



PROJECT:

**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

CLIENT:
VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY
DATE: 10/30/15
REVISIONS:
2816 COMMENTS

JOB NO.: 15-077

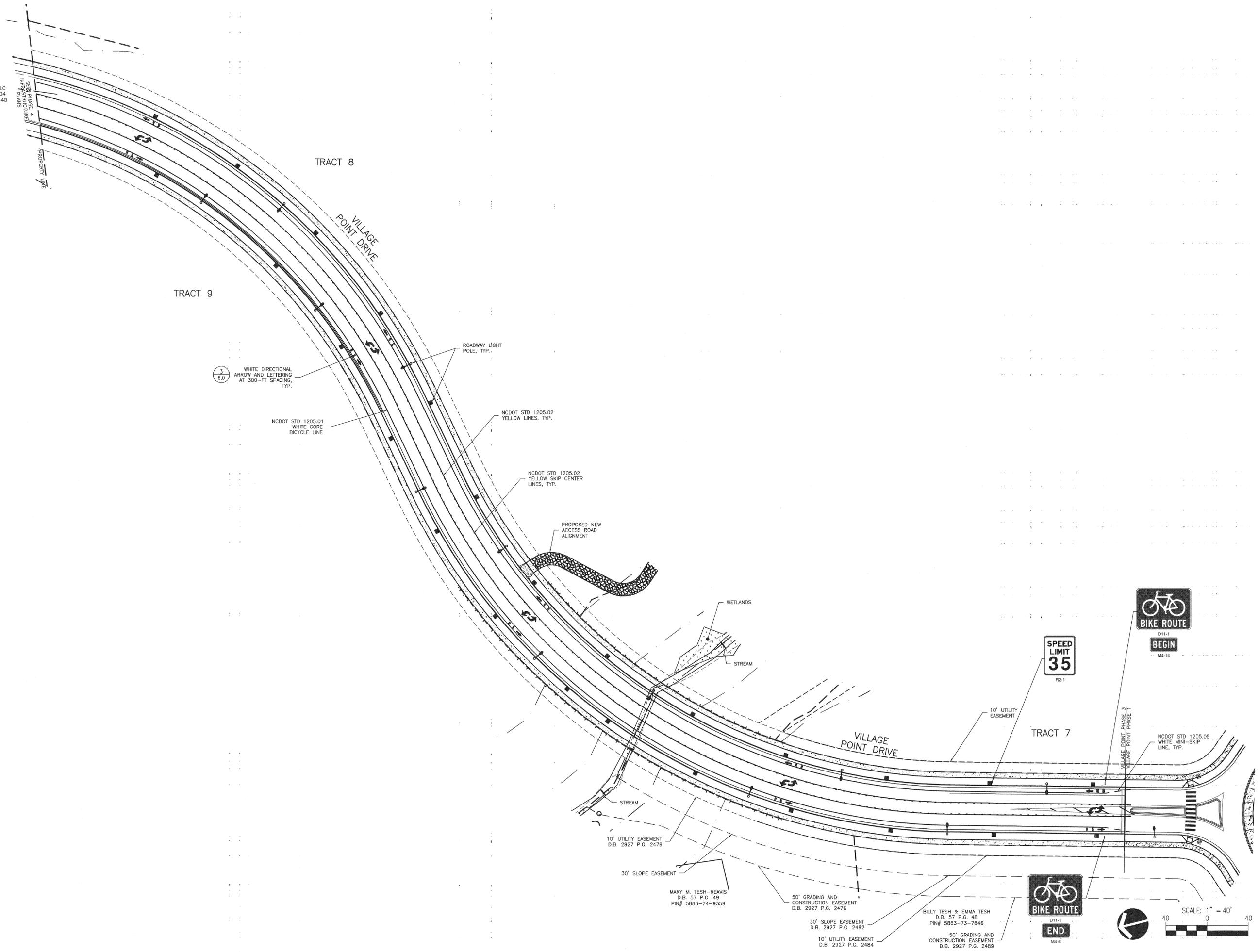
SHEET TITLE:
**STRIPING
AND
SIGNAGE
PLAN**

SCALE: 1" = 40'
SHEET NO.:

C-1.0
© STIMMEL ASSOCIATES, P.A.

VILLAGE POINTE LLC
D.B. 2534 P.G. 204
PIN# 5883-94-4440

FX11-049\Drawings\Redesign for NCDOT\11-049 C-1.0 STRIPING & SIGNAGE 02/09/16 11:41am



3
6.0
WHITE DIRECTIONAL
ARROW AND LETTERING
AT 300-FT SPACING,
TYP.

NCDOT STD 1205.01
WHITE GORE
BICYCLE LINE

ROADWAY LIGHT
POLE, TYP.

NCDOT STD 1205.02
YELLOW LINES, TYP.

NCDOT STD 1205.02
YELLOW SKIP CENTER
LINES, TYP.

PROPOSED NEW
ACCESS ROAD
ALIGNMENT

WETLANDS

STREAM

10' UTILITY EASEMENT
D.B. 2927 P.G. 2479

30' SLOPE EASEMENT

MARY M. TESH-REAVIS
D.B. 57 P.G. 49
PIN# 5883-74-9359

50' GRADING AND
CONSTRUCTION EASEMENT
D.B. 2927 P.G. 2476

30' SLOPE EASEMENT
D.B. 2927 P.G. 2492

10' UTILITY EASEMENT
D.B. 2927 P.G. 2484

BILLY TESH & EMMA TESH
D.B. 57 P.G. 48
PIN# 5883-73-7846

50' GRADING AND
CONSTRUCTION EASEMENT
D.B. 2927 P.G. 2489

SPEED
LIMIT
35
R2-1



VILLAGE POINT PHASE 3
VILLAGE POINT PHASE 1

NCDOT STD 1205.05
WHITE MINI-SKIP
LINE, TYP.



SCALE: 1" = 40'
40 0 40

EROSION AND SEDIMENTATION CONTROL NOTES:

SECTION(S) DISTURBED AREA:
DISTURBED AREA = 7.06 ACRES

1. A SEDIMENTATION AND EROSION CONTROL PERMIT SHALL BE OBTAINED FROM THE CITY OF WINSTON-SALEM EROSION CONTROL INSPECTOR PRIOR TO ANY LAND DISTURBING ACTIVITY.
2. AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE CONTRACTOR, THE OWNER AND THE EROSION CONTROL INSPECTOR IS REQUIRED PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE CONSTRUCTION SEQUENCE.
4. THE EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHOWN ON THE DRAWINGS ARE INTENDED AS A GUIDE. AFTER GRADING BEGINS, ADD MEASURES AS NECESSARY TO CONTROL EROSION AND SEDIMENTATION OR AS DIRECTED BY THE CITY OF WINSTON-SALEM EROSION CONTROL INSPECTOR.
5. ALL DIVERSION BERMS SHALL BE FERTILIZED, SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PROVIDE MATTING WHERE CALLED FOR ON THE DRAWINGS.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NCDENR - LAND QUALITY SECTION'S EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL. ALL MEASURES AND DEVICES SHALL BE INSPECTED AFTER ANY RAINFALL EVENT, OR ON A WEEKLY BASIS AS A MINIMUM, AND MAKE ANY NECESSARY REPAIRS IMMEDIATELY.
7. ALL SLOPED SURFACES SHALL BE ROUGHENED USING TRACKED EQUIPMENT TO MINIMIZE EROSION DURING VEGETATION ESTABLISHMENT.
8. ALL DISTURBED AREAS SHALL BE SEEDING AND MULCHED IN ACCORDANCE WITH THE SEEDING SCHEDULE WITHIN 7 WORKING DAYS OR 14 CALENDAR DAYS, WHICHEVER IS SHORTER, AFTER COMPLETION OF CONSTRUCTION. ALL SLOPES SHALL BE SEEDING AND MULCHED WITHIN 7 WORKING DAYS OR 14 CALENDAR DAYS, WHICHEVER IS SHORTER, AFTER COMPLETION OF THAT PHASE OF GRADING. SEEDING MIXTURE SHALL INCORPORATE SEED TYPES FROM THE PERMANENT AND TEMPORARY SEEDING SCHEDULES APPROPRIATE FOR THE TIME OF YEAR THAT SEED IS BEING APPLIED.
9. ALL EROSION CONTROL MEASURES AND DEVICES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND THE EROSION CONTROL INSPECTOR APPROVES THE REMOVAL OF THE DEVICES.
10. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CONDITIONS IN THE NPDES GENERAL PERMIT ISSUED AS PART OF THE EROSION CONTROL APPROVAL. THESE ITEMS INCLUDE BUT NOT LIMITED TO RAINFALL MEASUREMENTS, MAINTENANCE & REPAIR RECORDS, ETC.
11. NO CLEARING OR GRADING WORK SHALL COMMENCE UNTIL ALL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.
12. CLEARING LIMITS SHALL BE CLEARLY DEFINED PRIOR TO BEGINNING CLEARING OPERATIONS. CLEARING DEBRIS SHALL BE PROPERLY DISPOSED OF OFFSITE IN A PERMITTED LANDFILL FACILITY. ONSITE BURNING OF CLEARING DEBRIS WILL NOT BE ALLOWED. TREES OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED DURING CONSTRUCTION.
13. PRIOR TO PLACING FILL, ALL FILL AREAS SHALL BE STRIPPED TO REMOVE TOPSOIL, STUMPS, ROOTS, ORGANICS AND OTHER UNSUITABLE MATERIAL. STRIPINGS SHALL BE STOCKPILED AS DIRECTED BY THE OWNER.
14. ALL SOIL STOCKPILES SHALL BE PLACED WITHIN THE DISTURBED AREA LIMITS SHOWN ON THE DRAWINGS. STOCKPILE AREAS SHALL BE LEFT SUCH THAT RAINFALL RUNS OFF AND IS NOT TRAPPED ON OR WITHIN THE PILE. ALL RUNOFF SHALL BE DIRECTED TO APPROVED SEDIMENT TRAPPING DEVICES.

MARY M. TESH-REAVIS
BLOCK 4207 LOTS 105C & 105H
PIN# 5883-74-9359

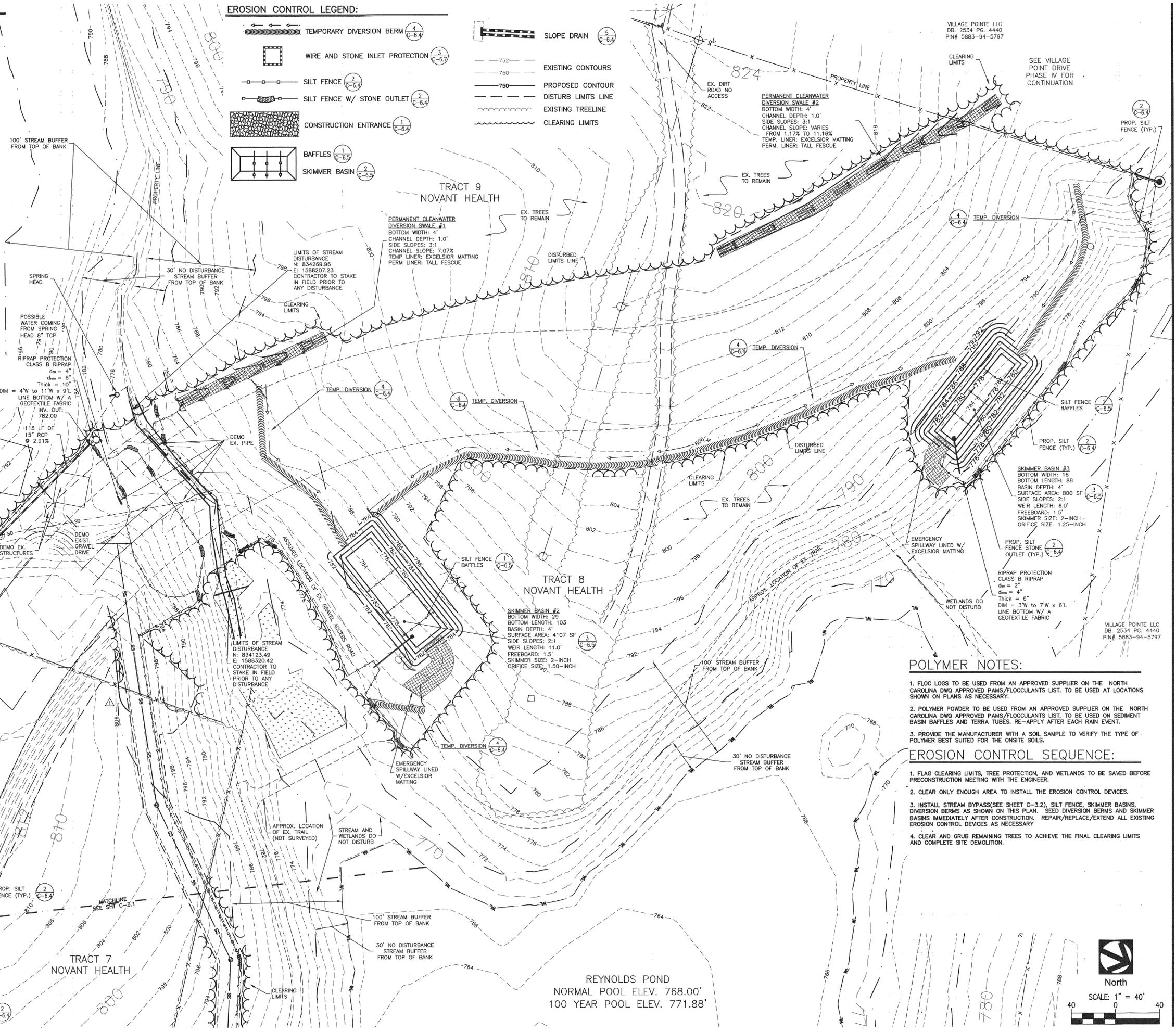
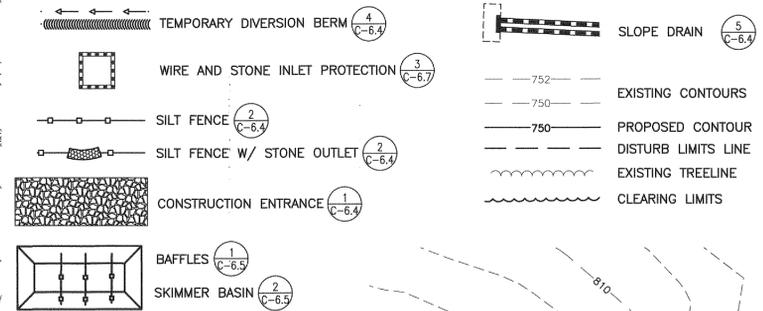
NO CLEARING OR DISTURBANCE BEYOND EX. 50' GRADING ESMT. STAKE LIMITS IN FIELD.

