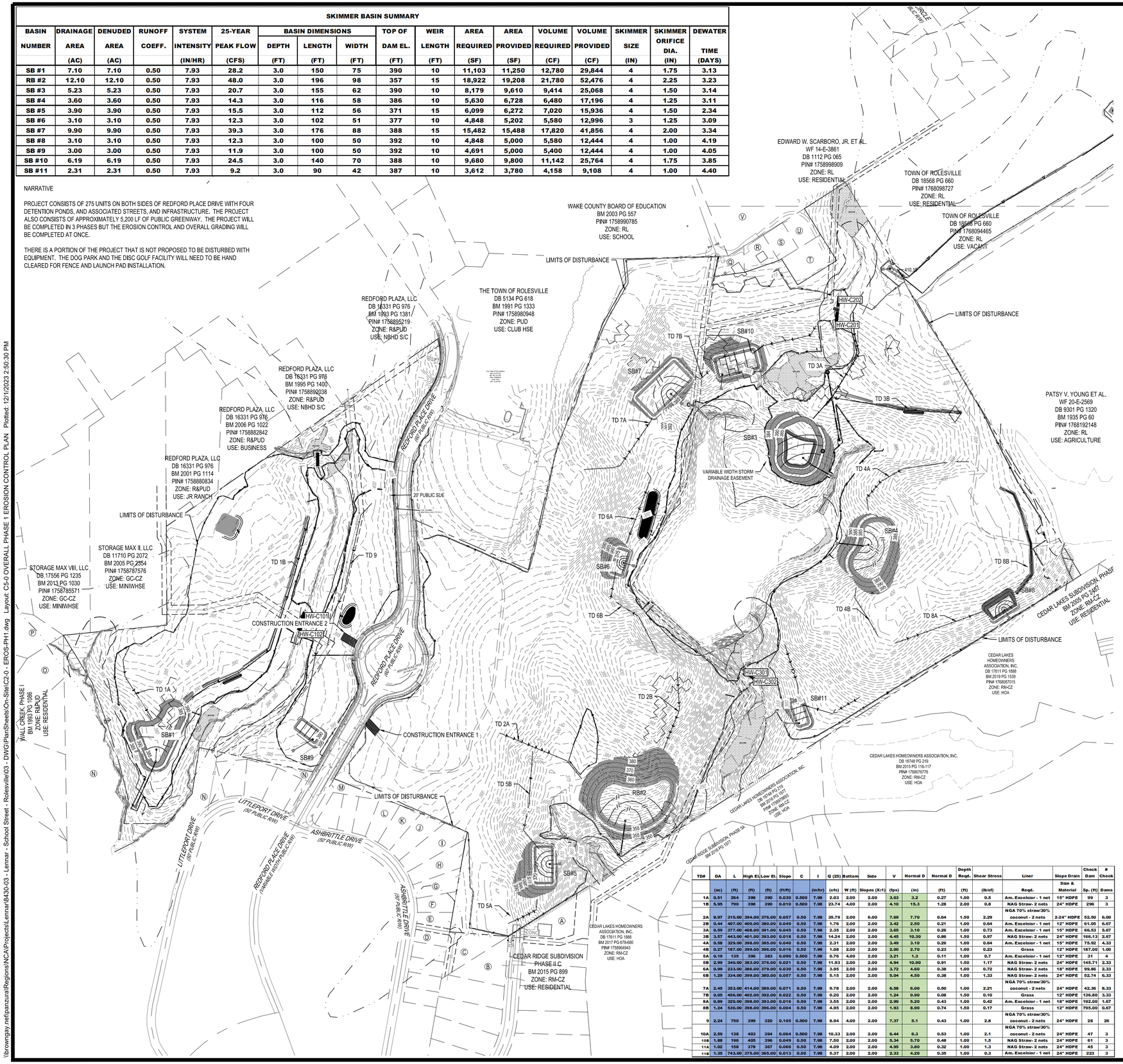
## SKIMMER BASIN SUMMARY

| BASIN NUMBER | DRAINAGE AREA (AC) | DENUDED AREA (AC) | RUNOFF COEFF. | SYSTEM INTENSITY (IN/HR) | 25-YEAR PEAK FLOW (CFS) | BASIN DIMENSIONS DEPTH (FT) | LENGTH (FT) | WIDTH (FT) | TOP OF DAM EL. (FT) | WEIR LENGTH (FT) | AREA REQUIRED (SF) | AREA PROVIDED (SF) | VOLUME REQUIRED (CF) | VOLUME PROVIDED (CF) | SKIMMER SIZE (IN) | SKIMMER ORIFICE DIA. (IN) | DEWATER TIME (DAYS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB #1 | 7.10 | 7.10 | 0.50 | 7.93 | 28.2 | 3.0 | 150 | 75 | 390 | 10 | 11,103 | 11,250 | 12,780 | 29,844 | 4 | 1.75 | 3.13 |
| RB #2 | 12.10 | 12.10 | 0.50 | 7.93 | 48.0 | 3.0 | 196 | 98 | 357 | 15 | 18,922 | 19,208 | 21,780 | 52,476 | 4 | 2.25 | 3.23 |
| SB #3 | 5.23 | 5.23 | 0.50 | 7.93 | 20.7 | 3.0 | 155 | 62 | 390 | 10 | 8,179 | 9,610 | 9,414 | 25,068 | 4 | 1.50 | 3.14 |
| SB #4 | 3.60 | 3.60 | 0.50 | 7.93 | 14.3 | 3.0 | 116 | 58 | 386 | 10 | 5,630 | 6,728 | 6,480 | 17,196 | 4 | 1.25 | 3.11 |
| SB #5 | 3.90 | 3.90 | 0.50 | 7.93 | 15.5 | 3.0 | 112 | 56 | 371 | 15 | 6,099 | 6,272 | 7,020 | 15,936 | 4 | 1.50 | 2.34 |
| SB #6 | 3.10 | 3.10 | 0.50 | 7.93 | 12.3 | 3.0 | 102 | 51 | 377 | 10 | 4,848 | 5,202 | 5,580 | 12,996 | 3 | 1.25 | 3.09 |
| SB #7 | 9.90 | 9.90 | 0.50 | 7.93 | 39.3 | 3.0 | 176 | 88 | 388 | 15 | 15,482 | 15,488 | 17,820 | 41,856 | 4 | 2.00 | 3.34 |
| SB #8 | 3.10 | 3.10 | 0.50 | 7.93 | 12.3 | 3.0 | 100 | 50 | 392 | 10 | 4,848 | 5,000 | 5,580 | 12,444 | 4 | 1.00 | 4.19 |
| SB #9 | 3.00 | 3.00 | 0.50 | 7.93 | 11.9 | 3.0 | 100 | 50 | 392 | 10 | 4,691 | 5,000 | 5,400 | 12,444 | 4 | 1.00 | 4.05 |
| SB #10 | 6.19 | 6.19 | 0.50 | 7.93 | 24.5 | 3.0 | 140 | 70 | 388 | 10 | 9,680 | 9,800 | 11,142 | 25,764 | 4 | 1.75 | 3.85 |
| SB #11 | 2.31 | 2.31 | 0.50 | 7.93 | 9.2 | 3.0 | 90 | 42 | 387 | 10 | 3,612 | 3,780 | 4,158 | 9,108 | 4 | 1.00 | 4.40 |

NARRATIVE

PROJECT CONSISTS OF 275 UNITS ON BOTH SIDES OF REDFORD PLACE DRIVE WITH FOUR DETENTION PONDS, AND ASSOCIATED STREETS, AND INFRASTRUCTURE. THE PROJECT ALSO CONSISTS OF APPROXIMATELY 5,200 LF OF PUBLIC GREENWAY. THE PROJECT WILL BE COMPLETED IN 3 PHASES BUT THE EROSION CONTROL AND OVERALL GRADING WILL BE COMPLETED AT ONCE.

THERE IS A PORTION OF THE PROJECT THAT IS NOT PROPOSED TO BE DISTURBED WITH EQUIPMENT. THE DOG PARK AND THE DISC GOLF FACILITY WILL NEED TO BE HAND CLEARED FOR FENCE AND LAUNCH PAD INSTALLATION.




