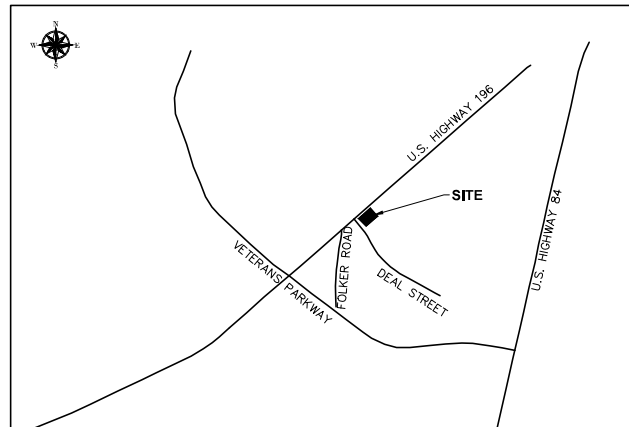


SITE DEVELOPMENT PLANS FOR APARTMENT COMPLEX AT DEAL STREET

OWNER
DUSTIN MCCAIN
 202 E GENERAL STEWART WAY
 HINESVILLE, GEORGIA, 31313
 (843) 274-1504

24-HOUR CONTACT
DUSTIN MCCAIN
 (843) 274-1504
 DMCCAIN@EROOFCS.COM

Sheet Title	Sheet Title
C1.1	TITLE SHEET
C1.2	GENERAL NOTES
C1.3	EXISTING CONDITIONS AND DEMOLITION PLAN
C2.1	STAKING PLAN
C2.2	DOT
C3.1	PAVING, GRADING AND DRAINAGE PLAN
C3.2	DRAINAGE PROFILES
C4.1	UTILITY PLAN
C4.2	SANITARY SEWER PROFILE
C5.1	LANDSCAPE PLAN
C5.2	IRRIGATION PLAN
C5.3	LANDSCAPE PLANTING DETAILS
C6.1	EROSION CONTROL PLAN (INITIAL)
C6.2	EROSION CONTROL (INTERMEDIATE)
C6.3	EROSION CONTROL PLAN (FINAL)
C6.4	EROSION CONTROL NOTES
C6.5	EROSION CONTROL NOTES
C6.6	USPS QUAD MAP
C6.7	EROSION CONTROL DETAILS
C6.8	EROSION CONTROL DETAILS
C6.9	EROSION CONTROL DETAILS
C7.1	SITE DETAILS
C7.2	SITE DETAILS
C7.3	SITE DETAILS
C7.4	SITE DETAILS
C7.5	SITE DETAILS
C7.6	SITE DETAILS
C7.7	SITE DETAILS
C7.8	SITE DETAILS



VICINITY MAP
N.T.S.

LOCATION: N31° 50' 04.45", W81° 36' 33.14"
 (31.834570, 81.609205)
 DISTURBED ACREAGE: 3.20 AC.
 TOTAL SITE ACREAGE: 3.16 AC.

DRAWING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
RIGHT OF WAY	--- R/W	--- R/W
EDGE OF PAVEMENT	---	---
DITCH CENTERLINE	---	---
SANITARY SEWER	--- 8"S	---
WATER LINE	--- 10"W	---
FORCE MAIN	--- FM	---
UNDERGROUND GAS LINE	--- 8"G	---
CONTOURS	--- 8'1	---
STORM DRAINAGE PIPE	--- 8"1	---
ELEVATION	81.90	X 81.90
SILT FENCE NON-SENSITIVE	81	---
SILT FENCE SENSITIVE	81	---
INLET PROTECTION	81	---
CHECK DAM - HAY BALE	81	---
CHECK DAM - RIP RAP	81	---
CONSTRUCTION EXIT	81	---
STORM OUTLET PROTECTION	81	---
SILT FENCE	81	---
MULCHING	Dx1	---
TEMPORARY GRASSING	Dx2	---
PERMANENT GRASSING	Dx3	---
FIRE HYDRANT	81	---
SEWER MANHOLE	81	---
WATER VALVE	81	---
DRAINAGE FLOW	81	---
WATER METER	81	---
BENCHMARK	81	---
WELL	81	---
GUY POLE	81	---
IRON PIN	81	---
TELEPHONE PEDESTAL	81	---
POWER POLE	81	---
PROPOSED CONCRETE	81	---
PROPOSED ASPHALT	81	---
GDOT ASPHALT	81	---

REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 12004
 STATE OF GEORGIA

REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 12004
 STATE OF GEORGIA

HINESVILLE:
 114 North Commercial Street
 Hinesville, GA 31303
 (912) 948-8662

SAVANNAH:
 308 Commercial Drive
 Savannah, GA 31406
 (912) 335-0248

TRLONG
ENGINEERING P.C.
www.trlong.com

SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET

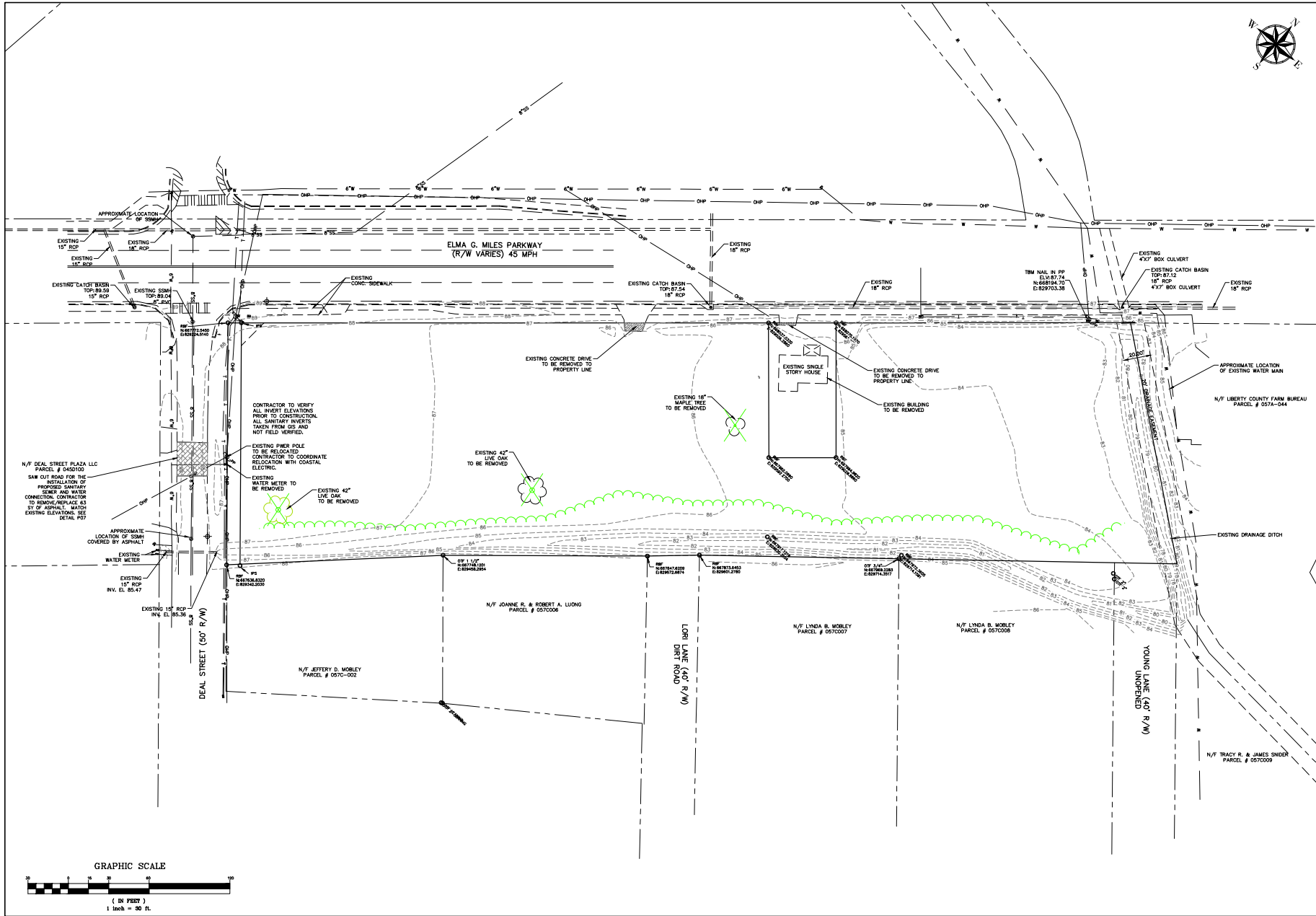
SHEET NAME:
 TITLE SHEET

REVISIONS:

1	1.0/0/2024 LCPC REV/COM
2	2.3/0/2024 FOUND/REV
3	3.7/2/2024 LCPC REV
4	4.6/29/2024 LCPC REV
5	
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INITIAL DATE: 06/23/2024
 DRAWN BY: JES
 CHECKED BY: THJ
 PROJECT #: 2024-12