BILLY T. TESH
EMMA TESH
BLOCK 4207 LOTS 105K
PIN# 5883-73-7846

EX. WATER GV & BO PROTECT EXIST. VALVE FROM CONSTRUCTION VEHICLES

E:\11-049\Drawings\Redesign for NCDOT\11-049 C-3.0-3.3-3.4.dwg : C-3.0 05/16/18 7:33pm

EROSION CONTROL LEGEND:



POLYMER NOTES:

1. FLOC LOGS TO BE USED FROM AN APPROVED SUPPLIER ON THE NORTH CAROLINA DWR APPROVED PAMS/FLOCCULANTS LIST. TO BE USED AT LOCATIONS SHOWN ON PLANS AS NECESSARY.
2. POLYMER POWDER TO BE USED FROM AN APPROVED SUPPLIER ON THE NORTH CAROLINA DWR APPROVED PAMS/FLOCCULANTS LIST. TO BE USED ON SEDIMENT BASIN BAFFLES AND TERRA TUBES. RE-APPLY AFTER EACH RAIN EVENT.
3. PROVIDE THE MANUFACTURER WITH A SOIL SAMPLE TO VERIFY THE TYPE OF POLYMER BEST SUITED FOR THE ONSITE SOIL.

EROSION CONTROL SEQUENCE:

1. FLAG CLEARING LIMITS, TREE PROTECTION, AND WETLANDS TO BE SAVED BEFORE PRECONSTRUCTION MEETING WITH THE ENGINEER.
2. CLEAR ONLY ENOUGH AREA TO INSTALL THE EROSION CONTROL DEVICES.
3. INSTALL STREAM BYPASS(SEE SHEET C-3.2), SILT FENCE, SKIMMER BASINS, DIVERSION BERMS AS SHOWN ON THIS PLAN. SEED DIVERSION BERMS AND SKIMMER BASINS IMMEDIATELY AFTER CONSTRUCTION. REPAIR/REPLACE/EXTEND ALL EXISTING EROSION CONTROL DEVICES AS NECESSARY.
4. CLEAR AND GRUB REMAINING TREES TO ACHIEVE THE FINAL CLEARING LIMITS AND COMPLETE SITE DEMOLITION.

Stimmel
Stimmel Associates, PA
Landscape Architecture
Civil Engineering
Land Planning
601 N. Trade Street Suite 200
Winston Salem, NC 27101-2916
P: 336.723.1067 F: 336.723.1069
SEALS:

NCBES CERT. NO.: C-1347
NORTH CAROLINA
SEAL
027912
JIMMIE L. HOWARD III
ENGINEER

PROJECT:

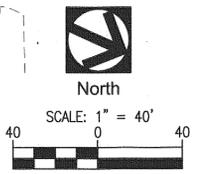
**VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA**

CLIENT:
VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY
DATE: 10/30/15
REVISIONS:
28/16 COMMENTS
5/1/16 EC MATTING

JOB NO: 15-077
SHEET TITLE:
GRADING & EROSION CONTROL - STAGE 1
SCALE: 1"=40'
SHEET NO.:

C-3.0
© STIMMEL ASSOCIATES, P.A.



REYNOLDS POND
NORMAL POOL ELEV. 768.00'
100 YEAR POOL ELEV. 771.88'



PROJECT:

**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

CLIENT:

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY

DATE: 10/30/15

REVISIONS:

2/8/16 COMMENTS

5/11/16 SHIFT #205

JOB NO.: 15-077

SHEET TITLE:

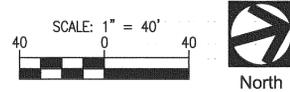
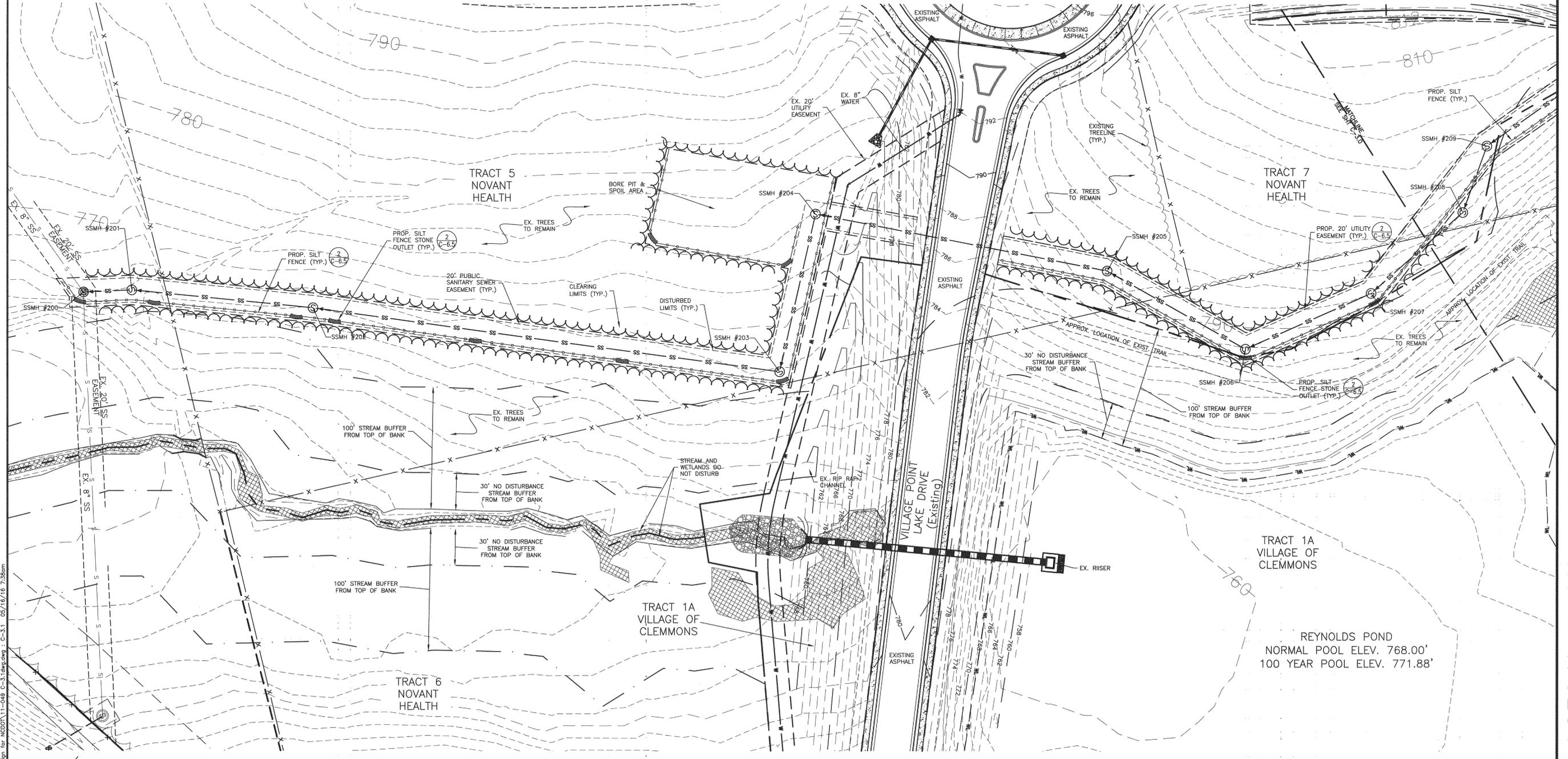
**GRADING &
EROSION
CONTROL
STAGE 1**

SCALE: 1" = 40'

SHEET NO.:

C-3.1

© STIMMEL ASSOCIATES, P.A.

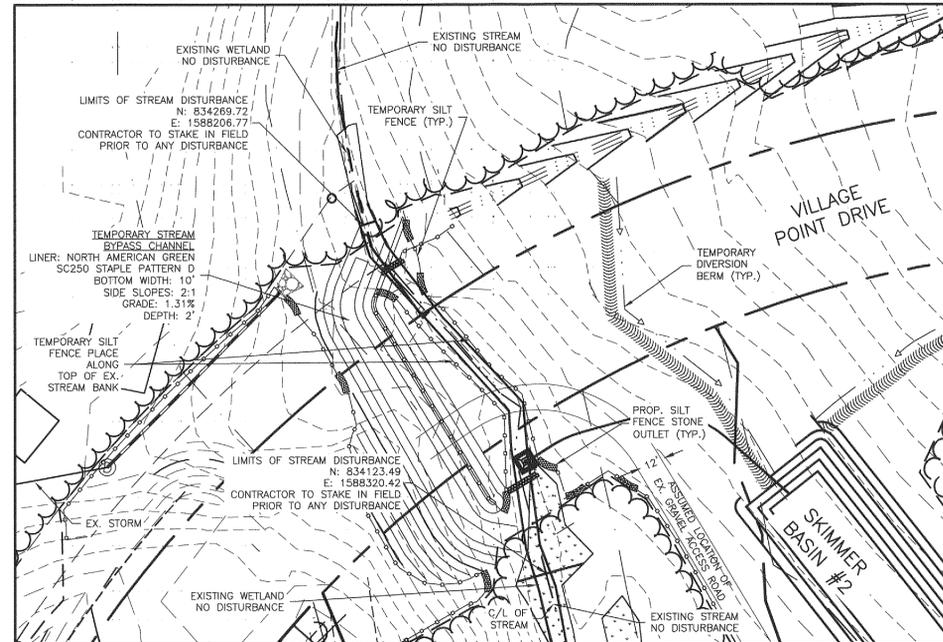


FA:\11-049\Drawings\Redesign for NCDOT\11-049 C-3.1.dwg : C-3.1 05/16/15 7:38am

1-40 RIGHT
OF WAY

STAGE 1A
EROSION CONTROL SEQUENCE:

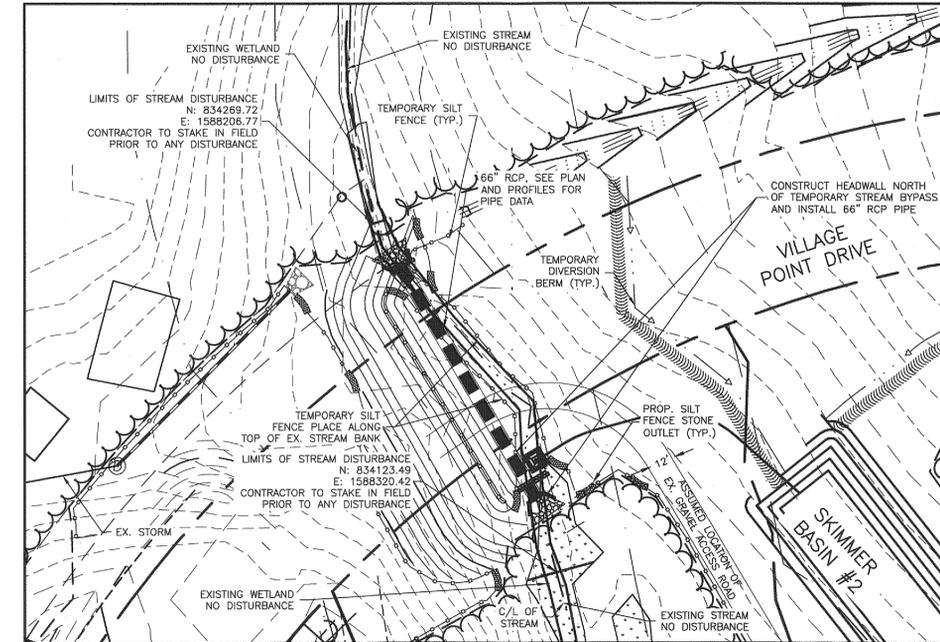
1. CLEAR ONLY ENOUGH AREA TO INSTALL THE EROSION CONTROL DEVICES.
2. INSTALL SILT FENCE AND STREAM BYPASS.



GRADING & EROSION CONTROL - STAGE 1A

STAGE 1B
EROSION CONTROL SEQUENCE:

1. UNDERCUT CULVERT AS SHOWN ON THIS PLAN.
2. INSTALL CULVERT, HEADWALLS, AND RIPRAP DISSIPATOR
3. DIVERT FLOW THROUGH CULVERT
4. REMOVE TEMPORARY BY PASS CHANNEL



GRADING & EROSION CONTROL - STAGE 1B

NOTES:

1. GROUNDWATER PUMPING MAY BE REQUIRED DURING CONSTRUCTION OF HEADWALL AND CULVERT AND SHALL BE INCLUDED IN THE CONTRACTORS BID.

Stimmel



Stimmel Associates, PA

Landscape Architecture
Civil Engineering
Land Planning

601 N. Trade Street Suite 200
Winston Salem, NC 27101-2916
P: 336.723.1067 F: 336.723.1069

SEALS:

NCBES CERT. NO.: C-1347



PROJECT:

VILLAGE POINT
PHASE THREE INFRASTRUCTURE
CLEMMONS, NORTH CAROLINA

CLIENT:

NOVANT HEALTH INC.
1980 SOUTH HAWTHORNE ROAD
SUITE 200
WINSTON-SALEM, NC
27103

DRAWN: CY

DATE: 10/30/15

REVISIONS:

2816 COMMENTS

JOB. NO.: 11-049

SHEET TITLE:

GRADING &
EROSION
CONTROL
STREAM BY-PASS

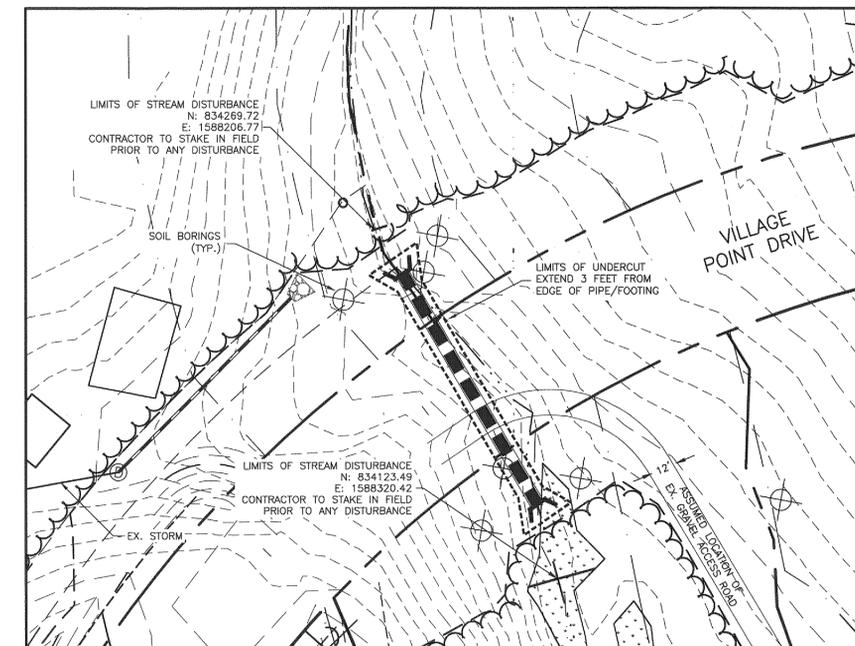
SCALE: 1"=40'

SHEET NO.:

C-3.2

© STIMMEL ASSOCIATES, P.A.