## EROSION CONTROL LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- DIRECTION OF OVERLAND FLOW
- DIRECTION OF OVERLAND FLOW
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- TEMP SILT FENCE WITH OUTLET
- TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION

### CONSTRUCTION SEQUENCE - PHASE 1

1. INSTALL TREE PROTECTION FENCING PER THE APPROVED PLAN. SCHEDULE A PRECONSTRUCTION CONFERENCE WITH WAKE COUNTY. OBTAIN A LAND DISTURBING PERMIT.
2. INSTALL GRAVEL CONSTRUCTION PAD, SILT FENCE, AND BRIDGEMATS AT STREAM CROSSINGS TO ACCESS AREAS ON EACH SIDE OF THE STREAMS. SEE SHEETS C7-4 - C7-7 FOR TEMPORARY CHANNEL SIZING AND CULVERT INSTALLATION SEQUENCING.
3. INSTALL TEMPORARY DIVERSIONS, SKIMMER BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
4. INSTALL THE OUTLET FOR SB4 AND THE BYPASS LINE FROM JB3001 - YI3002 WITH INLET PROTECTION.
5. CALL WAKE COUNTY FOR AN ONSITE INSPECTION BY THE COUNTY TO OBTAIN A CERTIFICATE OF COMPLIANCE.
6. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
7. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.

### STOCKPILE NOTES:

1. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED TO REDUCE EROSION. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
2. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE, THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
3. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE
4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

| TD# | DA | L | High El. | Low El. | Slope | C | I | Q (25) | Bottom | Side | V | Normal D | Normal D | Depth Reqd. | Shear Stress | Liner | Slope Drain | Check Dam | # Check |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (ac) | (ft) | (ft) | (ft) | (ft/ft) | | (in/hr) | (cfs) | W (ft) | Slopes (X:1) | (fps) | (in) | (ft) | (ft) | (lb/sf) | Reqd. | Size & Material | Sp. (ft) | Dams |
| 1A | 0.51 | 264 | 398 | 390 | 0.030 | 0.500 | 7.98 | 2.03 | 2.00 | 2.00 | 3.03 | 3.2 | 0.27 | 1.00 | 0.5 | Am. Excelsior - 1 net | 15" HDPE | 99 | 3 |
| 1B | 5.95 | 790 | 398 | 390 | 0.010 | 0.500 | 7.98 | 23.74 | 4.00 | 2.00 | 4.10 | 15.3 | 1.28 | 2.00 | 0.8 | NAG Straw- 2 nets | 24" HDPE | 296 | 3 |
| 2A | 6.97 | 315.00 | 394.00 | 376.00 | 0.057 | 0.50 | 7.98 | 35.79 | 2.00 | 6.00 | 7.69 | 7.70 | 0.64 | 1.50 | 2.29 | NGA 70% straw/30% coconut - 2 nets | 2-24" HDPE | 52.50 | 6.00 |
| 2B | 0.44 | 407.00 | 400.00 | 380.00 | 0.049 | 0.50 | 7.98 | 1.76 | 2.00 | 2.00 | 3.42 | 2.50 | 0.21 | 1.00 | 0.64 | Am. Excelsior - 1 net | 12" HDPE | 61.05 | 6.67 |
| 3A | 0.59 | 377.00 | 408.00 | 391.00 | 0.045 | 0.50 | 7.98 | 2.35 | 2.00 | 2.00 | 3.65 | 3.10 | 0.26 | 1.00 | 0.73 | Am. Excelsior - 1 net | 15" HDPE | 66.53 | 5.67 |
| 3B | 3.57 | 443.00 | 401.00 | 393.00 | 0.018 | 0.50 | 7.98 | 14.24 | 2.00 | 2.00 | 4.46 | 10.30 | 0.86 | 1.50 | 0.97 | NAG Straw- 2 nets | 24" HDPE | 166.13 | 2.67 |
| 4A | 0.58 | 329.00 | 398.00 | 385.00 | 0.040 | 0.50 | 7.98 | 2.31 | 2.00 | 2.00 | 3.49 | 3.10 | 0.26 | 1.00 | 0.64 | Am. Excelsior - 1 net | 15" HDPE | 75.92 | 4.33 |
| 4B | 0.27 | 187.00 | 399.00 | 396.00 | 0.016 | 0.50 | 7.98 | 1.08 | 2.00 | 2.00 | 2.00 | 2.70 | 0.23 | 1.00 | 0.23 | Grass | 12" HDPE | 187.00 | 1.00 |
| 5A | 0.19 | 135 | 396 | 383 | 0.096 | 0.500 | 7.98 | 0.76 | 4.00 | 2.00 | 3.21 | 1.3 | 0.11 | 1.00 | 0.7 | Am. Excelsior - 1 net | 12" HDPE | 31 | 4 |
| 5B | 2.99 | 340.00 | 383.00 | 376.00 | 0.021 | 0.50 | 7.98 | 11.93 | 2.00 | 2.00 | 4.94 | 10.90 | 0.91 | 1.50 | 1.17 | NAG Straw- 2 nets | 24" HDPE | 145.71 | 2.33 |
| 6A | 0.99 | 233.00 | 386.00 | 379.00 | 0.030 | 0.50 | 7.98 | 3.95 | 2.00 | 2.00 | 3.72 | 4.60 | 0.38 | 1.00 | 0.72 | NAG Straw- 2 nets | 18" HDPE | 99.86 | 2.33 |
| 6B | 1.29 | 334.00 | 399.00 | 380.00 | 0.057 | 0.50 | 7.98 | 5.15 | 2.00 | 2.00 | 5.04 | 4.50 | 0.38 | 1.00 | 1.33 | NAG Straw- 2 nets | 24" HDPE | 52.74 | 6.33 |
| 7A | 2.45 | 353.00 | 414.00 | 389.00 | 0.071 | 0.50 | 7.98 | 9.78 | 2.00 | 2.00 | 6.58 | 6.00 | 0.50 | 1.00 | 2.21 | NGA 70% straw/30% coconut - 2 nets | 24" HDPE | 42.36 | 8.33 |
| 7B | 6.05 | 456.00 | 402.00 | 392.00 | 0.022 | 0.50 | 7.98 | 9.20 | 2.00 | 2.00 | 1.24 | 0.90 | 0.08 | 1.50 | 0.10 | Grass | 12" HDPE | 136.80 | 3.33 |
| 8A | 0.89 | 329.00 | 398.00 | 393.00 | 0.016 | 0.50 | 7.98 | 3.55 | 2.00 | 2.00 | 2.90 | 5.20 | 0.43 | 1.00 | 0.42 | Am. Excelsior - 1 net | 18" HDPE | 192.00 | 1.67 |
| 8B | 1.24 | 530.00 | 398.00 | 396.00 | 0.004 | 0.50 | 7.98 | 4.95 | 2.00 | 2.00 | 1.93 | 8.90 | 0.74 | 1.50 | 0.17 | Grass | 12" HDPE | 795.00 | 0.67 |
| 9 | 2.24 | 750 | 399 | 320 | 0.105 | 0.500 | 7.98 | 8.94 | 4.00 | 2.00 | 7.37 | 5.1 | 0.43 | 1.00 | 2.8 | NGA 70% straw/30% coconut - 2 nets | 24" HDPE | 28 | 26 |
| 10A | 2.59 | 138 | 403 | 394 | 0.064 | 0.500 | 7.98 | 10.33 | 2.00 | 2.00 | 6.44 | 6.3 | 0.53 | 1.00 | 2.1 | NGA 70% straw/30% coconut - 2 nets | 24" HDPE | 47 | 3 |
| 10B | 1.88 | 196 | 405 | 396 | 0.049 | 0.50 | 7.98 | 7.50 | 2.00 | 2.00 | 5.34 | 5.70 | 0.48 | 1.00 | 1.5 | NAG Straw- 2 nets | 24" HDPE | 61 | 3 |
| 11A | 1.02 | 158 | 378 | 367 | 0.066 | 0.50 | 7.98 | 4.09 | 2.00 | 2.00 | 4.95 | 3.80 | 0.32 | 1.00 | 1.3 | NAG Straw- 2 nets | 24" HDPE | 45 | 3 |
| 11B | 1.35 | 743.00 | 375.00 | 365.00 | 0.013 | 0.50 | 7.98 | 5.37 | 2.00 | 2.00 | 2.33 | 4.20 | 0.35 | 1.00 | 0.3 | Am. Excelsior - 1 net | 24" HDPE | 223 | 3 |

TOTAL DISTURBED AREA
±62.3 ACRES

0 75 150 300
SCALE: 1" = 150

811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 4 | | |
| 3 | | |
| 2 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 1 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF


BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397



LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

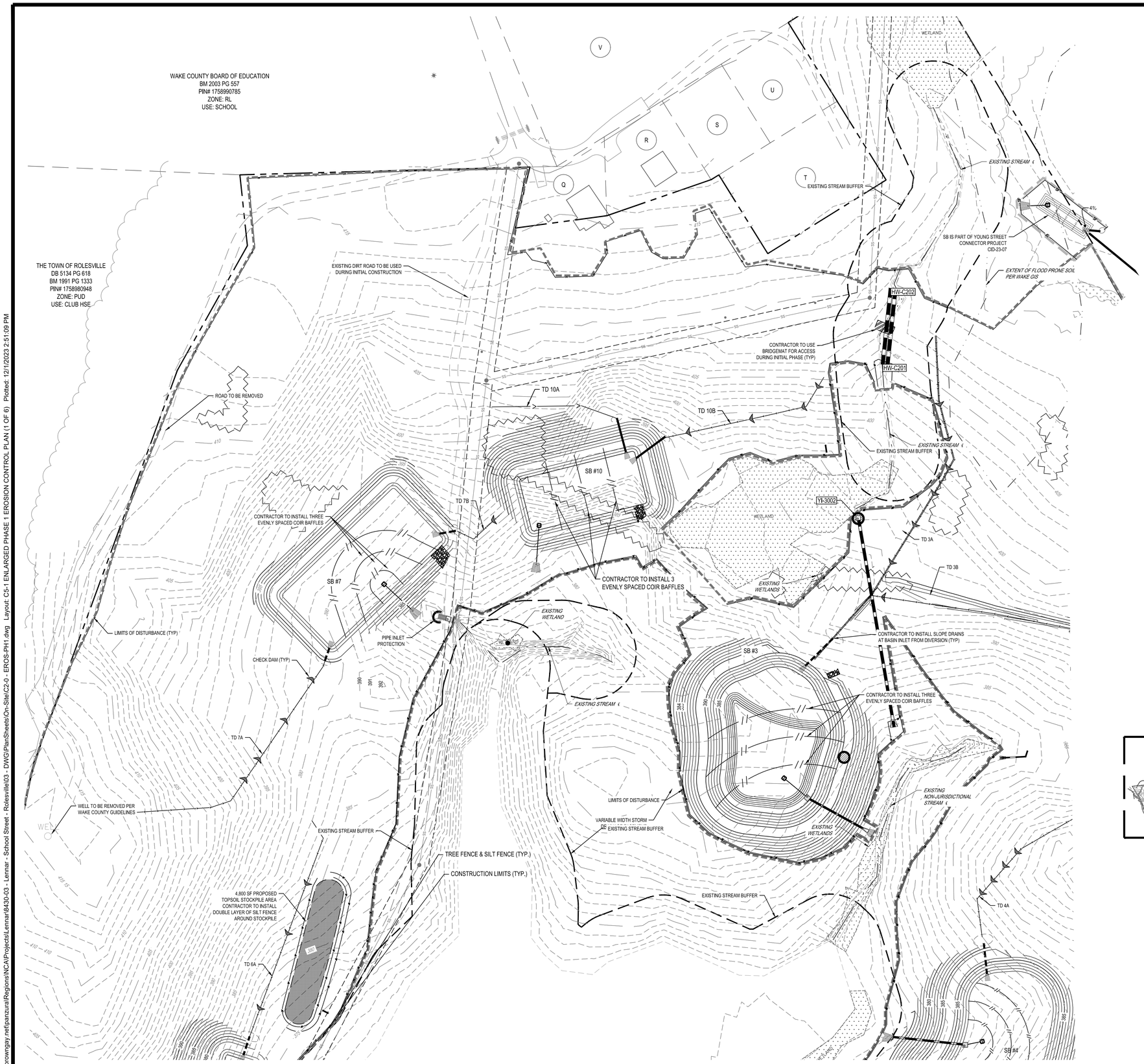
PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# OVERALL PHASE 1 EROSION CONTROL PLAN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
PRELIMINARY
DEBRA M. FERM
12-01-23
NOT FOR CONSTRUCTION

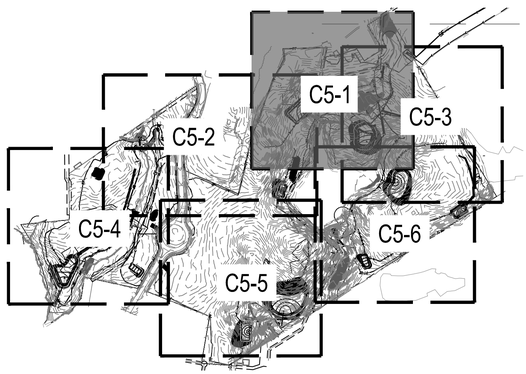
FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-0

\\browngay.net\panzura\Regions\NC\A\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2-0 - EROS-PH1.dwg Layout: C5-0 OVERALL PHASE 1 EROSION CONTROL PLAN Plotted: 12/1/2023 2:50:30 PM




## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- H:V / X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX / 100.XX — DIRECTION OF OVERLAND FLOW
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- SF — TEMP SILT FENCE WITH OUTLET
- PF — TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION




0 25' 50' 100'
SCALE: 1" = 50'

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397


LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 1 EROSION CONTROL PLAN (1 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — DEBRA M. FERRI — 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-1


\\brownjay.net\panzura\Regions\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2\0 - EROS-PH1.dwg Layout: C5-2 ENLARGED PHASE 1 EROSION CONTROL PLAN (2 OF 6) Plotted: 12/12/2023 2:51:33 PM

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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NC LICENSE #C-4397


LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
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PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

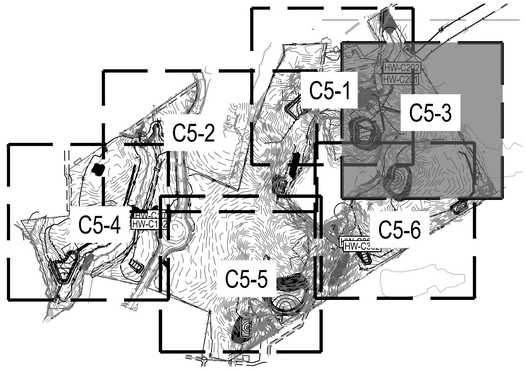
# ENLARGED PHASE 1 EROSION CONTROL PLAN (2 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERRIS
PRELIMINARY
12-01-23
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-2


## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- H.V. X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX 100.XX — DIRECTION OF OVERLAND FLOW
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- SF — TEMP SILT FENCE WITH OUTLET
- PF — TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION




0 25' 50' 100'
SCALE: 1" = 50'

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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NC LICENSE #C-4397


LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

ENLARGED SITE PLAN (3 OF 7)

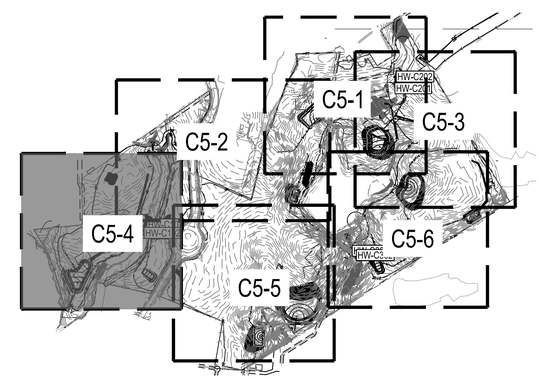
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. SERIN 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-3


## EROSION CONTROL LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR (600)
- EXISTING MINOR CONTOUR (601)
- PROPOSED MAJOR CONTOUR (600)
- PROPOSED MINOR CONTOUR (601)
- DIRECTION OF OVERLAND FLOW (H.V. / X.X%)
- DIRECTION OF OVERLAND FLOW (100.XX / 100.XX)
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- TEMP SILT FENCE WITH OUTLET
- TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION

N




0 25' 50' 100'
SCALE: 1" = 50'

811
Know what's below.
Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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NC LICENSE #C-4397


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MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

ENLARGED PHASE 1 EROSION CONTROL PLAN (4 OF 6)