SHEET NUMBER:
 C.I.1



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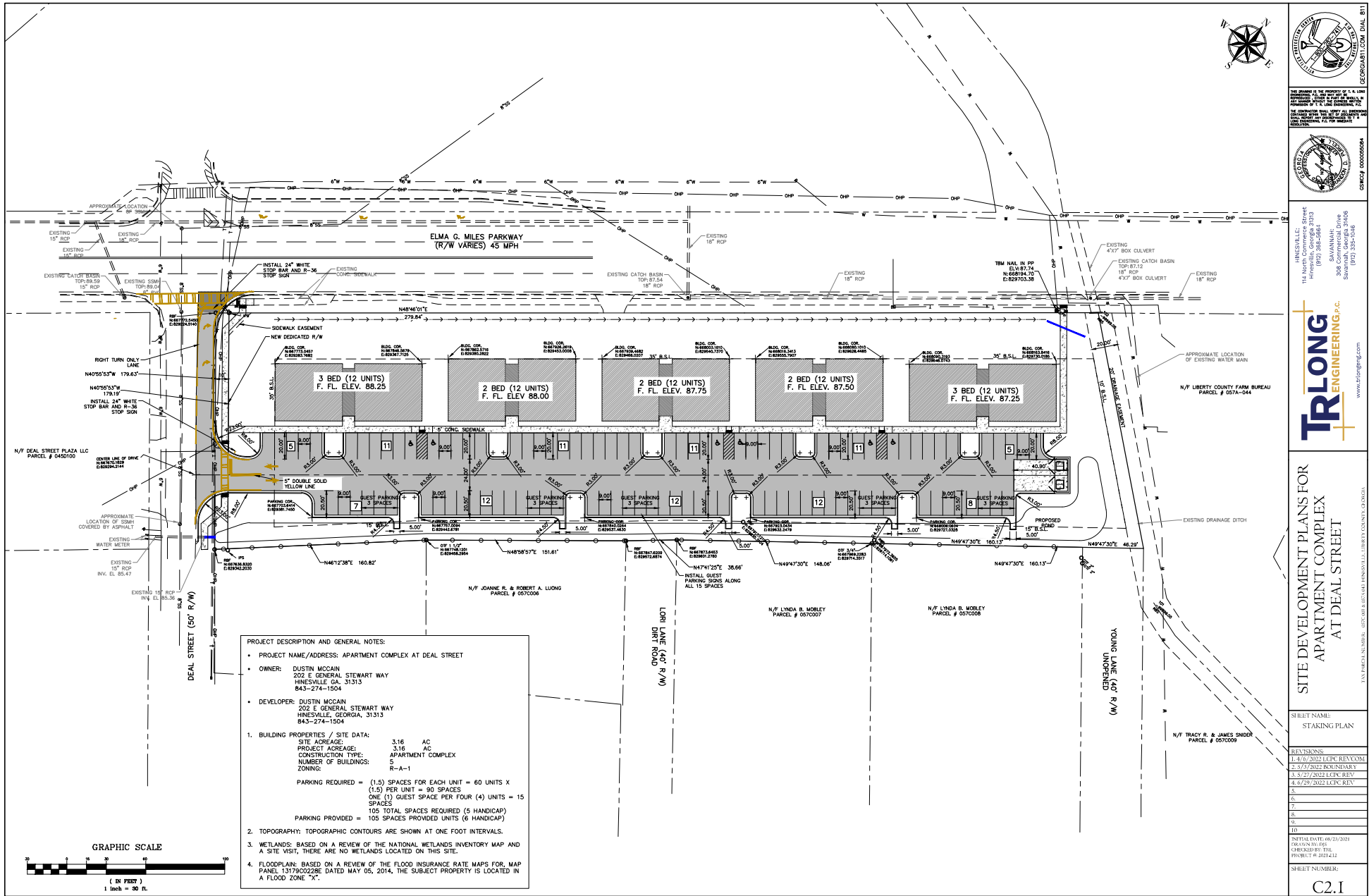


T. R. LONG ENGINEERING, P.C.
 116 North Commercial Street
 Hinesville, GA 31042-2123
 (912) 948-8666
 SAVANNAH
 308 Commercial Drive
 Savannah, GA 31406
 (912) 335-0241



**SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET**

SHEET NAME:	EXISTING CONDITIONS AND DEMOLITION PLAN
REVISIONS:	
1.	11/16/2021 LCP REVCOM
2.	12/27/2021 ROUNDRY
3.	3/27/2022 LCP REV
4.	6/29/2022 LCP REV
5.	
6.	
7.	
8.	
9.	
10.	
INITIAL DATE:	06/23/2021
DESIGNED BY:	TR
CHECKED BY:	TR
PROJECT #:	2021-12
SHEET NUMBER:	CI.3



HINESVILLE, Georgia
114 S. Main Street
Hinesville, Georgia 31303
(912) 384-0684

SAVANNAH, Georgia
306 S. Washington
Savannah, Georgia 31406
(912) 333-0148

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ENGINEERING P.C.
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SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

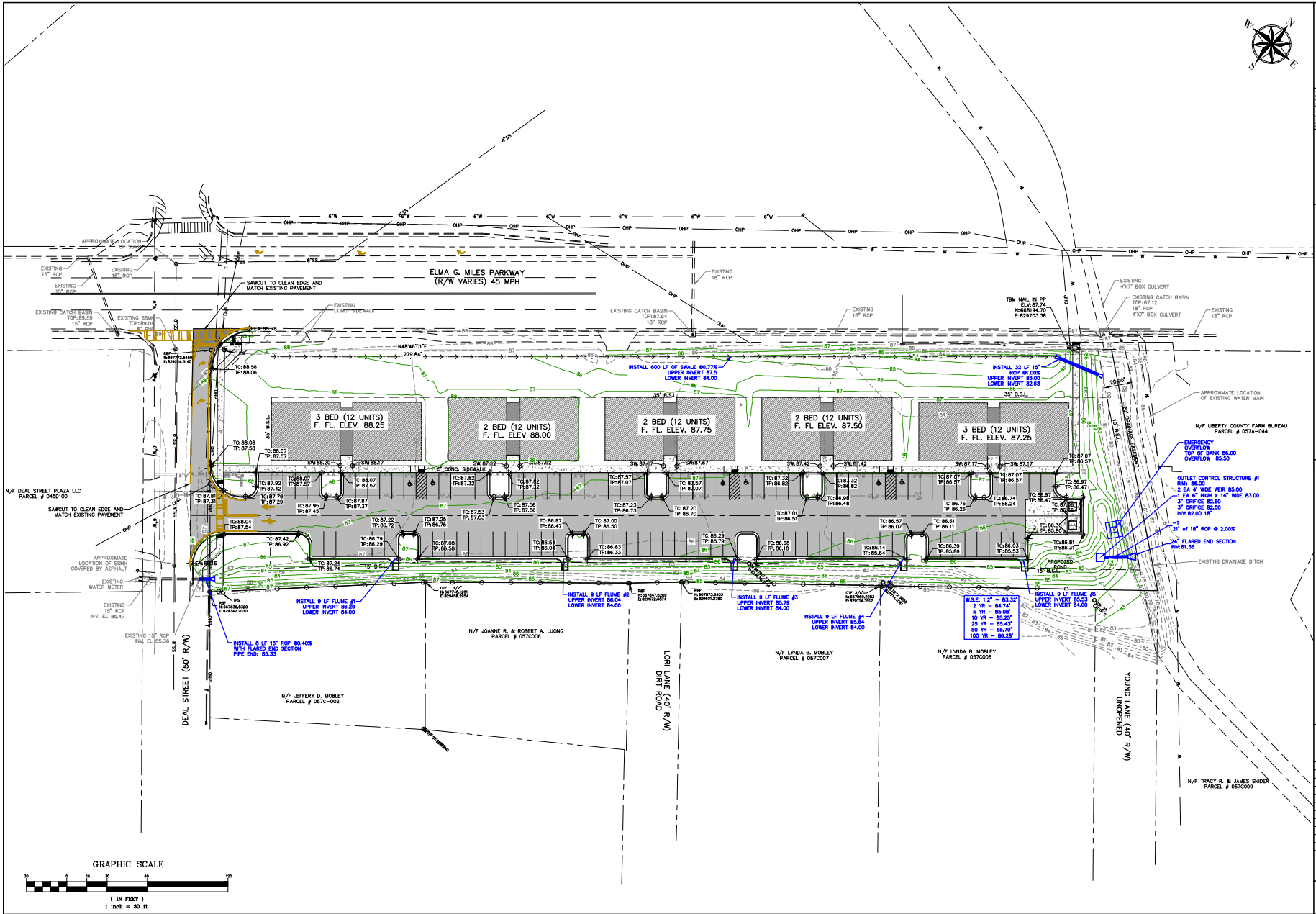
SHEET NAME:
STAGING PLAN

REVISIONS:

1	1/7/2024	LCPC REVIEW
2	3/7/2024	CONCURRENCE
3	3/27/2024	LCPC REV
4	6/29/2024	LCPC REV
5		
6		
7		
8		
9		
10		

INITIAL DATE: 06/23/2024
 DRAWN BY: PLS
 CHECKED BY: TPL
 PROJECT #: 2024-12

SHEET NUMBER:
C2.1



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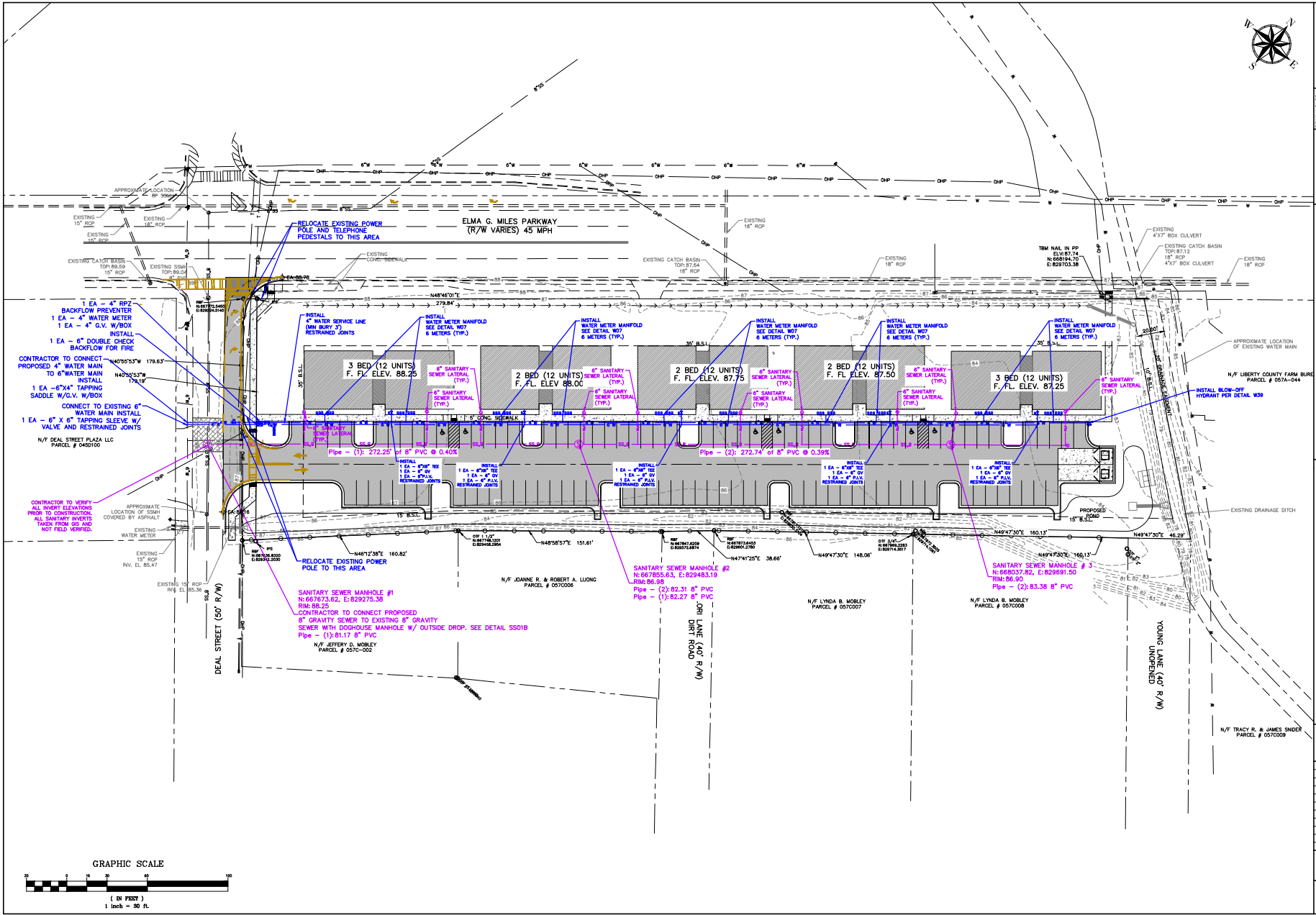


MINNESOTA: 114 Marshall Street
Huntsville, Georgia 37313
(972) 384-0684
SAVANNAH: 306
Savannah, Georgia 31406
(912) 335-1048

TR LONG
ENGINEERING P.C.
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SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