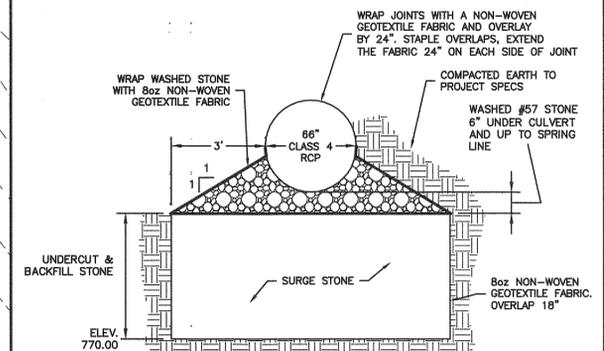
CULVERT/HEADWALL UNDERCUT:



CULVERT/HEADWALL UNDERCUT EXHIBIT

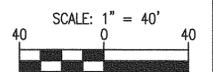
NOTES:

1. UNDERCUT HEADWALL FOOTINGS AND CULVERT TO THE ELEVATIONS SHOWN BELOW AND 3' HORIZONTALLY FROM EDGE OF FOOTING AND PIPE. CULVERT AS SHOWN, BACKFILL WITH SURGE STONE WRAPPED IN AN 8oz. PER S.Y. NON-WOVEN GEOTEXTILE ON ALL SIDES AND OVERLAP BY 18-INCHES.
2. CONTRACTOR SHALL PROVIDE AN ALLOWANCE IN THEIR BID FOR ADDITIONAL UNDERCUT AND STONE/FABRIC BACKFILL BY THE SY/FT.
3. THE GEOTECHNICAL ENGINEER SHALL VERIFY ALL SUBGRADES, BEARING CAPACITIES AND UNDERCUT REQUIREMENTS.
4. SHORING MAY BE REQUIRED AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
5. CONTINUOUS GROUNDWATER PUMPING MAY BE REQUIRED DUE TO SHALLOW GROUND WATER ELEVATIONS. CONTRACTOR SHALL INCLUDE IN THEIR BID ALL EQUIPMENT AND METHODS TO CONTROL THE GROUNDWATER DURING CONSTRUCTION.



NOTE:
THE GEOTECHNICAL ENGINEER SHALL CONFIRM UNDERCUT LOCATIONS, DEPTH AND BEARING PRIOR TO BACKFILL.

SECTION A-A





PROJECT:

**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

CLIENT:

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY

DATE: 1/6/12

REVISIONS:

28/16 COMMENTS

JOB NO.: 15-077

SHEET TITLE:

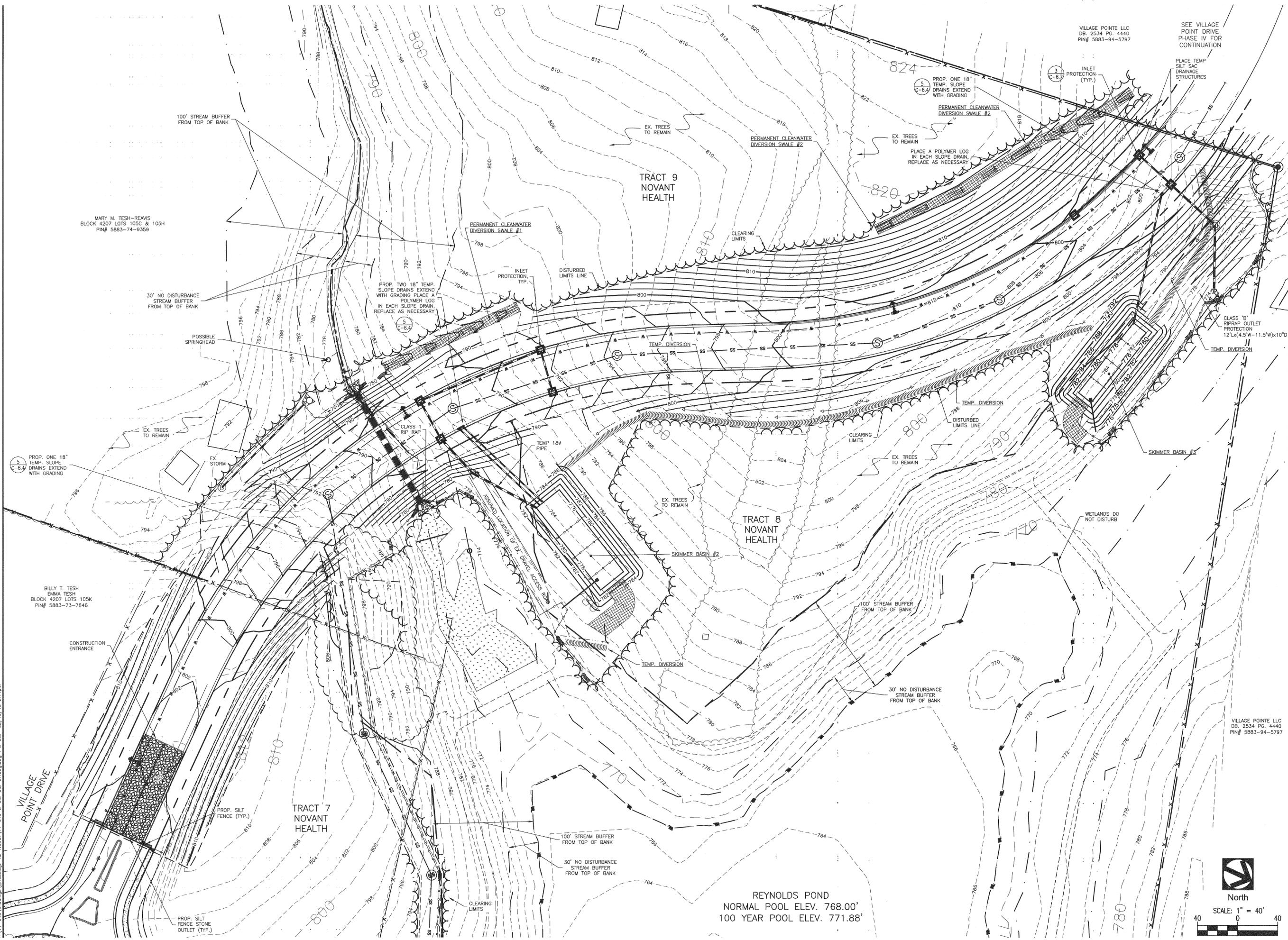
**GRADING &
EROSION
CONTROL -
STAGE 2**

SCALE: 1"=40'

SHEET NO.:

C-3.3

© STIMMEL ASSOCIATES, P.A.



MARY M. TESH-REAVIS
BLOCK 4207 LOTS 105C & 105H
PIN# 5883-74-9359

BILLY T. TESH
EMMA TESH
BLOCK 4207 LOTS 105K
PIN# 5883-73-7846

CONSTRUCTION
ENTRANCE

100' STREAM BUFFER
FROM TOP OF BANK

30' NO DISTURBANCE
STREAM BUFFER
FROM TOP OF BANK

POSSIBLE
SPRINGHEAD

EX. TREES
TO REMAIN

EX. STORM

PROP. ONE 18"
TEMP. SLOPE
DRAINS EXTEND
WITH GRADING

PROP. TWO 18"
TEMP. SLOPE DRAINS EXTEND
WITH GRADING PLACE A
POLYMER LOG
IN EACH SLOPE DRAIN,
REPLACE AS NECESSARY

PERMANENT CLEANWATER
DIVERSION SWALE #1

PERMANENT CLEANWATER
DIVERSION SWALE #2

PERMANENT CLEANWATER
DIVERSION SWALE #2

PLACE A POLYMER LOG
IN EACH SLOPE DRAIN,
REPLACE AS NECESSARY

PROP. ONE 18"
TEMP. SLOPE
DRAINS EXTEND
WITH GRADING

VILLAGE POINT LLC
DB. 2534 PG. 4440
PIN# 5883-94-5797

SEE VILLAGE
POINT DRIVE
PHASE IV FOR
CONTINUATION

PLACE TEMP
SILT SAC
DRAINAGE
STRUCTURES

INLET
PROTECTION
(TYP.)

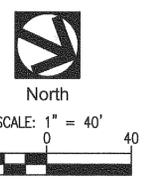
TRACT 9
NOVAT
HEALTH

TRACT 8
NOVAT
HEALTH

TRACT 7
NOVAT
HEALTH

REYNOLDS POND
NORMAL POOL ELEV. 768.00'
100 YEAR POOL ELEV. 771.88'

VILLAGE POINT LLC
DB. 2534 PG. 4440
PIN# 5883-94-5797



FX11-049 Drawings - Redesign for NCDOT 11-049 C-3.0-3.3-3.4.dwg : C-3.3 02/19/16 2:41pm



**VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA**

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

**GRADING &
EROSION
CONTROL -
STAGE 3**

C-3.4

VILLAGE POINTE LLC
DB. 2534 PG. 4440
PIN# 5883-94-5797

100' STREAM BUFFER
FROM TOP OF BANK

TRACT 9
NOVANT
HEALTH

EX. TREES
TO REMAIN

30' NO DISTURBANCE
STREAM BUFFER
FROM TOP OF BANK

MARY M. TESH-REAVIS
BLOCK 4207 LOTS 105C & 105H
PIN# 5883-74-9359

EX. TREES
TO REMAIN

EX. STORM

BILLY T. TESH
EMMA TESH
BLOCK 4207 LOTS 105K
PIN# 5883-73-7846

CLASS 'B' RIPRAP OUTLET
PROTECTION
13'L X (6'W-15'W) X 1' D

PROVIDE NEW
12' (W) X 8' (D)
GRAVEL ACCESS
ROAD TO TIE TO
EXISTING GRAVEL
ACCESS ROAD

TRACT 8
NOVANT
HEALTH

SWM BMP
GRASS LINED
SWALE

PROP. SILT
FENCE (TYP.)

DISTURBED
LIMITS LINE

100' STREAM BUFFER
FROM TOP OF BANK

WETLANDS DO
NOT DISTURB

30' NO DISTURBANCE
STREAM BUFFER
FROM TOP OF BANK

PROP. SILT
FENCE STONE
OUTLET (TYP.)

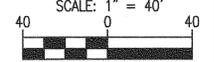
100' STREAM BUFFER
FROM TOP OF BANK

30' NO DISTURBANCE
STREAM BUFFER
FROM TOP OF BANK

REYNOLDS POND
NORMAL POOL ELEV. 768.00'
100 YEAR POOL ELEV. 771.88'



North
SCALE: 1" = 40'





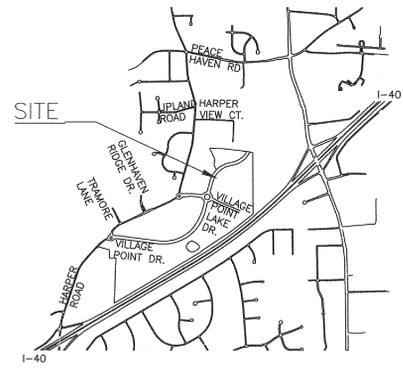
VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA

OVERALL
UTILITY
PLAN

C-4.0

LEGEND:

| | | | |
|-------------|-----------------------------------|-----|--|
| --- 752 --- | EXISTING CONTOURS @ 2' INTERVALS | --- | EXISTING SANITARY SEWER LINE |
| --- 750 --- | EXISTING CONTOURS @ 10' INTERVALS | --- | PROPOSED SANITARY SEWER LINE |
| --- | PROPOSED CONTOUR | --- | EXISTING SANITARY SEWER MANHOLE |
| --- | RIGHT-OF-WAY | --- | PROPOSED SANITARY SEWER MANHOLE |
| --- | CENTERLINE | --- | EXISTING STORM DRAINAGE LINE |
| --- | FUTURE CENTERLINE | --- | PROPOSED STORM DRAINAGE LINE |
| --- | PROPERTY BOUNDARY | --- | EXISTING STORM DRAINAGE MANHOLE |
| --- | EASEMENT LINE | --- | PROPOSED STORM DRAINAGE MANHOLE |
| --- | EXISTING TREELINE | --- | EXISTING CATCH BASIN |
| --- | CREEK / WATER SURFACE | --- | PROPOSED CATCH BASIN |
| --- | DELINEATES WETLANDS | --- | EXISTING CURB INLET |
| --- | EXISTING WATERLINE | --- | PROPOSED CURB INLET |
| --- | PROPOSED WATERLINE | --- | EXISTING CURB AND GUTTER |
| --- | EXISTING FIRE HYDRANT AND VALVE | --- | PROPOSED CURB AND GUTTER |
| --- | PROPOSED FIRE HYDRANT | --- | INLET PROTECTION |
| --- | EXISTING GATE VALVE | --- | SILT FENCE |
| --- | PROPOSED GATE VALVE | --- | TEMPORARY DIVERSION |
| --- | PROPOSED 45° BEND | --- | CLEARING LIMITS |
| --- | | --- | STREET LIGHT/OPEN TRADITION FIXTURES |
| --- | | --- | STREET LIGHT/FLAT LENS CUT OFF COSRA FIXTURE |
| --- | | --- | GUARDRAIL |



LOCATION MAP

1"=2000'



VILLAGE POINT
LAKE DRIVE

WSFC
SCHOOL

VILLAGE POINT DRIVE

VILLAGE POINT DRIVE

VILLAGE POINT DRIVE

TRACT 5
NOVANT HEALTH, INC.