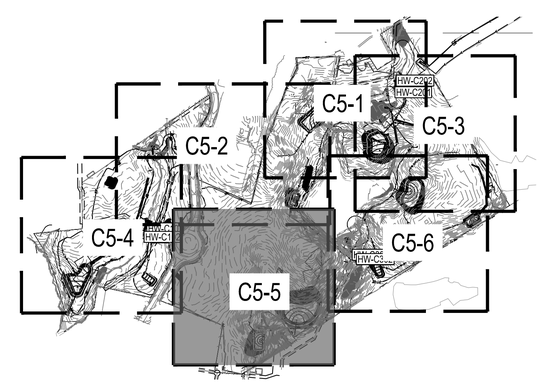
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
DEBRA M. FERN
12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-4

\\brownguy.net\panzura\Regions\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2-0 - EROS-PH1.dwg Layout: C5-4 ENLARGED PHASE 1 EROSION CONTROL PLAN (4 OF 6) Plotted: 12/1/2023 2:52:44 PM


## EROSION CONTROL LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- DIRECTION OF OVERLAND FLOW
- DIRECTION OF OVERLAND FLOW
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- TEMP SILT FENCE WITH OUTLET
- TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION




0 25' 50' 100'
SCALE: 1" = 50'

Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGENC.COM
NC LICENSE #C-4397


LENNAR CORPORTAION
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MORRISVILLE / NORTH CAROLINA / 27560

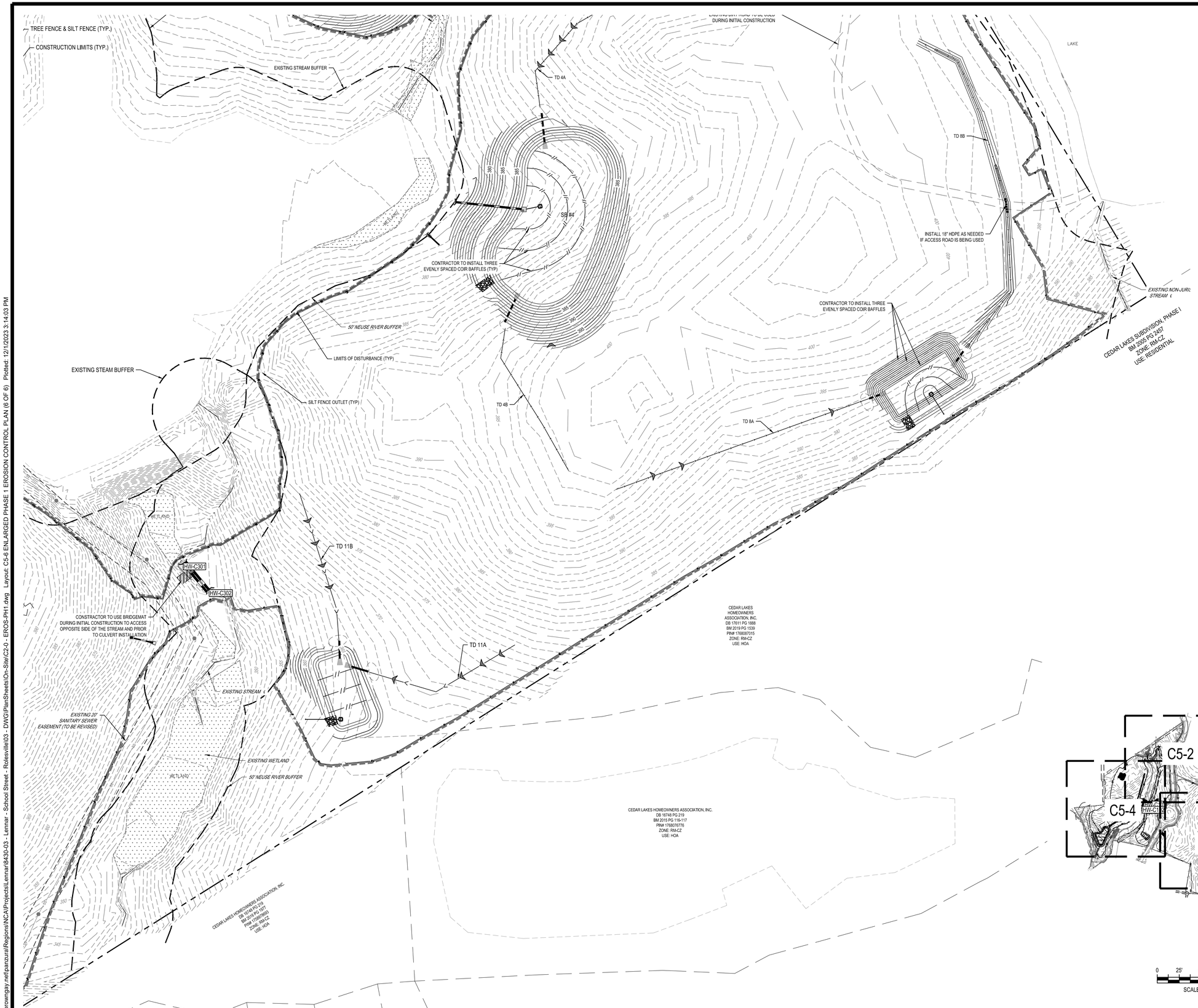
PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 1 EROSION CONTROL PLAN (5 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
PRELIMINARY
DEBRA M. FOSH
12-01-23
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-5

\\brownjay.net\panzura\Regions\NC-A\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2-0 - EROS-PH1.dwg Layout: C5-5 ENLARGED PHASE 1 EROSION CONTROL PLAN (5 OF 6) Plotted: 12/1/2023 3:12:24 PM




## EROSION CONTROL LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR (600)
- EXISTING MINOR CONTOUR (601)
- PROPOSED MAJOR CONTOUR (600)
- PROPOSED MINOR CONTOUR (601)
- DIRECTION OF OVERLAND FLOW (H:V, X.X%)
- DIRECTION OF OVERLAND FLOW (100.XX)
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S150BN)
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION DITCH OR BERM
- TEMP SILT FENCE WITH OUTLET
- TEMP TREE PROTECTION FENCE
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- PIPE INLET PROTECTION
- INLET PROTECTION
- EXCAVATED INLET PROTECTION

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| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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PARKER RIDGE
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ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 1 EROSION CONTROL PLAN (6 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — DEBRA M. FERRY — 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-6

\\browngay.net\panzura\Regions\NC\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\Plan\Sheets\On-Site\C2-0 - EROS-PH1.dwg Layout: C5-6 ENLARGED PHASE 1 EROSION CONTROL PLAN (6 OF 6) Plotted: 12/1/2023 3:14:03 PM


## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# ±X.X AC — DRAINAGE AREA LABEL
- H.V. X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
- TEMPORARY JUTE NETTING BAFFLES (700 G/M2 CO/R FABRIC OR HEAVIER)
- TEMPORARY DIVERSION DITCH OR BERM
- SF — TEMPORARY SILT FENCE
- PF — TEMP TREE PROTECTION FENCE
- SF-PF — TEMP SILT / TREE PROTECTION FENCE
- CF — TEMP CONSTRUCTION FENCE
- 4.00' — SILT FENCE OUTLET
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FB — FILTER BAG

1. INSTALL STORM DRAINAGE SYSTEM AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS, OR OTHER APPROVED MEASURES AS SHWON ON THE PLAN. INSTALL ENERGY DISSIPATERS UPON COMPLETION
2. CLEAR AND GRUB REMAINDER OF SITE TO BE DISTURBED
3. CONTINUE GRADING ACTIVITIES AND REROUTE DIVERSIONS TO MAINTAIN POSITIVE FLOW USING EARTHEN BERMS AS NECESSARY TO BRING SITE TO FINAL GRADE
4. MAINTAIN DEVICES PER NOTES ON C0-1. GRAVEL CONSTRUCTION ENTRANCES AND OTHER MEASURES SHALL BE PROPERLY MAINTAINED TO PREVENT SEDIMENT FROM ENTERING THE STREET.
5. SKIMMER BASINS SHALL REMAIN UNTIL THEY ARE APPROVED TO BE REMOVED. SILT BAGS SHALL BE USED TO DEWATER THE BASIN DURING THE CONVERSION.
6. ONCE THE STREETS HAVE BEEN PAVED, CURB INLET PROTECTION DEVICES SHALL BE CONVERTED TO STANDARD GRAVEL BAG CURB INLET PROTECTION.
7. ONCE THE SITE IS STABILIZED, CONTACT THE ENVIRONMENTAL CONSULTANT FOR INSPECTION AND APPROVAL TO REMOVE DEVICES.
8. CLEAN OUT SKIMMER BASINS WITH THE USE OF SILT BAGS, CUT AND GRADE SCM TO FINAL ELEVATIONS AND SEED IMMEDIATELY.
9. CONSTRUCTION ENTRANCES SHALL BE MAINTAINED WEEKLY AND AFTER RAIN EVENTS SO THAT STREETS REMAIN CLEAN. AFTER PAVING HAS OCCURED, THE CONTRACTOR SHALL KEEP STREETS FREE OF SEDIMENT.
10. SCM CERTIFICATIONS AND AS-BUILT PLANS MUST BE PROVIDED TO THE STORMWATER CONTROL INSPECTOR FOR REVIEW 7 DAYS PRIOR TO FINAL INSPECTION. CERTIFICATIONS AND AS-BUILT PLANS MUST BE ACCEPTED PRIOR TO APPROVAL OF FINAL INSPECTION.