SHEET NAME:		PAVING, GRADING AND DRAINAGE PLAN
REVISIONS:		
1	11/17/2021	LCPC REVIEW
2	3/7/2022	BOUNDARY
3	3/27/2022	LCPC REV
4	6/29/2022	LCPC REV
5		
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8		
9		
10		
INITIAL DATE: 06/23/2021		
DRAWN BY: TJS		
CHECKED BY: TJS		
PROJECT #: 2021-12		
SHEET NUMBER:		C3.I



TR LONG
 ENGINEERING P.C.
 114 SWANNAH
 HUNTSVILLE, GEORGIA 37933
 (937) 384-0664
 SWANNAH
 306 SWANNAH
 SWANNAH, GEORGIA 31406
 (912) 333-1048

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 ENGINEERING P.C.
 www.trlong.com

SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET

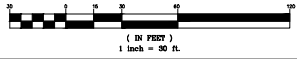
SHEET NAME:
 UTILITY PLAN

REVISIONS:

1	11/16/2021	LCPC REV/CORR
2	3/1/2022	CONTRACT
3	5/27/2022	LCPC REV
4	6/29/2022	LCPC REV
5		
6		
7		
8		
9		
10		

INITIAL DATE: 06/23/2021
 DRAWN BY: TRL
 CHECKED BY: TRL
 PROJECT #: 2021-12
 SHEET NUMBER:
 C4.1

GRAPHIC SCALE





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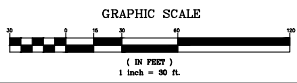
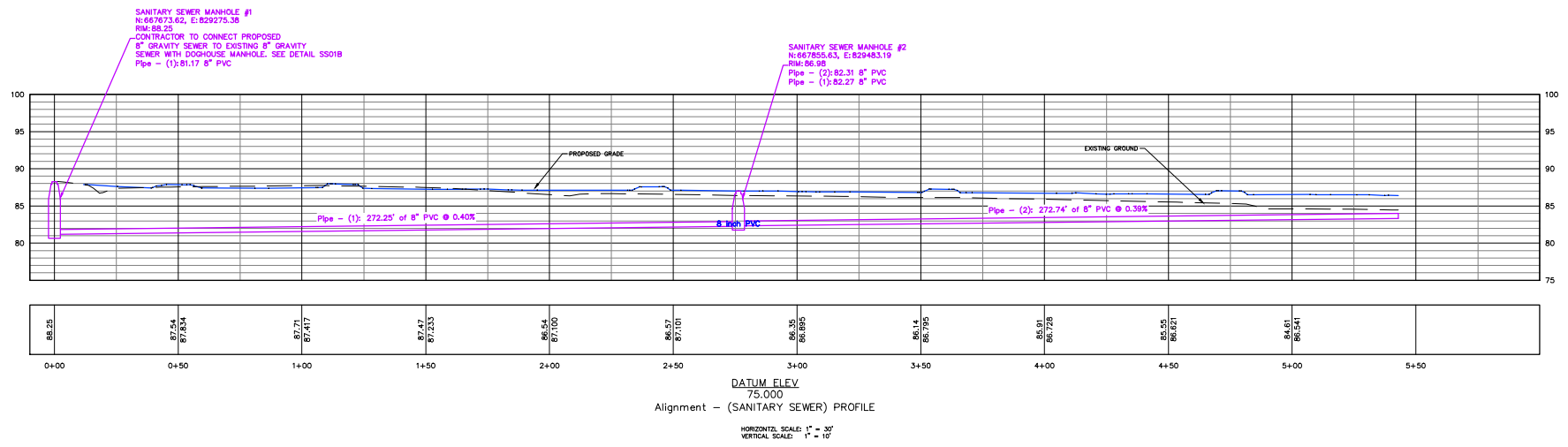