TRACT 7
NOVANT HEALTH, INC.

TRACT 1B
VILLAGE OF CLEMMONS

TRACT 6
NOVANT HEALTH, INC.

TRACT 1A
VILLAGE OF CLEMMONS

TRACT 8
NOVANT HEALTH, INC.

TRACT 9
NOVANT HEALTH, INC.

REYNOLDS
POND

DRAWING INDEX:

| | |
|-------|---|
| C-0.0 | COVER SHEET |
| C-1.0 | STRIPING AND SIGNAGE PLAN |
| C-2.0 | GRADING AND EROSION CONTROL - STAGE 1 |
| C-3.1 | GRADING AND EROSION CONTROL - STAGE 1 |
| C-3.2 | GRADING AND EROSION CONTROL - STREAM BY-PASS |
| C-3.3 | GRADING AND EROSION CONTROL - STAGE 2 |
| C-3.4 | GRADING AND EROSION CONTROL - STAGE 3 |
| C-4.0 | OVERALL UTILITY PLAN |
| C-4.1 | VILLAGE POINT DRIVE STA. 10+00.00 TO STA. 22+50.00 |
| C-4.2 | VILLAGE POINT DRIVE STA. 19+00.00 TO STA. 28+00.00 |
| C-4.3 | SANITARY SEWER OUTFALL STA. 10+00.00 TO STA. 21+50.00 |
| C-4.4 | SANITARY SEWER OUTFALL STA. 21+50.00 TO STA. 29+98.65 |
| C-6.0 | ROADWAY DETAILS |
| C-6.1 | TYPICAL STREET SECTIONS |
| C-6.2 | STORM DRAINAGE DETAILS |
| C-6.3 | WATER AND SEWER DETAILS |
| C-6.4 | EROSION CONTROL DETAILS |
| C-6.5 | EROSION CONTROL DETAILS |
| C-6.6 | EROSION CONTROL DETAILS |
| S-1.0 | HEADWALL #1 PLAN & ELEVATIONS (WEST) |
| S-2.0 | HEADWALL #1 PLAN & ELEVATIONS (EAST) |
| S-3.0 | WALL SCHEDULE AND TYPICAL WALL SECTIONS |
| S-4.0 | SECTIONS TYPICAL DETAILS GENERAL NOTES |

WATER AND SEWER DESIGN APPROVED

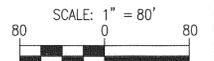
| | |
|--------------------|------|
| WATER AND SEWER | DATE |
| UTILITIES DIRECTOR | |

APPROVAL OF THESE WATER AND SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL FOR CONSTRUCTION MUST BE IN FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO BEGINNING OF CONSTRUCTION WILL RELIEVE THE CITY OF ANY FINANCIAL PARTICIPATION IN THIS PROJECT WHATSOEVER.

CITY OF WINSTON-SALEM

BY: _____

APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SANITARY SEWER INFRASTRUCTURE DEPICTED IN THESE PLANS DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE THAN THAT SET FORTH IN SECTION 64 OF THE WATER SYSTEM POLICY AND SECTION 36 OF THE SEWER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.





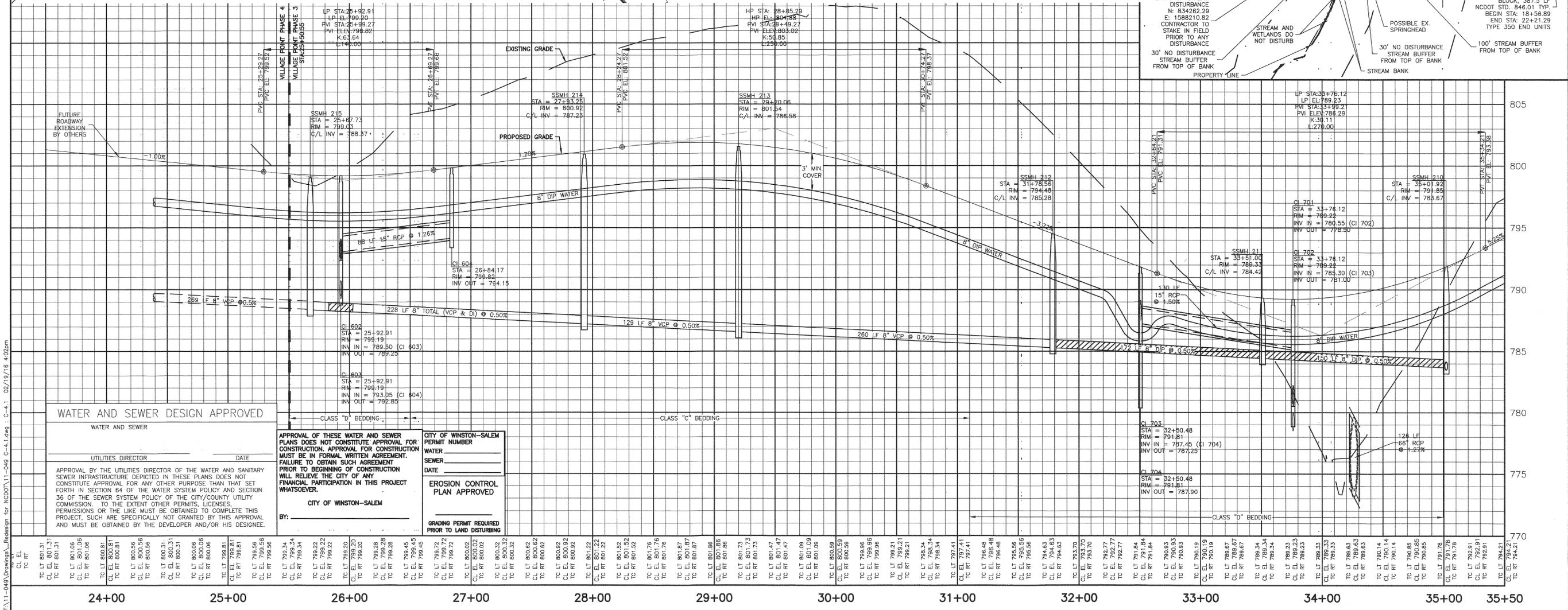
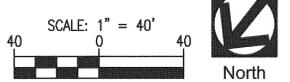
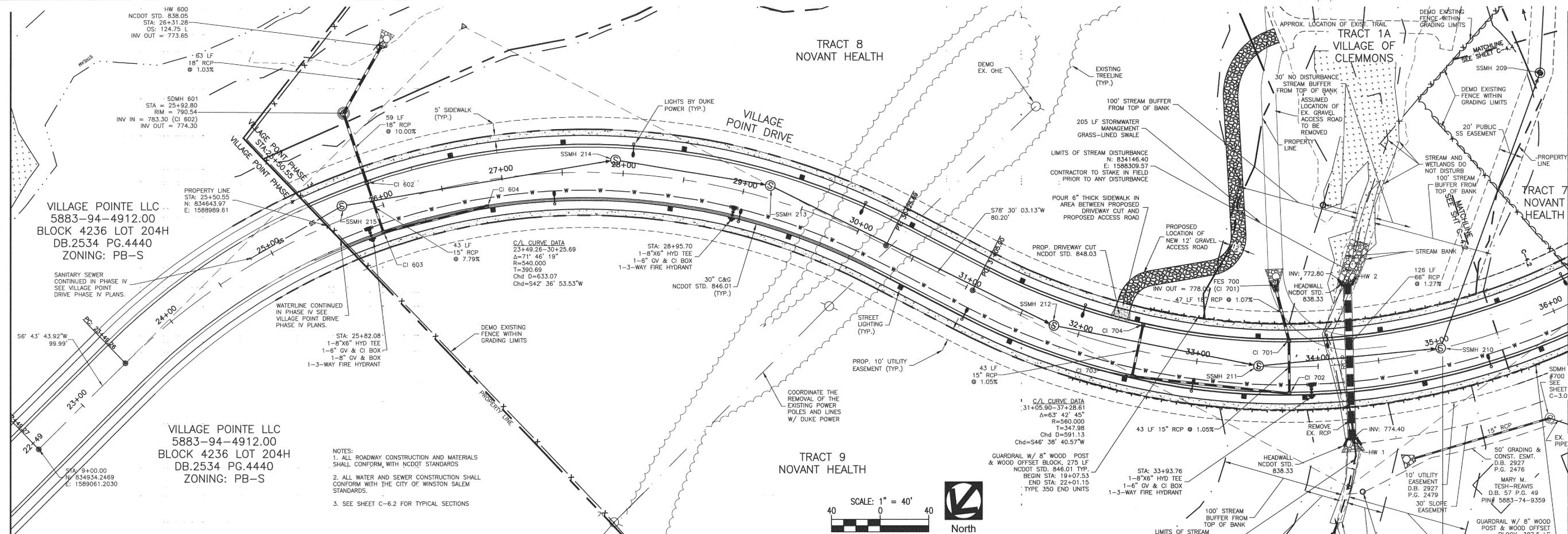
VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA

CLIENT:
VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY
DATE: 10/30/15
REVISIONS:
2/8/16 COMMENTS

JOB NO: 15-077
SHEET TITLE:
VILLAGE
POINT DRIVE
STA: 25+50.55
- 35+50.00

SCALE: 1"=40'
SHEET NO.:



WATER AND SEWER DESIGN APPROVED

WATER AND SEWER
UTILITIES DIRECTOR DATE
APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SANITARY SEWER INFRASTRUCTURE DEPICTED IN THESE PLANS DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE THAN THAT SET FORTH IN SECTION 84 OF THE WATER SYSTEM POLICY AND SECTION 36 OF THE SEWER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.

APPROVAL OF THESE WATER AND SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL FOR CONSTRUCTION MUST BE IN FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO BEGINNING OF CONSTRUCTION WILL RELIEVE THE CITY OF ANY FINANCIAL PARTICIPATION IN THIS PROJECT WHATSOEVER.
CITY OF WINSTON-SALEM
BY:

CITY OF WINSTON-SALEM
PERMIT NUMBER
WATER
SEWER
DATE
EROSION CONTROL
PLAN APPROVED
GRADING PERMIT REQUIRED
PRIOR TO LAND DISTURBING

FN11-0408 Drawings - Resign for NCDOT 11-049 C-4.1.dwg : C-4.1 02/19/16 4:02pm



PROJECT:

**VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA**

CLIENT:

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY

DATE: 10/30/15

REVISIONS:

2816 COMMENTS

JOB NO.: 15-077

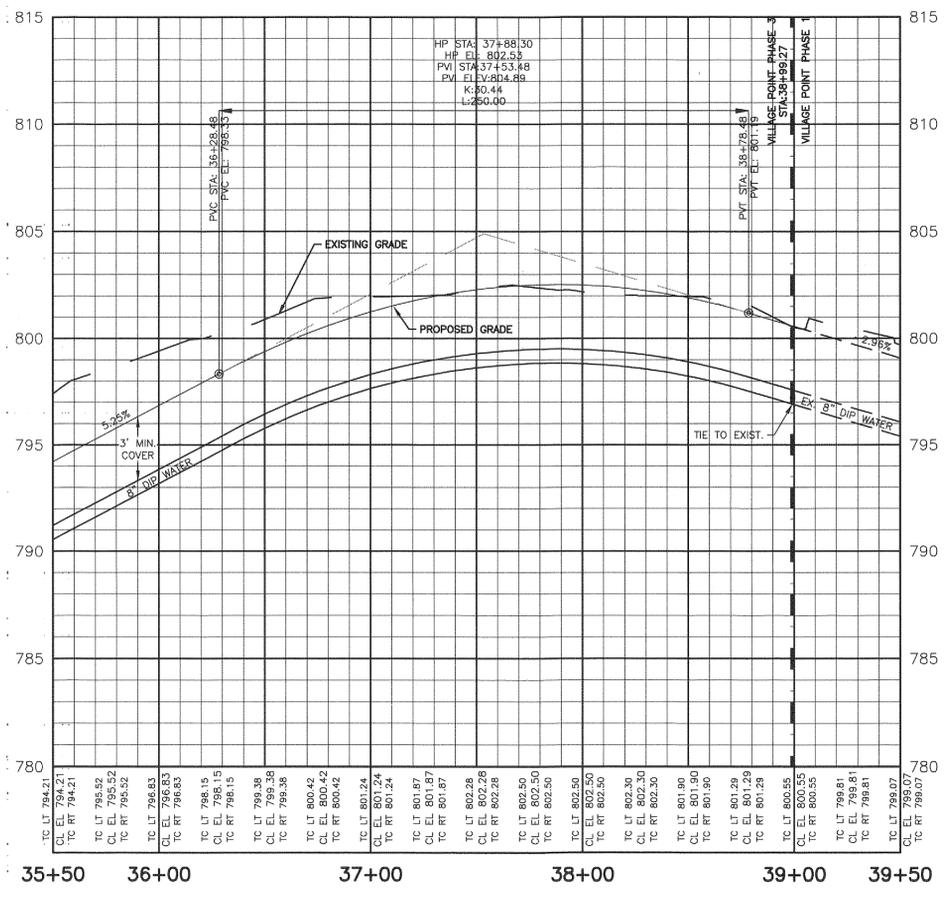
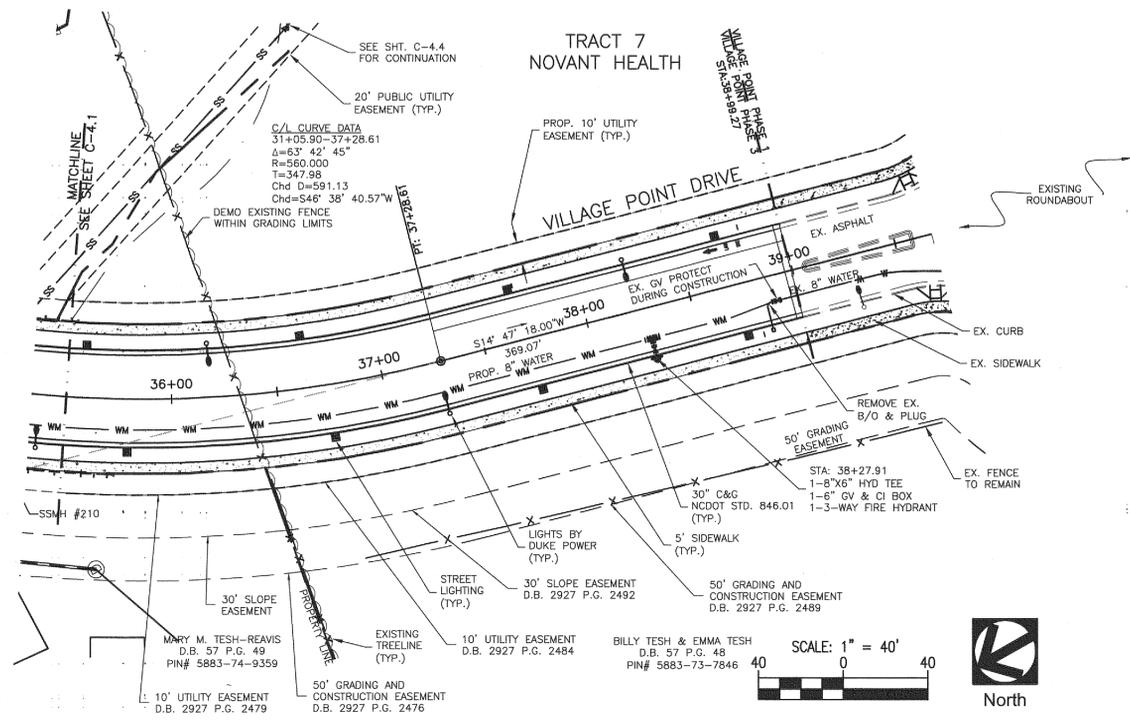
SHEET TITLE:

**VILLAGE
POINT DRIVE
STA: 35+50.00
- 39+00.00**

SCALE: 1"=40'

SHEET NO.:

C-4.2



APPROVAL OF THESE WATER AND SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL FOR CONSTRUCTION MUST BE IN FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO BEGINNING OF CONSTRUCTION WILL RELIEVE THE CITY OF ANY FINANCIAL PARTICIPATION IN THIS PROJECT WHATSOEVER.