**SECTION E: GROUND STABILIZATION**

| Required Ground Stabilization Timeframes | | |
|---|---|---|
| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1<br>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed |
| (e) Areas with slopes flatter than 4:1 | 14 | -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed unless there is zero slope |

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**Permanent Diversion Summary**

| PD | DA | C | I | Q (25) | Bottom W (ft) | Side Slopes | V (fps) | Normal D | Normal D | Depth Req | Shear Stress | Liner |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (ac) | | (in/hr) | ($ft^3$/sec) | | (__H:1V) | | (in) | (ft) | (ft) | ($lb/ft^2$) | |
| 1 | 0.226 | 0.55 | 7.98 | 0.99 | 2 | 3 | 2.21 | 2.1 | 0.18 | 1 | 0.4 | NAG S75BN |
| 2 | 0.516 | 0.65 | 7.98 | 2.68 | 2 | 3 | 2.1 | 4.5 | 0.38 | 1 | 0.35 | NAG S75BN |
| 3 | 0.551 | 0.65 | 7.98 | 2.86 | 2 | 3 | 2.51 | 4.4 | 0.37 | 1 | 0.49 | NAG S75BN |
| 4 | 0.443 | 0.65 | 7.98 | 2.30 | 2 | 3 | 3.04 | 3.2 | 0.27 | 1 | 0.85 | NAG S75BN |
| 5 | 0.582 | 0.65 | 7.98 | 3.02 | 2 | 3 | 2.52 | 4.6 | 0.38 | 1 | 0.47 | NAG S75BN |

TOTAL DISTURBED AREA
±62.3 ACRES

0 75' 150' 300'
SCALE: 1" = 150'

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| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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ROLESVILLE / NORTH CAROLINA / 27571

# OVERALL PHASE 2 EROSION CONTROL PLAN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
PRELIMINARY
ENGINEER
DEBRA M. FERRI
12-01-23
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-7

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**SECTION E: GROUND STABILIZATION**

**Required Ground Stabilization Timeframes**

| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|---|---|---|
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
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HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE AT LEFT

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# ±X.X AC — DRAINAGE AREA LABEL
- H:V X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
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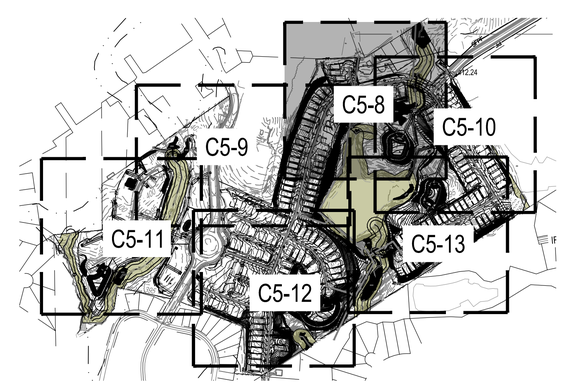
- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FB — FILTER BAG




0 25' 50' 100'
SCALE: 1" = 50'

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N

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| 0 | 06/01/2023 | INITIAL SUBMITTAL |

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DRAWN BY: DF/JWM
REVIEWED BY: DF

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ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 2 EROSION CONTROL PLAN (1 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-8

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**SECTION E: GROUND STABILIZATION**

| Required Ground Stabilization Timeframes | | |
|---|---|---|
| **Site Area Description** | **Stabilize within this many calendar days after ceasing land disturbance** | **Timeframe variations** |
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High-Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1<br>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed |
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HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE ABOVE

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# / ±X.X AC — DRAINAGE AREA LABEL
- H:V / X:X% — DIRECTION OF OVERLAND FLOW
- 100.XX / 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
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- 4.00' — SILT FENCE OUTLET
- CHECK DAM
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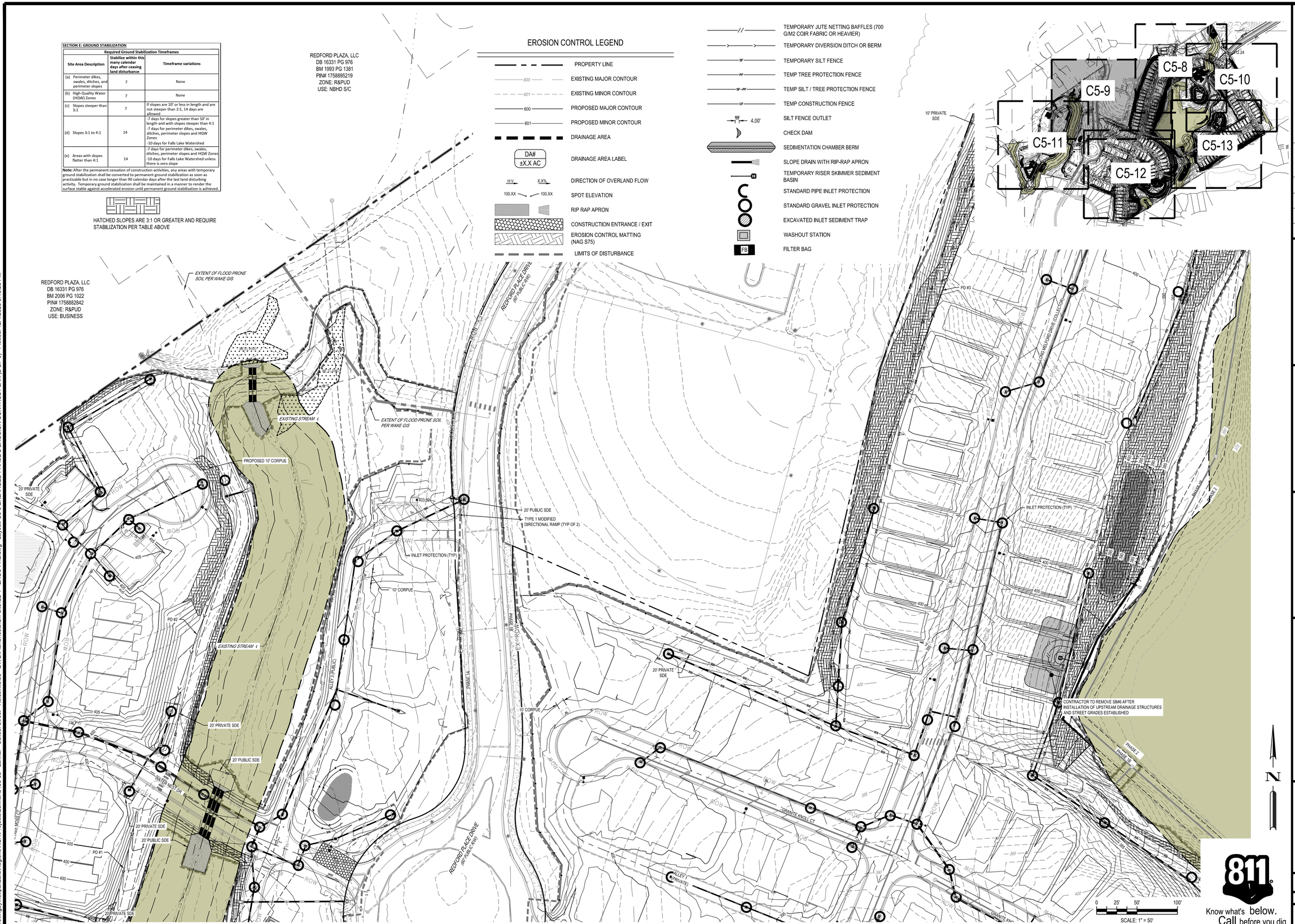
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FB — FILTER BAG

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| 4 | 06/01/2023 | INITIAL SUBMITTAL |

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DRAWN BY: DF/JWM
REVIEWED BY: DF


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# ENLARGED PHASE 2 EROSION CONTROL PLAN (2 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-9

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**SECTION E: GROUND STABILIZATION**

**Required Ground Stabilization Timeframes**

| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|---|---|---|
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
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HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE AT LEFT

N

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# ±X.X AC — DRAINAGE AREA LABEL
- H:V X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
- TEMPORARY JUTE NETTING BAFFLES (700 G/M2 COIR FABRIC OR HEAVIER)
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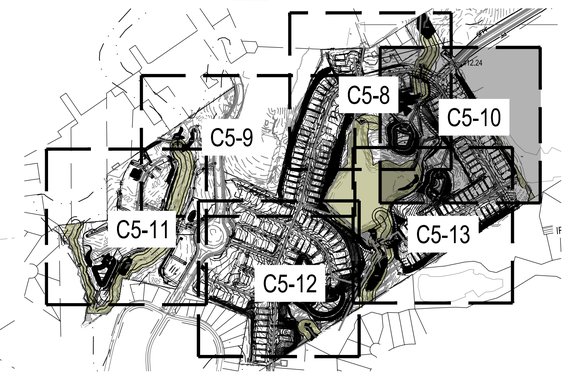


0 25' 50' 100'
SCALE: 1" = 50'

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| 4 | 06/01/2023 | INITIAL SUBMITTAL |

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DRAWN BY: DF/JWM
REVIEWED BY: DF

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# ENLARGED PHASE 2 EROSION CONTROL PLAN (3 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23

PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-10


| SECTION E: GROUND STABILIZATION | | |
|---|---|---|
| Required Ground Stabilization Timeframes | | |
| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
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| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
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N

## EROSION CONTROL LEGEND

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- 601 — PROPOSED MINOR CONTOUR
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- DA# ±X.X AC — DRAINAGE AREA LABEL
- H:V X.X% — DIRECTION OF OVERLAND FLOW
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- WASHOUT STATION
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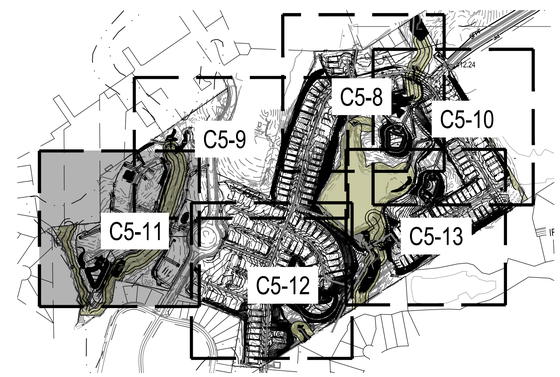


0 25' 50' 100'
SCALE: 1" = 50'

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DRAWN BY: DF/JWM
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82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 2 EROSION CONTROL PLAN (4 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERRI 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-11


**SECTION E: GROUND STABILIZATION**

**Required Ground Stabilization Timeframes**

| | Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|---|---|---|---|
| (a) | Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) | High Quality Water (HQW) Zones | 7 | None |
| (c) | Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) | Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1<br>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed |
| (e) | Areas with slopes flatter than 4:1 | 14 | -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed unless there is zero slope |

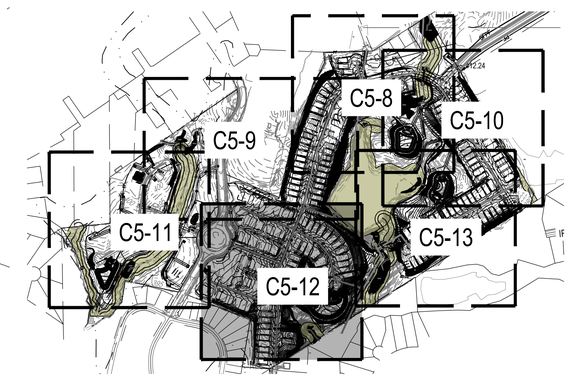
**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE AT LEFT

N

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# ±X.X AC — DRAINAGE AREA LABEL
- H:V, X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
- TEMPORARY JUTE NETTING BAFFLES (700 G/M2 COIR FABRIC OR HEAVIER)
- TEMPORARY DIVERSION DITCH OR BERM
- SF — TEMPORARY SILT FENCE
- PF — TEMP TREE PROTECTION FENCE
- SF-PF — TEMP SILT / TREE PROTECTION FENCE
- CF — TEMP CONSTRUCTION FENCE
- SF 4.00' — SILT FENCE OUTLET
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FB — FILTER BAG




0 25' 50' 100'
SCALE: 1" = 50'

811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 4 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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NC LICENSE #C-4397


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1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 2 EROSION CONTROL PLAN (5 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERN 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-12

\\brownjay.net\panzura\Regions\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2-1 - EROS-PH2.dwg Layout: C5-12 ENLARGED PHASE 2 EROSION CONTROL PLAN (5 OF 6) Plotted: 12/1/2023 3:17:01 PM


**SECTION E: GROUND STABILIZATION**

| Required Ground Stabilization Timeframes | | | |
|---|---|---|---|
| | Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
| (a) | Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) | High-Quality Water (HQW) Zones | 7 | None |
| (c) | Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) | Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1<br>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed |
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HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE AT LEFT

N

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
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- 600 — PROPOSED MAJOR CONTOUR
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- DA# / ±X.X AC — DRAINAGE AREA LABEL
- H:V / X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX / 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
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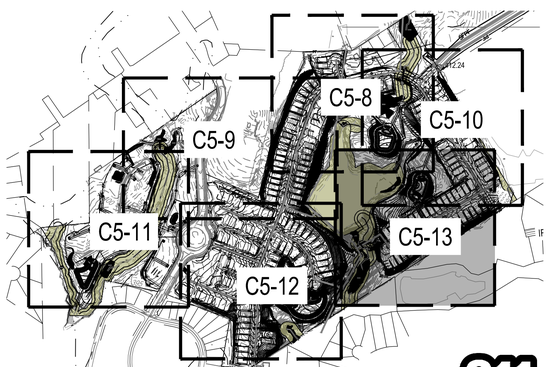


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PARKER RIDGE
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# ENLARGED PHASE 2 EROSION CONTROL PLAN (6 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
DEBRA M. FERON
12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-13

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## EROSION CONTROL LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DRAINAGE AREA LABEL (DA# ±X.X AC)
- DIRECTION OF OVERLAND FLOW
- SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
- LIMITS OF DISTURBANCE
- TEMPORARY JUTE NETTING BAFFLES (700 G/M2 CO/R FABRIC OR HEAVIER)
- TEMPORARY DIVERSION DITCH OR BERM
- TEMPORARY SILT FENCE
- TEMP TREE PROTECTION FENCE
- TEMP SILT / TREE PROTECTION FENCE
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- SLOPE DRAIN WITH RIP-RAP APRON
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- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FILTER BAG

1. INSTALL STORM DRAINAGE SYSTEM AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS, OR OTHER APPROVED MEASURES AS SHWON ON THE PLAN. INSTALL ENERGY DISSIPATERS UPON COMPLETION
2. CLEAR AND GRUB REMAINDER OF SITE TO BE DISTURBED
3. CONTINUE GRADING ACTIVITIES AND REROUTE DIVERSIONS TO MAINTAIN POSITIVE FLOW USING EARTHEN BERMS AS NECESSARY TO BRING SITE TO FINAL GRADE
4. MAINTAIN DEVICES PER NOTES ON C0-1. GRAVEL CONSTRUCTION ENTRANCES AND OTHER MEASURES SHALL BE PROPERLY MAINTAINED TO PREVENT SEDIMENT FROM ENTERING THE STREET.
5. SKIMMER BASINS SHALL REMAIN UNTIL THEY ARE APPROVED TO BE REMOVED. SILT BAGS SHALL BE USED TO DEWATER THE BASIN DURING THE CONVERSION.
6. ONCE THE STREETS HAVE BEEN PAVED, CURB INLET PROTECTION DEVICES SHALL BE CONVERTED TO STANDARD GRAVEL BAG CURB INLET PROTECTION.
7. ONCE THE SITE IS STABILIZED, CONTACT THE ENVIRONMENTAL CONSULTANT FOR INSPECTION AND APPROVAL TO REMOVE DEVICES.
8. CLEAN OUT SKIMMER BASINS WITH THE USE OF SILT BAGS, CUT AND GRADE SCM TO FINAL ELEVATIONS AND SEED IMMEDIATELY.
9. CONSTRUCTION ENTRANCES SHALL BE MAINTAINED WEEKLY AND AFTER RAIN EVENTS SO THAT STREETS REMAIN CLEAN. AFTER PAVING HAS OCCURED, THE CONTRACTOR SHALL KEEP STREETS FREE OF SEDIMENT.
10. SCM CERTIFICATIONS AND AS-BUILT PLANS MUST BE PROVIDED TO THE STORMWATER CONTROL INSPECTOR FOR REVIEW 7 DAYS PRIOR TO FINAL INSPECTION. CERTIFICATIONS AND AS-BUILT PLANS MUST BE ACCEPTED PRIOR TO APPROVAL OF FINAL INSPECTION.