CITY OF WINSTON-SALEM

BY: _____

WATER AND SEWER DESIGN APPROVED

WATER AND SEWER

UTILITIES DIRECTOR _____ DATE _____

APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SANITARY SEWER INFRASTRUCTURE DEPICTED IN THESE PLANS DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE THAN THAT SET FORTH IN SECTION 64 OF THE WATER SYSTEM POLICY AND SECTION 36 OF THE SEWER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.



VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA

CLIENT:
VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY
DATE: 10/30/15
REVISIONS:
28/16 COMMENTS
5/11/16 SHIFT #206

JOB NO.: 15-077

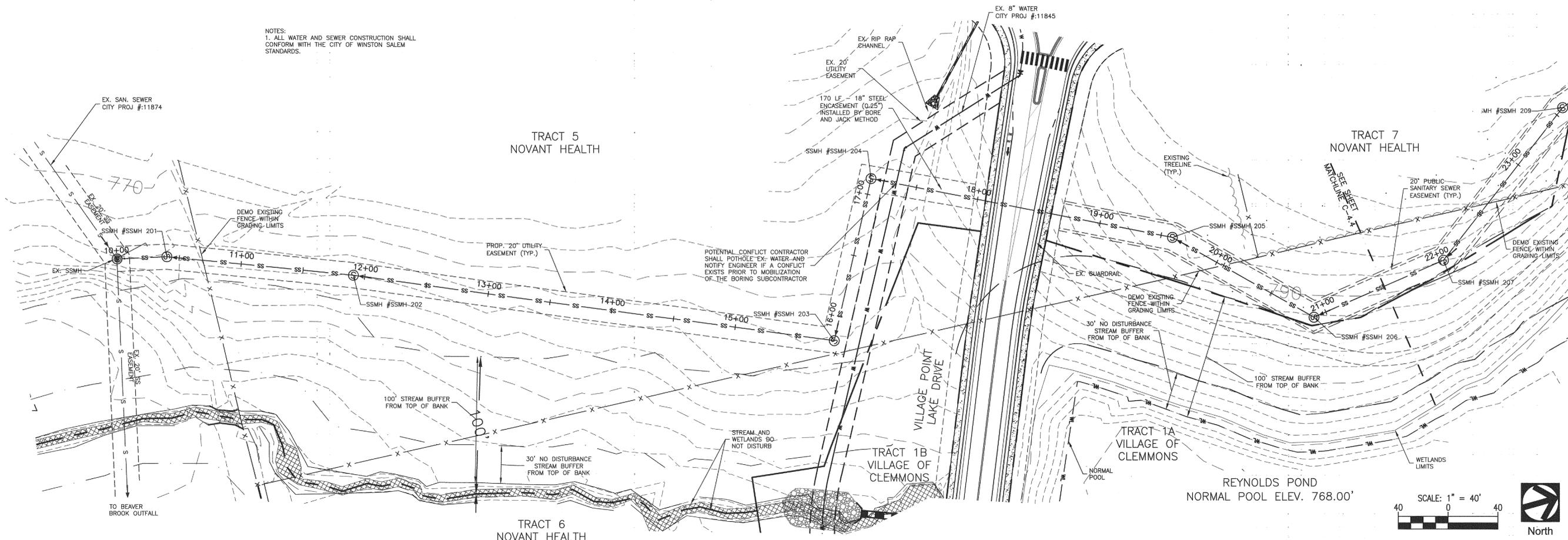
SHEET TITLE:

SANITARY
SEWER
OUTFALL
STA: 10+00 -
21+50
SCALE: 1"=40'

SHEET NO.:

C-4.3

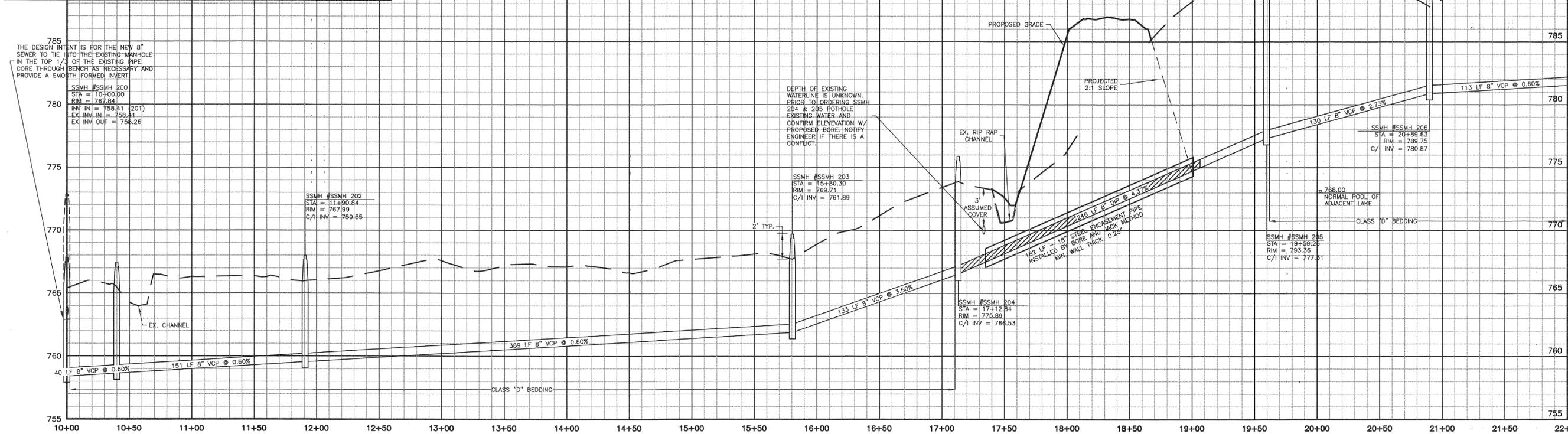
NOTES:
1. ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM WITH THE CITY OF WINSTON SALEM STANDARDS.



WATER AND SEWER DESIGN APPROVED

WATER AND SEWER
UTILITIES DIRECTOR _____ DATE _____
APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SANITARY SEWER INFRASTRUCTURE DEPICTED IN THESE PLANS DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE THAN THAT SET FORTH IN SECTION 64 OF THE WATER SYSTEM POLICY AND SECTION 36 OF THE SEWER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.

APPROVAL OF THESE WATER AND SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL FOR CONSTRUCTION MUST BE IN FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO BEGINNING OF CONSTRUCTION WILL RELIEVE THE CITY OF ANY FINANCIAL PARTICIPATION IN THIS PROJECT WHATSOEVER.
CITY OF WINSTON-SALEM
BY: _____



F:\11-049\Drawings\Redesign for MCDOT\11-049 C-4.3.dwg : C-4.3 05/18/16 1:57pm



PROJECT:

**VILLAGE POINT DRIVE
PHASE III
CLEMMONS, NORTH CAROLINA**

CLIENT:

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY

DATE: 10/30/15

REVISIONS:

2816 COMMENTS

JOB. NO: 15-077

SHEET TITLE:

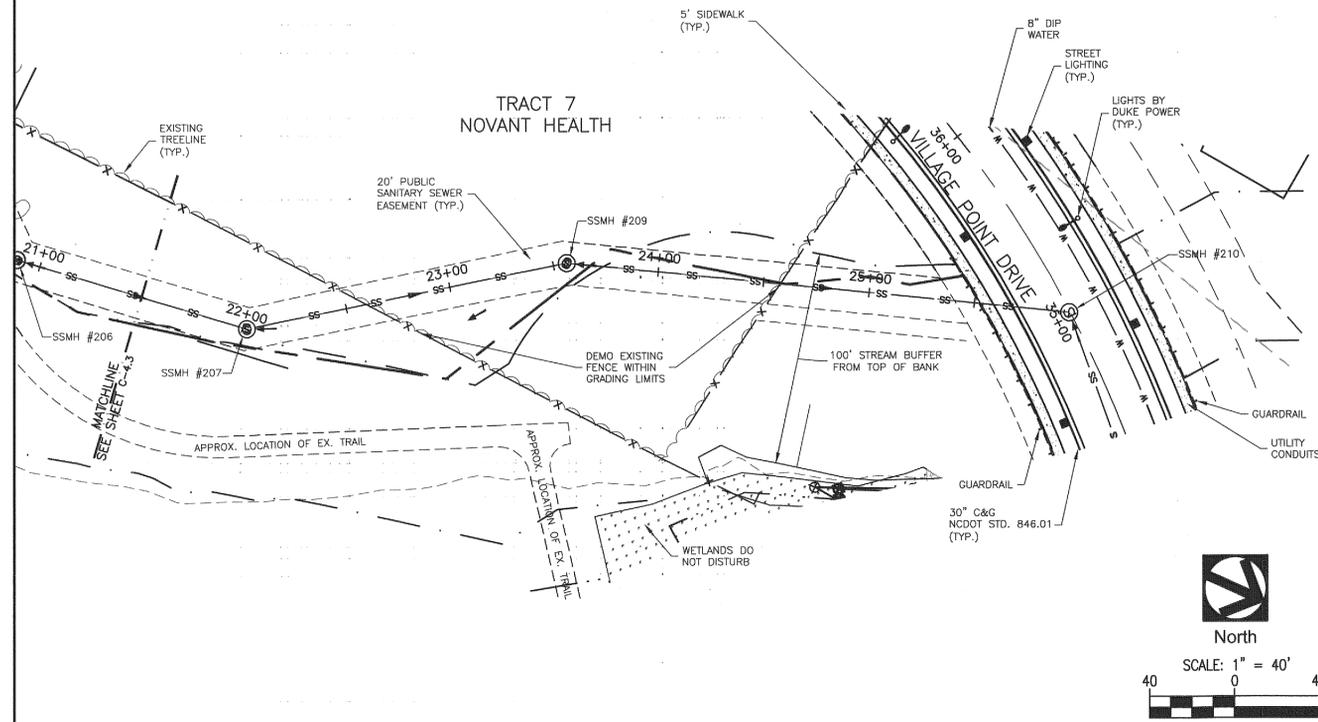
**SANITARY
SEWER
OUTFALL
STA: 21+50 -
25+98.65**

SCALE: 1"=40'

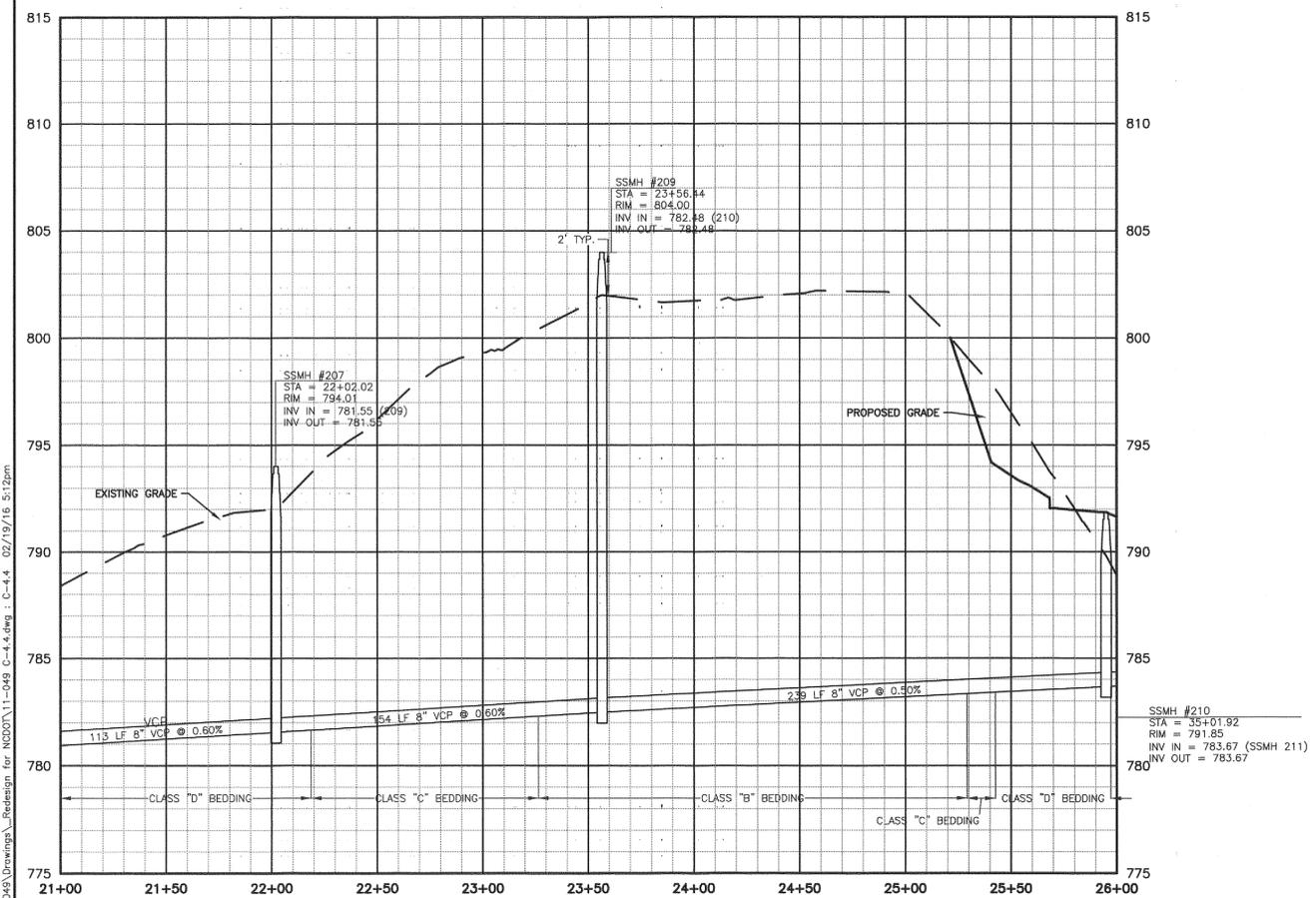
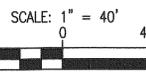
SHEET NO.:

C-4.4

© STIMMEL ASSOCIATES, P.A.