**SECTION E: GROUND STABILIZATION**

**Required Ground Stabilization Timeframes**

| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|---|---|---|
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
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**Permanent Diversion Summary**

| PD | DA | C | I | Q (25) | Bottom W (ft) | Side Slopes | V (fps) | Normal D | Normal D | Depth Req | Shear Stress | Liner |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (ac) | | (in/hr) | ($ft^3$/sec) | | (__H:1V) | | (in) | (ft) | (ft) | ($lb/ft^2$) | |
| 1 | 0.226 | 0.55 | 7.98 | 0.99 | 2 | 3 | 2.21 | 2.1 | 0.18 | 1 | 0.4 | NAG S75BN |
| 2 | 0.516 | 0.65 | 7.98 | 2.68 | 2 | 3 | 2.1 | 4.5 | 0.38 | 1 | 0.35 | NAG S75BN |
| 3 | 0.551 | 0.65 | 7.98 | 2.86 | 2 | 3 | 2.51 | 4.4 | 0.37 | 1 | 0.49 | NAG S75BN |
| 4 | 0.443 | 0.65 | 7.98 | 2.30 | 2 | 3 | 3.04 | 3.2 | 0.27 | 1 | 0.85 | NAG S75BN |
| 5 | 0.582 | 0.65 | 7.98 | 3.02 | 2 | 3 | 2.52 | 4.6 | 0.38 | 1 | 0.47 | NAG S75BN |

TOTAL DISTURBED AREA
±62.3 ACRES

0 75' 150' 300'
SCALE: 1" = 150'

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82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

# OVERALL PHASE 3 EROSION CONTROL PLAN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — DEBRA M. FERRI — 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-14

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| SECTION E: GROUND STABILIZATION | | |
|---|---|---|
| Required Ground Stabilization Timeframes | | |
| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
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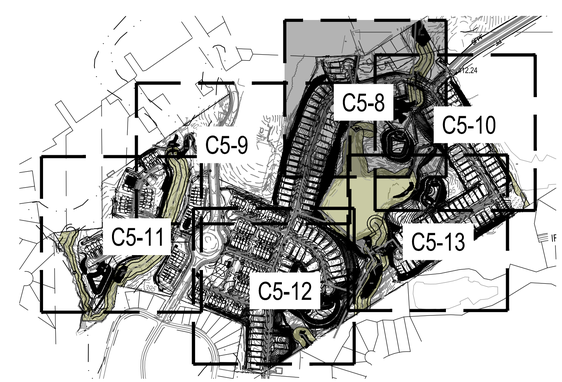


0 25' 50' 100'
SCALE: 1" = 50'

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# ENLARGED PHASE 3 EROSION CONTROL PLAN (1 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-15

**SECTION E: GROUND STABILIZATION**

| Required Ground Stabilization Timeframes | | |
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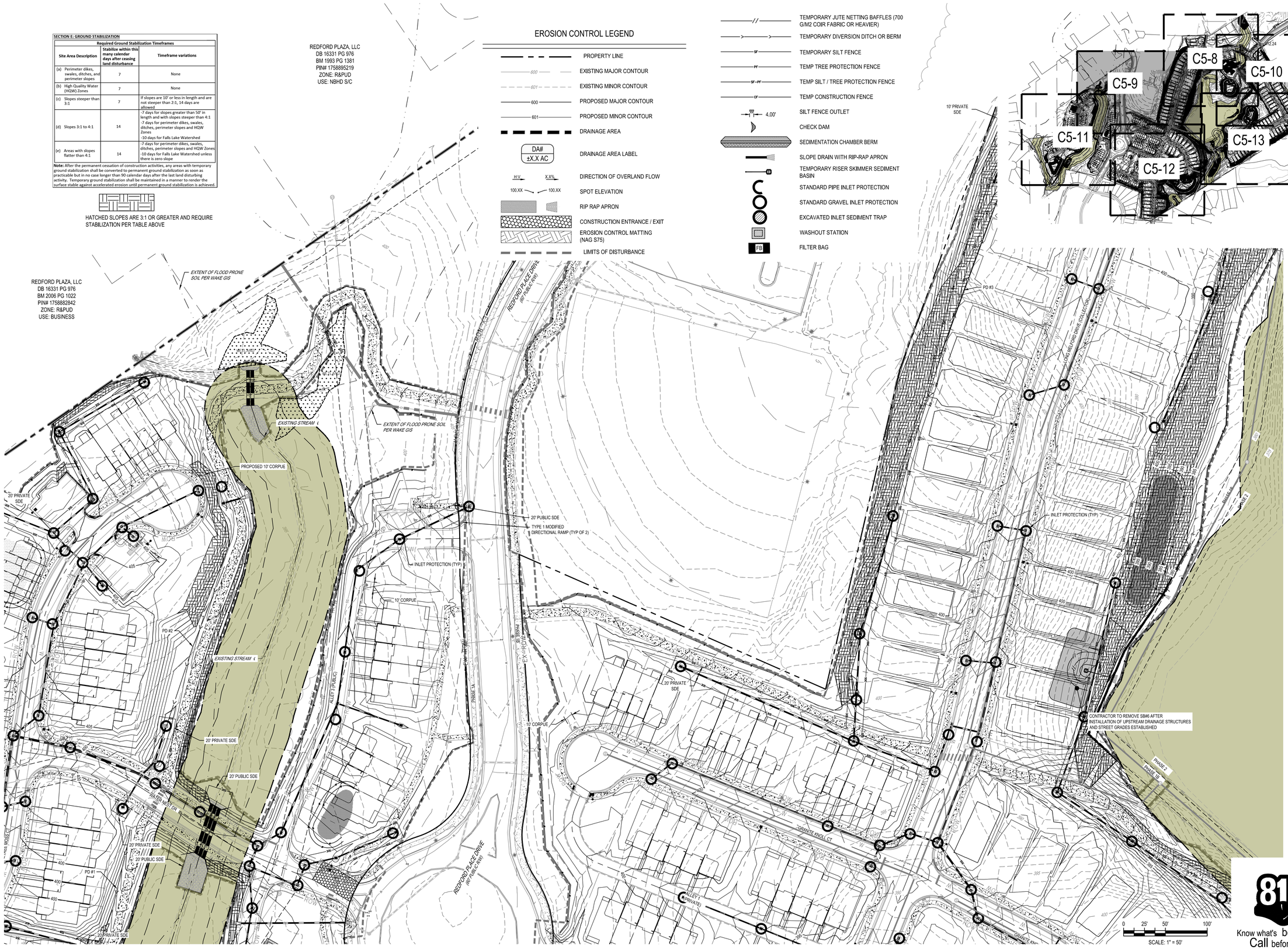


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DRAWN BY: DF/JWM
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# ENLARGED PHASE 3 EROSION CONTROL PLAN (2 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-16


**SECTION E: GROUND STABILIZATION**

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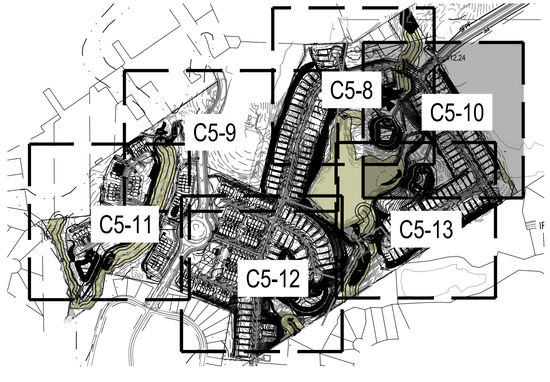
- TEMPORARY JUTE NETTING BAFFLES (700 G/M2 COIR FABRIC OR HEAVIER)
- TEMPORARY DIVERSION DITCH OR BERM
- SF — TEMPORARY SILT FENCE
- PF — TEMP TREE PROTECTION FENCE
- SF-PF — TEMP SILT / TREE PROTECTION FENCE
- CF — TEMP CONSTRUCTION FENCE
- 4.00' — SILT FENCE OUTLET
- CHECK DAM
- SEDIMENTATION CHAMBER BERM
- SLOPE DRAIN WITH RIP-RAP APRON
- TEMPORARY RISER SKIMMER SEDIMENT BASIN
- STANDARD PIPE INLET PROTECTION
- STANDARD GRAVEL INLET PROTECTION
- EXCAVATED INLET SEDIMENT TRAP
- WASHOUT STATION
- FB — FILTER BAG