North



APPROVAL OF THESE WATER AND SEWER PLANS DOES NOT CONSTITUTE APPROVAL FOR CONSTRUCTION. APPROVAL FOR CONSTRUCTION MUST BE IN FORMAL WRITTEN AGREEMENT. FAILURE TO OBTAIN SUCH AGREEMENT PRIOR TO BEGINNING OF CONSTRUCTION WILL RELIEVE THE CITY OF ANY FINANCIAL PARTICIPATION IN THIS PROJECT WHATSOEVER.

CITY OF WINSTON-SALEM

BY: _____

WATER AND SEWER DESIGN APPROVED

WATER AND SEWER

UTILITIES DIRECTOR _____ DATE _____

APPROVAL BY THE UTILITIES DIRECTOR OF THE WATER AND SANITARY SEWER INFRASTRUCTURE DEPICTED IN THESE PLANS DOES NOT CONSTITUTE APPROVAL FOR ANY OTHER PURPOSE THAN THAT SET FORTH IN SECTION 64 OF THE WATER SYSTEM POLICY AND SECTION 36 OF THE SEWER SYSTEM POLICY OF THE CITY/COUNTY UTILITY COMMISSION. TO THE EXTENT OTHER PERMITS, LICENSES, PERMISSIONS OR THE LIKE MUST BE OBTAINED TO COMPLETE THIS PROJECT, SUCH ARE SPECIFICALLY NOT GRANTED BY THIS APPROVAL AND MUST BE OBTAINED BY THE DEVELOPER AND/OR HIS DESIGNEE.

F:\11-069 Drawings\Redesign for NCDOT\11-049 C-4.4.dwg : C-4.4 02/19/16 5:12pm



**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

CLIENT:

VILLAGE OF CLEMMONS
3715 CLEMMONS ROAD
CLEMMONS, NC 27012
(336)-766-7511

DRAWN: CY
DATE: 10/30/15
REVISIONS:
2816 COMMENTS

JOB NO: 15-077
SHEET TITLE:
**ROADWAY
DETAILS**

SCALE: NONE
SHEET NO.:

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-206
ENGLISH STANDARD DRAWING FOR
CONCRETE CURB, GUTTER
AND CURB & GUTTER

SECTION VIEW OF CURBS OR CURBS AND GUTTERS

SECTION VIEW OF JOINTS

GENERAL NOTES:
- PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
- JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
- CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.
- CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.
- FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8" X 6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
- SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

ENGLISH STANDARD DRAWING FOR
CONCRETE CURB, GUTTER
AND CURB & GUTTER

SHEET 1 OF 3
846.01

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-206
ENGLISH STANDARD DRAWING FOR
GUARDRAIL PLACEMENT
AT CURB AND GUTTER

SECTION D-D

SECTION C-C

GUARDRAIL AT FACE OF CURB

GUARDRAIL 12' OFFSET FROM FACE OF CURB

ENGLISH STANDARD DRAWING FOR
GUARDRAIL PLACEMENT
AT CURB AND GUTTER

SHEET 11 OF 11
862.01

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

7-206
ENGLISH STANDARD DRAWING FOR
WHEELCHAIR RAMP
CURB CUT

ISOMETRIC VIEW

SECTION A-A

SECTION B-B

PLAN VIEW

DETECTABLE WARNING DOMES

ENGLISH STANDARD DRAWING FOR
WHEELCHAIR RAMP
CURB CUT

SHEET 1 OF 4
848.05

1/4" TOOLED C.J. SCORING PATTERN

TOOLED EDGES

1/4" PREMOLDED BITUMINOUS EXPANSION JOINT AS SHOWN ON PLAN (20' O.C. MAX)

98% COMPACTED SUBGRADE

98% COMPACTED SUBGRADE

BLDG FACE

TYP. CONTROL JOINT

TYP. EXPANSION JOINT

EJ AT WALL

2% MAX. CROSS SLOPE

5' JT. TO JT. UNLESS OTHERWISE NOTED

5' SMOOTH TROWELED C.J.

DIAGONAL ROUGH BROOM FINISH

NOTES:
USE 1/4" BITUMINOUS EXPANSION JOINT A MAX. OF 20' O.C. AND WHENEVER CONCRETE WALK MEETS FIXED OBJECTS (I.E., CURBS, BLDG., ETC.).
NCDOT CLASS B CONCRETE

1 CONCRETE WALK

SCALE: NTS

BACK OF CURB

FACE OF CURB

EDGE OF GUTTER

LANE

BIKE

4" WHITE SOLID LING TO NCDOT STANDARDS

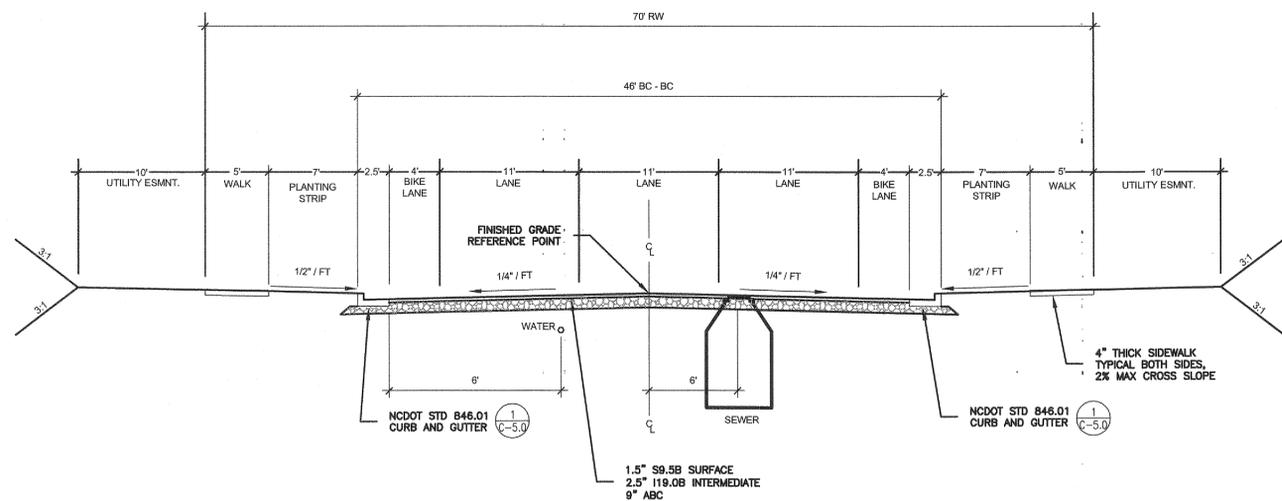
THERMOPLASTIC MARKING TO NCDOT STANDARDS AND M.U.T.C.D. (2009) STANDARDS CENTERED IN BIKE LANE

2 BICYCLE LANE PAVEMENT MARKINGS

SCALE: NTS



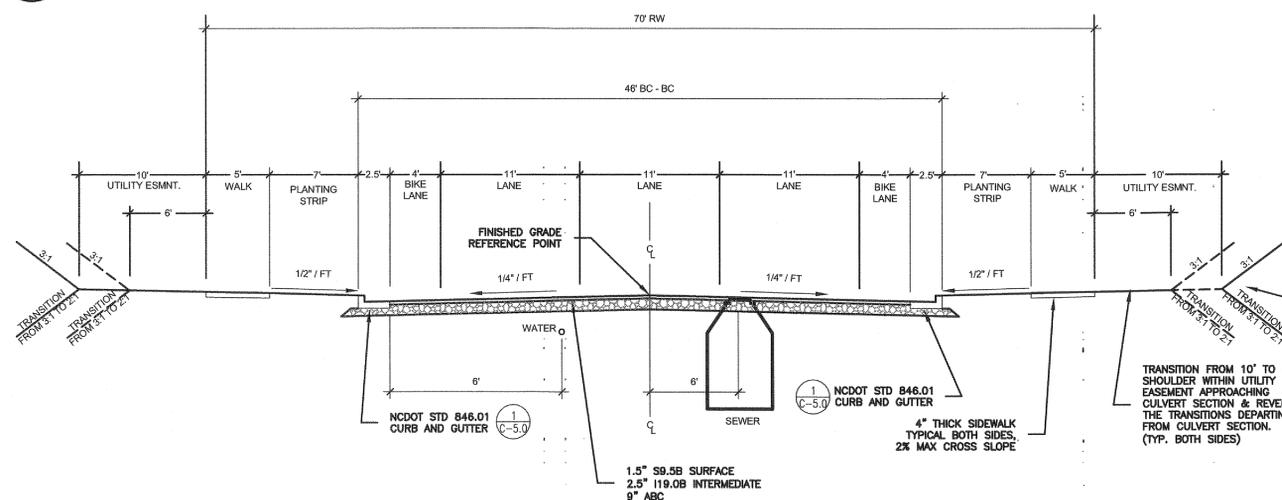
**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA



VILLAGE POINT DRIVE SECTION

STA 25+50.55 TO 33+34.27 & 35+34.27 TO 38+99.27

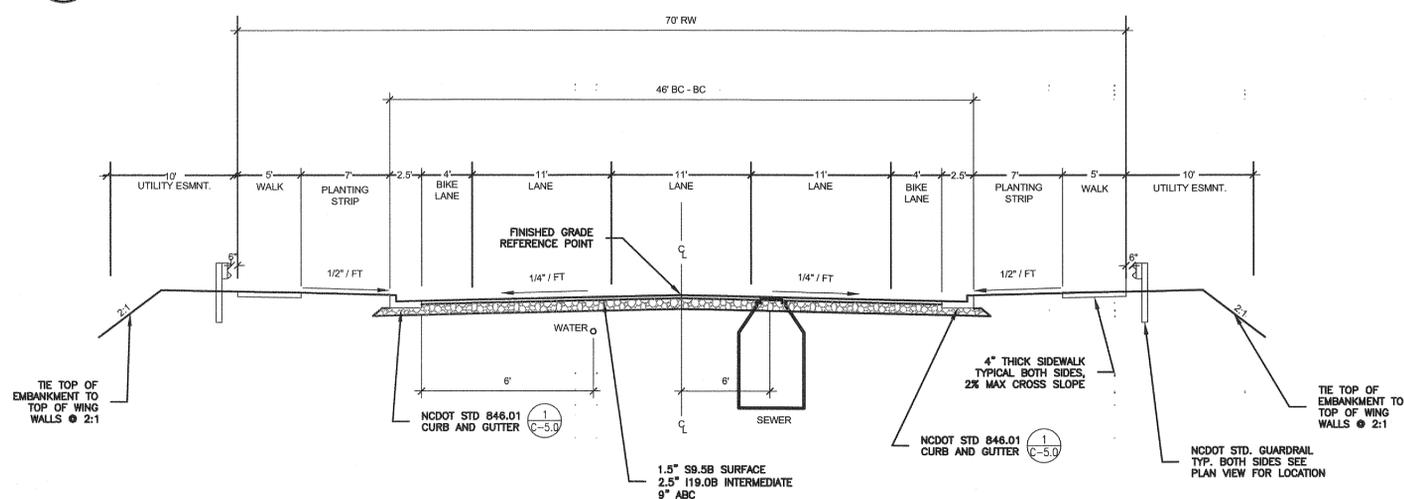
N.T.S.



VILLAGE POINT DRIVE SECTION

STA 33+34.27 TO 33+85.27 & 34+84.27 TO 35+34.27

N.T.S.



VILLAGE POINT DRIVE SECTION

STA 33+84.27 TO 34+84.27

N.T.S.

F:\11-049 Drawings_Redesign for NCDOT\11-049 C-6.0 SERIES.dwg 1 C-6.1 02/05/16 1:48pm



**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
METHOD 'A'

SHEET 1 OF 1
300.01

GENERAL NOTES:
1. I.D. = THE MAXIMUM HORIZONTAL INSIDE DIMENSION.
2. O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIMENSION.
3. H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL OR SELECT MATERIAL FOR FOUNDATION CONDITIONING AS DIRECTED BY THE ENGINEER (LETTER WILL NOT BE ALLOWED)

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL CATCH BASINS OVER 8'-0" IN DEPTH WITH STEPS 18" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - BRICK/STUCCO PIPES, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
USE TYPE "A", "B" AND "C" GRATES UNLESS OTHERWISE INDICATED.
PIPE 18" IN HEIGHT OR LESS USE 8" WALLS AND BOTTOM SLAB. OVER 18" TO 36" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
CONSTRUCT WITH PIPE CHAMFER MATCHING.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

DETAIL SHOWING METHOD OF RISER CONSTRUCTION

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
GUIDE FOR RIP RAP AT PIPE OUTLETS

SHEET 1 OF 1
876.02

| D | CLASS 'B' RIP RAP | | CLASS 'I' RIP RAP | | CLASS 'B' RIP RAP | | CLASS 'I' RIP RAP | | |
|-----|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|----|
| | TONS | S. Y. | |
| 12" | 2 | 5 | 5 | 2 | 5 | 1 | 4 | 2 | 1 |
| 15" | 2 | 7 | 7 | 3 | 7 | 1 | 5 | 3 | 2 |
| 18" | 3 | 10 | 9 | 4 | 10 | 2 | 7 | 4 | 2 |
| 24" | 5 | 14 | 15 | 7 | 15 | 3 | 11 | 7 | 4 |
| 30" | 8 | 21 | 21 | 11 | 22 | 5 | 16 | 11 | 7 |
| 36" | 11 | 28 | 29 | 15 | 30 | 7 | 22 | 16 | 10 |
| 42" | 15 | 37 | 39 | 20 | 39 | 10 | 28 | 22 | 13 |
| 48" | - | - | 49 | 26 | 50 | - | 38 | 17 | 38 |
| 54" | - | - | 60 | 33 | 62 | - | 36 | 21 | 47 |
| 60" | - | - | 73 | 40 | 75 | - | 44 | 26 | 56 |
| 66" | - | - | 87 | 48 | 89 | - | 54 | 32 | 67 |
| 72" | - | - | 102 | 57 | 104 | - | 64 | 38 | 78 |

NOTE:
FOR CALCULATION PURPOSES
CLASS 'B' RIP RAP = 100 LBS./FT³
CLASS 'I' RIP RAP = 105 LBS./FT³

H = RIP RAP TO TOP OF PIPE (MAX. H = D + T)
T = 15" CLASS 'I' RIP RAP, UNLESS OTHERWISE SHOWN ON PLANS
T = 12" CLASS 'B' RIP RAP, UNLESS OTHERWISE SHOWN ON PLANS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

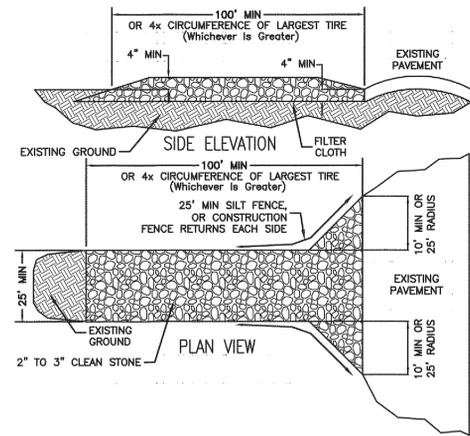
ENGLISH STANDARD DRAWING FOR
PRECAST MANHOLE 4', 5' AND 6' DIAMETER
12" THRU 48" PIPE

SHEET 1 OF 1
840.52

GENERAL NOTES:
USE 4000 PSI MINIMUM COMPRESSIVE STRENGTH CONCRETE.
FABRICATE, ASSEMBLE AND DESIGN PRECAST MANHOLE COMPONENTS ACCORDANCE WITH ASSDITD M319.
ASSEMBLE RISER AND GRADE RINGS WITH THE STEPS SPACED 12" FROM THE TOP TO THE BOTTOM OF THE MANHOLE.
WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, CONSTRUCT THE TOP OF THE MANHOLE FLUSH WITH THE GROUND AND A MINIMUM OF 9" ABOVE THE GROUND AT OTHER LOCATIONS.
LIMIT DEPTH OF FILL TO 30'-0" FROM FINISH GRADE TO TOP OF BOTTOM SLAB.
THE MIN. SLAB THICKNESS "T" IS THE DIMENSION OF THE THINNEST PORTION OF THE TOP BOTTOM SLAB.
TOP MAT OF REINFORCEMENT MAY BE NEGLECTED IF TOP SLAB HAS A DISTRIBUTABLE TOP AND BOTTOM.

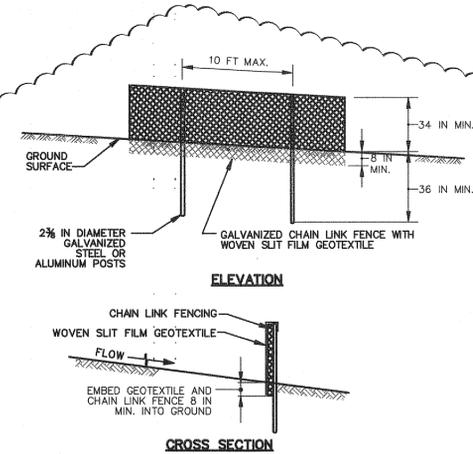
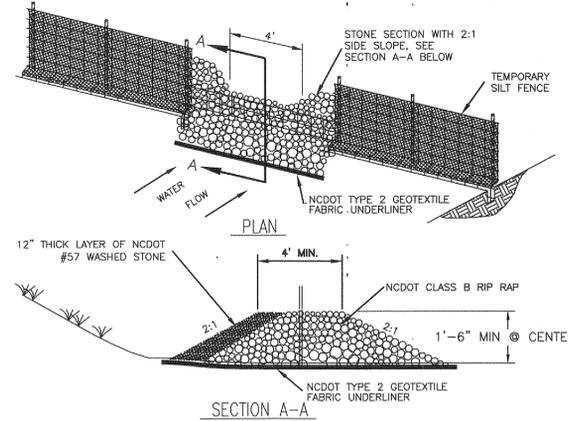
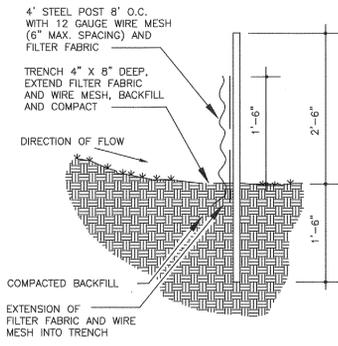
| D | W | T | AS |
|---|---|---|------|
| 4 | 4 | 6 | 0.12 |
| 5 | 5 | 8 | 0.15 |
| 6 | 6 | 6 | 0.18 |

REINFORCED CONC. FTG. (SEE STD. 1552.01 IF REQUIRED)
USE MIN. AREA OF STEEL IN BASE SLAB OF 0.12 IN² PER LINEAR FOOT EACH WAY



CONSTRUCTION SPECIFICATIONS:

- STONE - USE COARSE AGGREGATE (2 - 3 INCH STONE)
- LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 100 FEET.
- THICKNESS - NOT LESS THAN 8 INCHES.
- WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- WASHING - WHEN NECESSARY WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



1 STONE CONSTRUCTION ENTRANCE

N.T.S.

2 SILT FENCE

N.T.S.

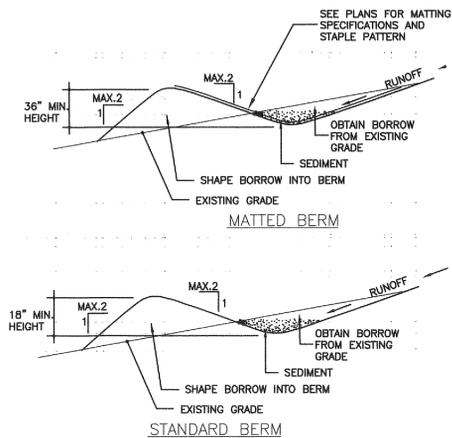
SILT FENCE OUTLET

CONSTRUCTION SPECIFICATIONS

1. INSTALL 2 3/8 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

3 TEMPORARY SLOPE DRAIN

N.T.S.



4 TEMPORARY DIVERSION BERM

N.T.S.

TEMPORARY SEEDING

FOR LATE WINTER/EARLY SPRING

| SPECIES: | RATE (LB/ACRE): |
|--|-----------------|
| RYE (GRAIN) | 120 |
| ANNUAL LESPEDEZA (KOBE IN PIEDMONT & COASTAL PLAIN, KOREAN IN MOUNTAINS) | 50 |

| SEEDING DATES |
|---------------------------------|
| MOUNTAINS--FEB. 1 - MAY 1 |
| PIEDMONT--JAN. 1 - MAY 1 |
| COASTAL PLAIN--DEC. 1 - APR. 15 |

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FOR SUMMER

| SPECIES: | RATE (LB/ACRE): |
|---------------|-----------------|
| GERMAN MILLET | 40 |

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDAN GRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

| SEEDING DATES |
|----------------------------------|
| MOUNTAINS--MAY 15 - AUG. 15 |
| PIEDMONT--MAY 1 - AUG. 15 |
| COASTAL PLAIN--APR. 15 - AUG. 15 |

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

FOR FALL

| SPECIES: | RATE (LB/ACRE): |
|-------------|-----------------|
| RYE (GRAIN) | 120 |

| SEEDING DATES |
|---|
| MOUNTAINS--AUG. 15 - DEC. 15 |
| PIEDMONT AND COASTAL PLAIN--AUG. 15 - DEC. 30 |

SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

SEEDBED PREPARATION:

1. RIP AREA TO BE SEED TO A MINIMUM DEPTH OF 4-6 INCHES.
2. REMOVE ALL LOOSE ROCKS, ROOTS, ETC. LEAVING SURFACE SMOOTH AND UNIFORM.
3. APPLY SEED, AGRICULTURAL LIME, FERTILIZER AND SUPER PHOSPHATE UNIFORMLY AND MIX WITH THE SOIL.
4. SEED ON A FRESHLY PREPARED SEEDBED AND COVER THE SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
5. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.

MAINTENANCE PLAN

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

TEMPORARY SEEDING

RESEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE.

TEMPORARY DIVERSIONS

INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

SKIMMER BASINS INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER), RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

SILT FENCE

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REPLACE BURLAP EVERY 60 DAYS. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

PERMANENT GROUND COVER

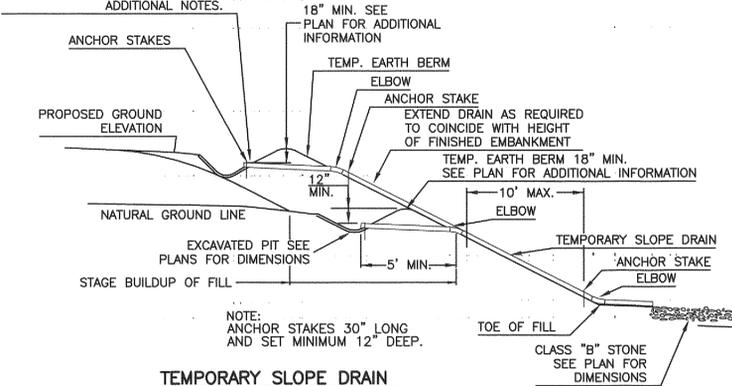
THE OWNER OR RESPONSIBLE PARTY IS RESPONSIBLE FOR THE LONG-TERM MAINTENANCE OF THE GROUND COVER ON THE PROPERTY. GROUND COVER MUST BE MAINTAINED TO A DEGREE THAT PREVENTS SOIL EROSION AND SEDIMENTATION AT ALL TIMES.

PERMANENT SEEDING

ALL UNPAVED DISTURBED AREAS (OR LAWN TO BE REESTABLISHED) OUTSIDE PLANTING BED TO BE SEED WITH AN EVEN MIXTURE OF REBEL II, FALCON AND JAGUAR FINE FESCUES, OR APPROVED EQUAL, AT A RATE OF 5-6 LBS./1,000 S.F. SO AS TO PRODUCE A THICK, FIRM STAND OF GRASS. FERTILIZE AT A RATE OF 10 LBS./1,000 S.F. WITH 10-10-10 SLOW-RELEASE FERTILIZER (USE STRAW AND ASPHALT EMULSION TO COVER SEED UNTIL STABLE). APPLY LIME ACCORDING TO SOIL TEST, OR APPLY 4,000 LBS./ACRE SLOW-RELEASE PELLETIZED AGRICULTURAL LIMESTONE.

| SEEDING DATES |
|----------------------------------|
| AUG. 20 - OCT. 25 & FEB. 1 - MAY |

EACH SLOPE DRAIN TO HAVE A FLOC LOG BY APPLIED POLYMER SYSTEMS, INC(1-678-494-5298). INSTALLED IN THE UPSTREAM END, REPLACE AS NECESSARY SEE SHEET C-3.0 FOR ADDITIONAL NOTES.



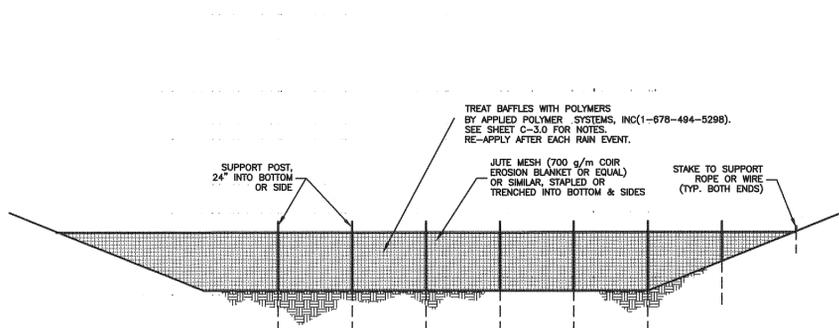
NOTES:

1. WHEN A LONG DELAY IS EXPECTED BETWEEN FINAL GRADE AND IMPLEMENT OF A PERMANENT DRAINAGE SYSTEM PROTECT THE INLET BY PLACING A TEE SECTION ON THE INLET AND/OR BY LINING THE INLET AREA WITH CLASS B STONE OR ASPHALT CONCRETE PLANT MIX AS DIRECTED BY THE ENGINEER.
2. USE CLASS B STONE FOR EROSION CONTROL AT OUTLET LOCATIONS SUBJECT TO SCOURING. SILT BASIN TYPE B MAY ALSO BE UTILIZED TO CONTAIN SEDIMENT.

5 TEMPORARY SLOPE DRAIN

N.T.S.

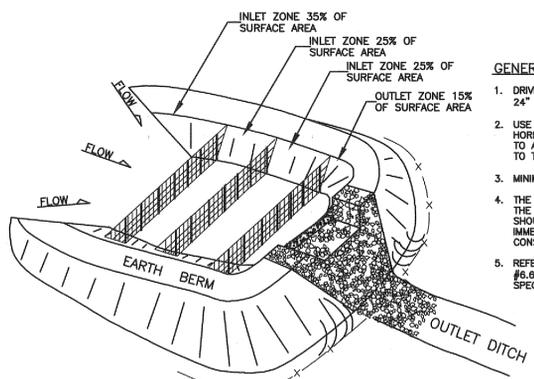




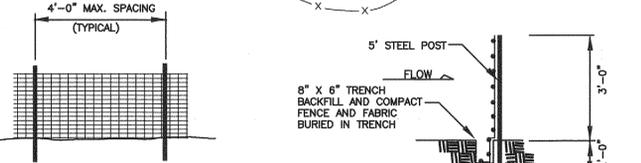
NOTE:
INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.
AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND STABILIZE IT.

1 BAFFLE DETAIL

N.T.S.