0 25' 50' 100'
SCALE: 1" = 50'

811 Know what's below. Call before you dig.

| REV | DATE | DESCRIPTION |
|---|---|---|
| 1 | 11/21/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 2 | 10/02/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 3 | 08/01/2023 | PER TOWN OF ROLESVILLE COMMENT |
| 0 | 06/01/2023 | INITIAL SUBMITTAL |

DESIGNED BY: DF/CD
DRAWN BY: DF/JWM
REVIEWED BY: DF

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82 SCHOOL STREET
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# ENLARGED PHASE 3 EROSION CONTROL PLAN (3 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERM 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-17


**SECTION E: GROUND STABILIZATION**

**Required Ground Stabilization Timeframes**

| | Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|---|---|---|---|
| (a) | Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) | High Quality Water (HQW) Zones | 7 | None |
| (c) | Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) | Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1<br>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed |
| (e) | Areas with slopes flatter than 4:1 | 14 | -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones<br>-10 days for Falls Lake Watershed unless there is zero slope |

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

HATCHED SLOPES ARE 3:1 OR GREATER AND REQUIRE STABILIZATION PER TABLE AT LEFT

N

## EROSION CONTROL LEGEND

- PROPERTY LINE
- 600 — EXISTING MAJOR CONTOUR
- 601 — EXISTING MINOR CONTOUR
- 600 — PROPOSED MAJOR CONTOUR
- 601 — PROPOSED MINOR CONTOUR
- DRAINAGE AREA
- DA# ±X.X AC — DRAINAGE AREA LABEL
- H.V. / X.X% — DIRECTION OF OVERLAND FLOW
- 100.XX / 100.XX — SPOT ELEVATION
- RIP RAP APRON
- CONSTRUCTION ENTRANCE / EXIT
- EROSION CONTROL MATTING (NAG S75)
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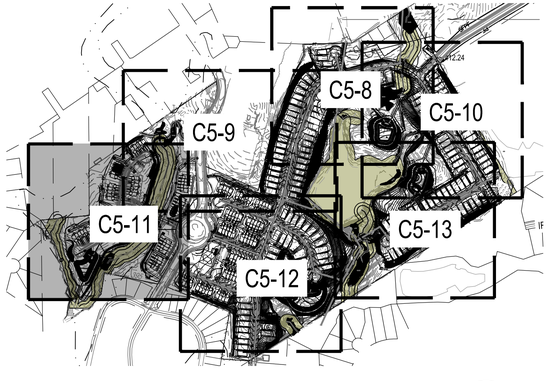


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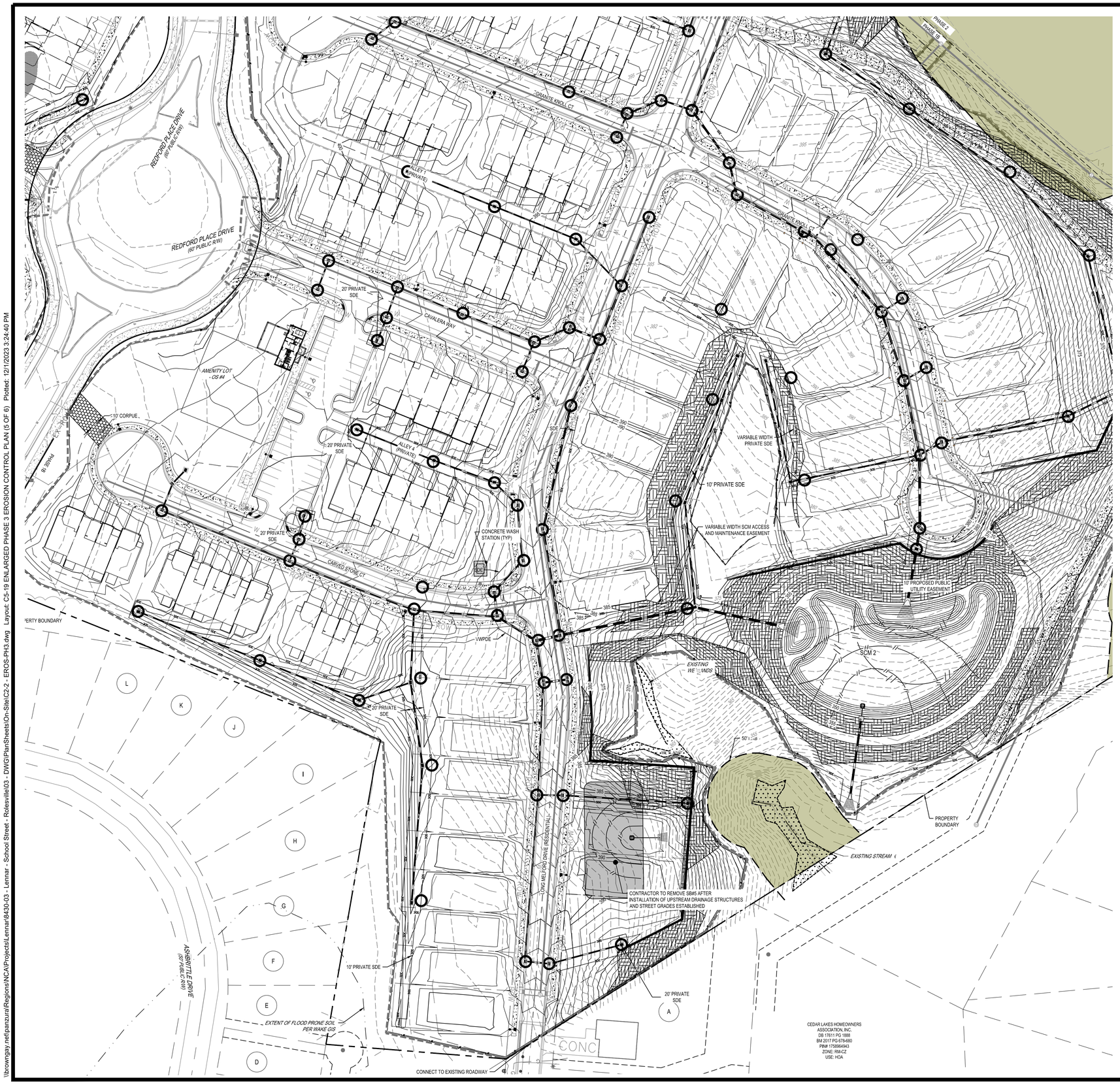
# ENLARGED PHASE 3 EROSION CONTROL PLAN (4 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — DEBRA M. FERRIS — 12-01-23
PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023
C5-18

\\brownjay.net\panzura\Regions\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\C2.2 - EROS-PH3.dwg Layout: C5-18 ENLARGED PHASE 3 EROSION CONTROL PLAN (4 OF 6) Plotted: 12/1/2023 3:24:09 PM

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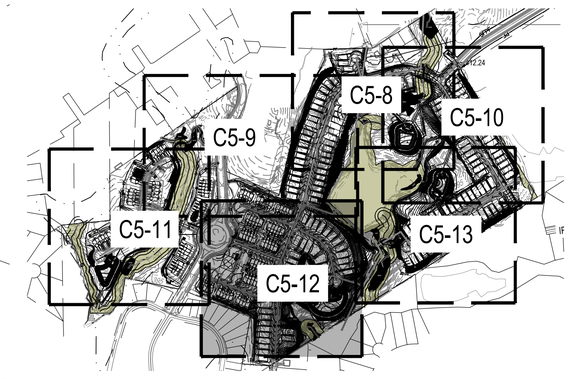


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# ENLARGED PHASE 3 EROSION CONTROL PLAN (5 OF 6)

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DEBRA M. FERN 12-01-23

PRELIMINARY
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03
DATE: 11/21/2023

C5-19