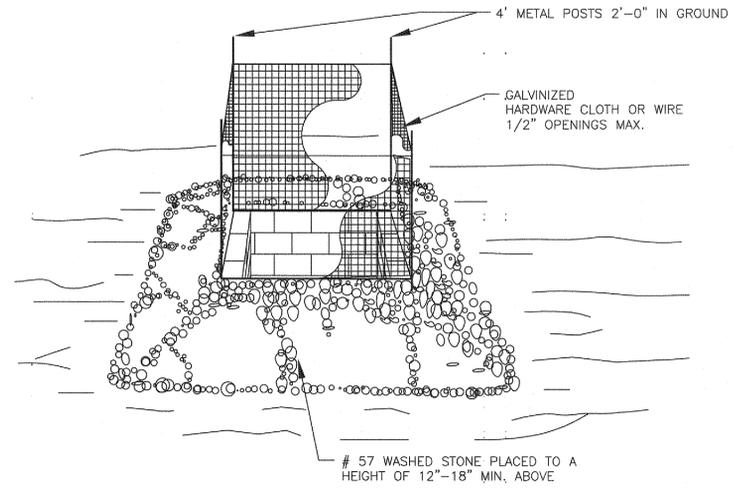


- GENERAL NOTES:**
1. DRIVE 5" STEEL POST AT LEAST 24" INTO SOLID GROUND.
 2. USE STAPLES 1' APART HORIZONTALLY AND VERTICALLY TO ATTACH THE FILTER FABRIC TO THE WIRE FENCE.
 3. MINIMUM BAFFLE SPACING IS 10'.
 4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERMS SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.
 5. REFER TO NCESPDM SECTION #6.65 FOR ADDITIONAL SPECIFICATIONS.



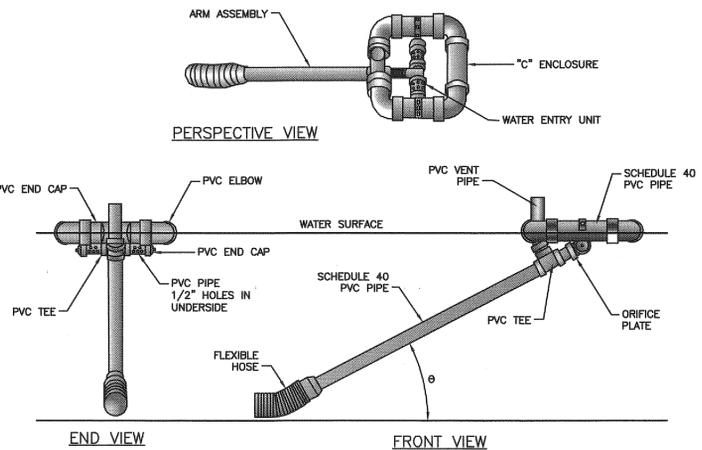
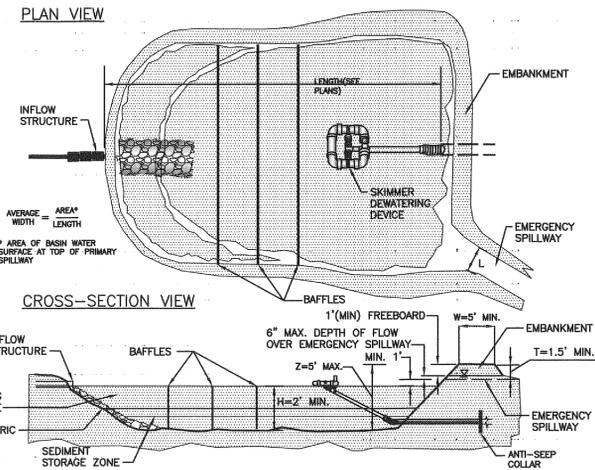
3 SKIMMER FILTER BASIN SPILLWAY

N.T.S.



4 WIRE/STONE INLET PROTECTION

SCALE: NTS



2 SKIMMER BASIN

N.T.S.

SKIMMER

Maintenance of Fiber Filtration Tubes

To assure long term performance, Fiber Filtration Tubes (FFTs) installations must be properly maintained. By definition, these devices are designed to provide filtration and it is intuitive that a properly functioning filter will eventually need to be replaced. This is the case with the water, oil and air filters that we all use on a daily basis.

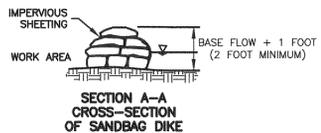
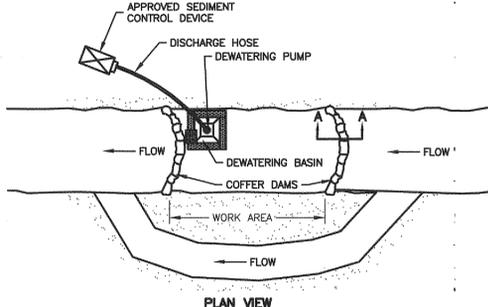
The first maintenance activity for FFTs is to inspect the installation every two weeks and/or after each significant precipitation event (typically > 1/2" of rainfall) as mandated by the US EPA NPDES regulations. When sediment accumulations reach 1/3 of the FFT height the sediment should be removed to insure storage capacity for the next event. This may be accomplished using hand labor or a small bucket loader. Care must be taken to prevent damage to the FFTs. Replace all FFTs that display torn netting and/or excessive deformation.

Unlike many sediment retention devices that simply act as barriers to slow water flow velocities, FFTs are also designed to capture sediment within their 3-D matrix. As filtered material accumulates the matrix will eventually begin to blind or clog resulting in reduced flow rates and increased turbidity of water exiting the FFT. The functional longevity of an FFT is dependent upon a variety of site specific environmental conditions including duration of installation, sediment composition, the presence/type of a flocculant and amount of water that has passed through the device. The functional longevity of an FFT must be determined by regularly scheduled field inspections and on site experience will lead to predictive results in a given environment.

Fiber Filtration Tubes are designed to photo-biodegrade within two years. Depending upon application and long term land use the devices may be left in place or removed. FFTs will support long term plant growth in areas conducive to establishment of dense vegetation. If an FFT is removed there are at least three options for disposal and re-use.

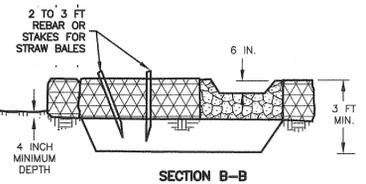
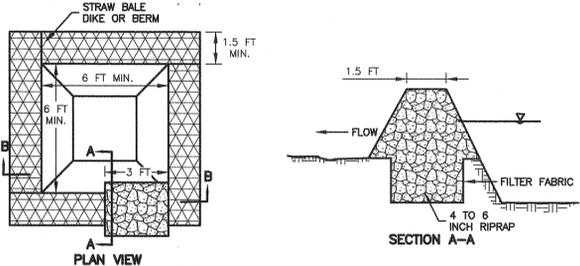
1. The FFT may be re-used for additional sediment retention or storm water treatment applications if there is not excessive sediment loading.
2. The FFT may be cut open and the matrix may be rolled out to be used as a blanket if there is not excessive sediment loading.
3. The FFT may be hauled to a landfill if there are potentially undesirable constituents trapped within the matrix.

To replace, carefully pull out the anchoring staples and stakes. Take care not to damage erosion control devices that have been installed in conjunction with FFTs. The staples and stakes may be reused if they demonstrate no significant damage and can be driven back into the ground. Remove the "open" FFT and reshape the existing trench, if applicable. Smooth the soil surface and install the new FFTs following the published installation guidelines. Be sure to compact any residual soil against the base of the FFTs to minimize the chance of undermining by water.



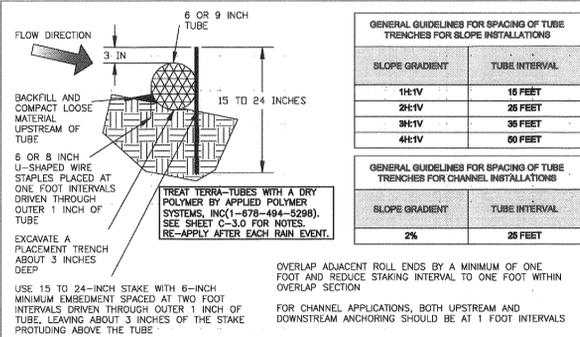
6 TEMPORARY BYPASS CHANNEL & DEWATERING DETAIL

SCALE: NTS



7 TEMPORARY DEWATERING BASIN DETAIL

SCALE: NTS



TERRA-TUBES
Fiber Filtration Tubes

PROFILE
TERRA-TUBES
PROFILE VIEW
SLOPE/CHANNEL DETAIL

FILE NAME: Terra Tube Profile View - Slope and Channel Detail.dwg
CONTACT NUMBER: 800-568-8681
WEB SITE: www.stimmelproducts.com
DRAWN BY: MCB
DATE: 4/15/07
SCALE: NOT TO SCALE
CHECKED BY: MCB
DATE: 4/15/07
SHEET 1 OF 2

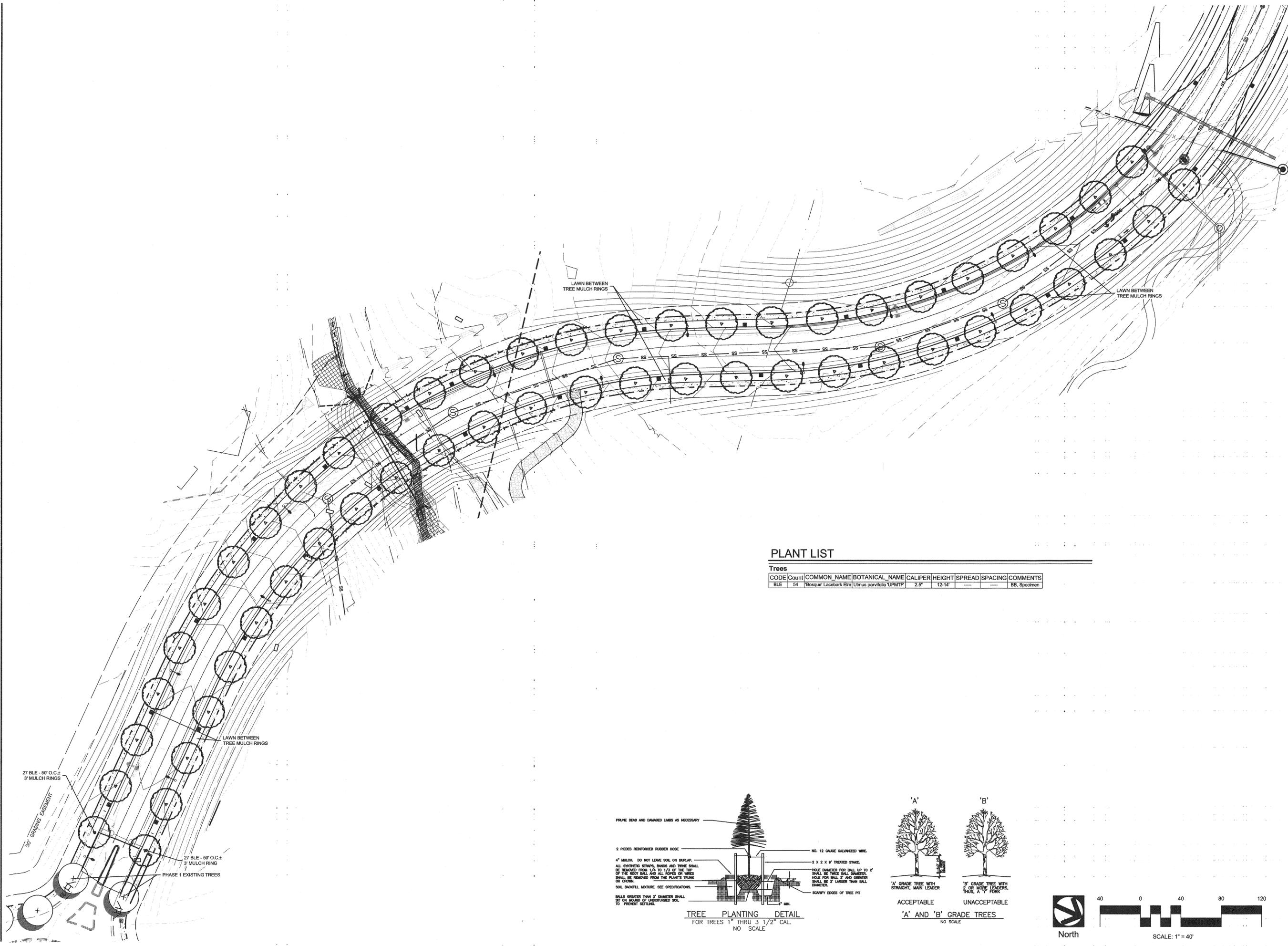
5 TERRA TUBE

SCALE: NTS



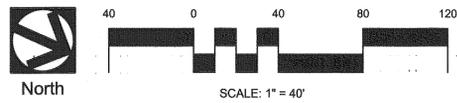
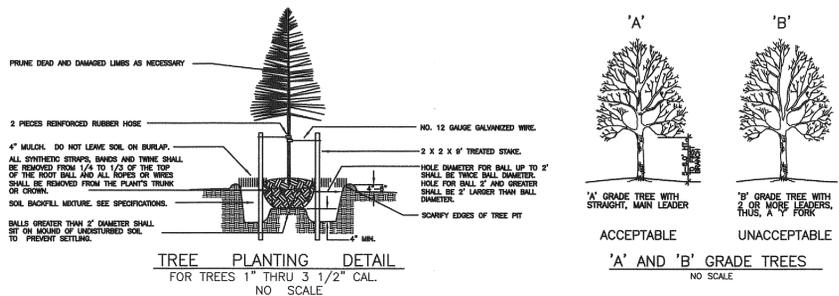
**VILLAGE POINT DRIVE
PHASE III**
CLEMMONS, NORTH CAROLINA

**STREET
TREE
PLANTING
PLAN PH3**



PLANT LIST

| CODE | Count | COMMON_NAME | BOTANICAL_NAME | CALIPER | HEIGHT | SPREAD | SPACING | COMMENTS |
|------|-------|-----------------------|--------------------------|---------|--------|--------|---------|--------------|
| BLE | 54 | 'Bosque' Lacebark Elm | Ulmus parvifolia 'UPMTP' | 2.5" | 12-14' | --- | --- | BB, Specimen |



F:\15-077\Drawings\CD\15-077 -LAND Ph_3_Ph_4.dwg : L-1.0 02/19/16 8:48am