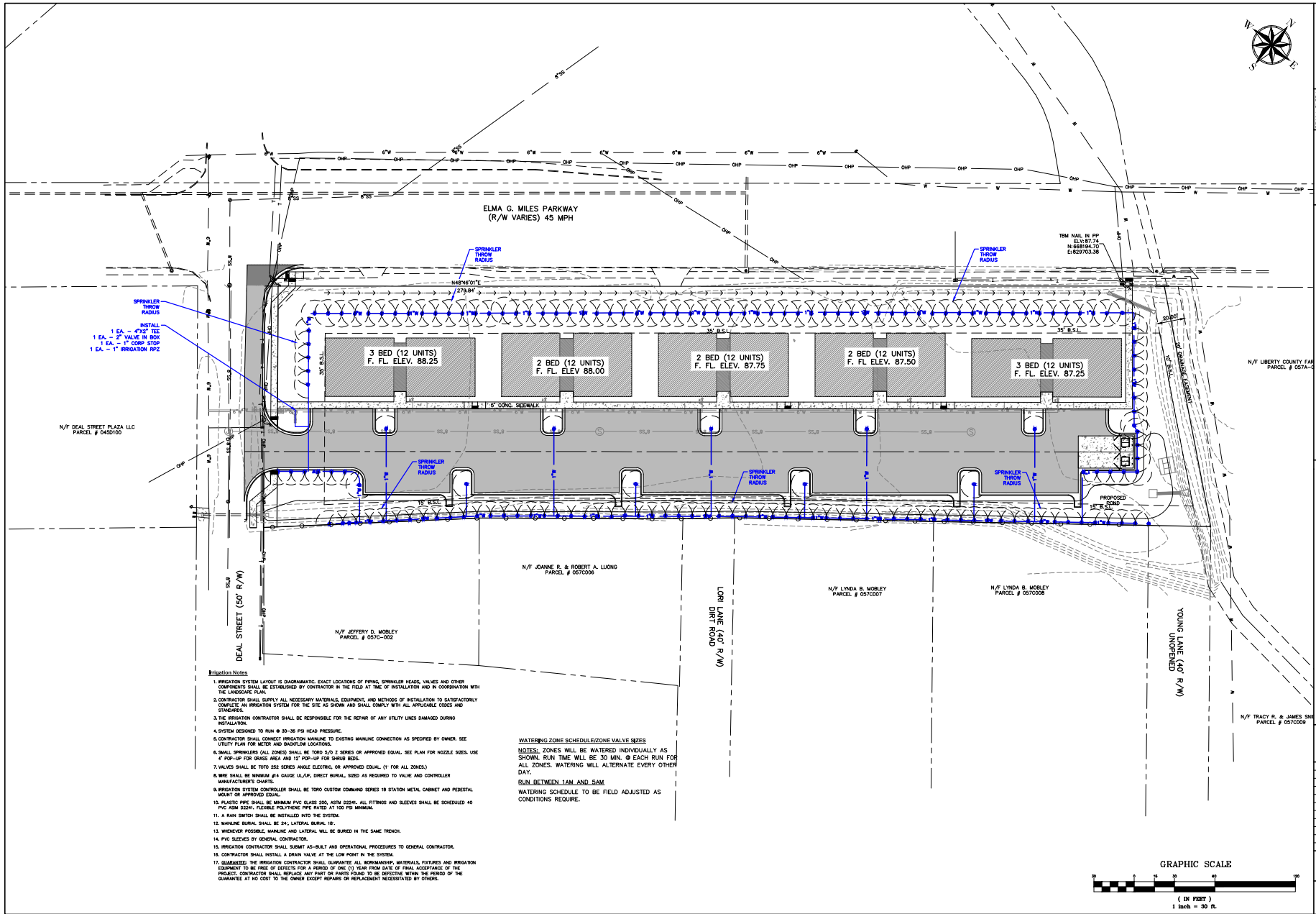
T. R. LONG ENGINEERING, P.C.
 114 HUNTSVILLE STREET
 HUNTSVILLE, GEORGIA 35893
 (972) 384-6884
 SAVANNAH OFFICE
 306 S. GUYTON AVENUE
 SAVANNAH, GEORGIA 31406
 (912) 335-1048



SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET

SHEET NAME: SANITARY SEWER PROFILE	
REVISIONS:	
1.	1.3/7/2021 LCPC REV/COM
2.	2.3/7/2021 BOUNDARY
3.	3.2/2/2022 LCPC REV
4.	4.6/29/2022 LCPC REV
5.	
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10.	
INITIAL DATE: 06/23/2024 DRAWN BY: PLS CHECKED BY: TRL PROJECT #: 2024-12	
SHEET NUMBER: C4.2	





GEORGIA 1204 DIAL 011

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SAVANNAH, Georgia 31406
300 S. Swanwick
Savannah, Georgia 31406
(912) 335-0148

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SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

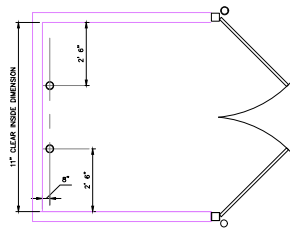
SHEET NAME:
IRRIGATION PLAN

REVISIONS:

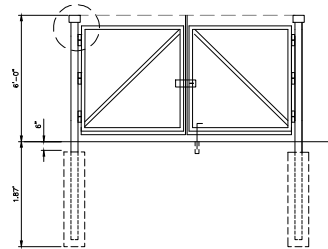
1	4/7/2024	LCPC REVIEW
2	3/7/2024	FOUNDATION
3	3/7/2024	LCPC REV
4	6/29/2024	LCPC REV
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INITIAL DATE: 06/23/2024
CHECKED BY: TLL
PROJECT #: 2024-12

SHEET NUMBER:
C5.2

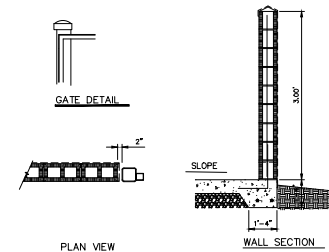


DUMPSTER AREA PLAN VIEW
NOT TO SCALE



ELEVATION DUMPSTER

DUMPSTER ENCLOSURE GATE
NOT TO SCALE



DUMPSTER ENCLOSURE WALL
NOT TO SCALE

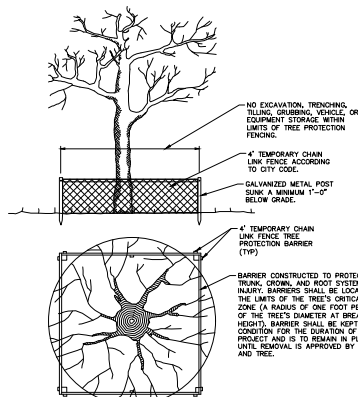


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1145 HUNTERS HILL, SWANNAH, GEORGIA 31406
(912) 334-0684
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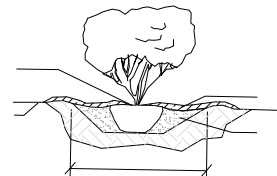
TRLONG
ENGINEERING P.C.

SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

SHEET NUMBER: C5.3

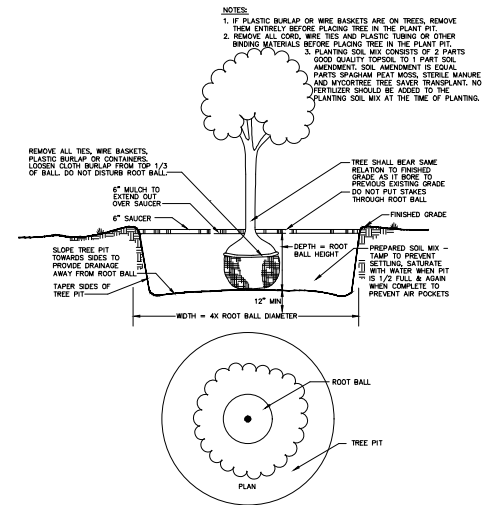


FOR ADDED PROTECTION:
- PROVIDE 4" DEEP WOOD CHIP MULCH OVER ANY UNPROTECTED ROOT ZONE.
- MAKE CLEAN CUTS ON ROOTS EXPOSED BY GRADING AND BACKFILL IMMEDIATELY.
- PROVIDE TEMPORARY IRRIGATION WHERE PRACTICAL AND FEASIBLE.



49 TYPICAL SHRUB PLANTING
C-11 SCALE: N.T.S.

- SHRUB PLANTING NOTES:
1. DIG PLANTING HOLE AT LEAST 2X THE WIDTH OF THE ROOT BALL OR CONTAINER.
 2. SCARIFY SUBGRADE AND SIDES OF PLANTING HOLE WHEN PLANTING IN CLAY SOIL.
 3. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE, OR 1-2" ABOVE IF THE SOIL IS PRONE TO SETTLING.
 4. IF CONTAINER GROWN PLANT, GENTLY SLIDE PLANT OUT OF CONTAINER, DISTURB THE ROOTS.
 5. IF BAG PLANT, REMOVE BURLAP FROM AT LEAST THE TOP 12 INCHES OF THE ROOT BALL, WITHOUT DISTURBING THE ROOT BALL. REMOVE ALL CORD FROM THE TRUNK. REMOVE BURLAP AND WIRE BASKET (IF PRESENT) FROM THE ROOT BALL.
 6. BACK FILL THE PLANTING HOLE WITH EXCAVATED NATIVE SOIL, BROKEN UP OR TILLED. WATER TO REMOVE AIR POCKETS. DO NOT ADD AMENDMENTS.
 7. PLACE PINE STRAW OR BARK MULCH ON THE SURFACE TO A (SETTLED) DEPTH OF 1 TO 3 INCHES.



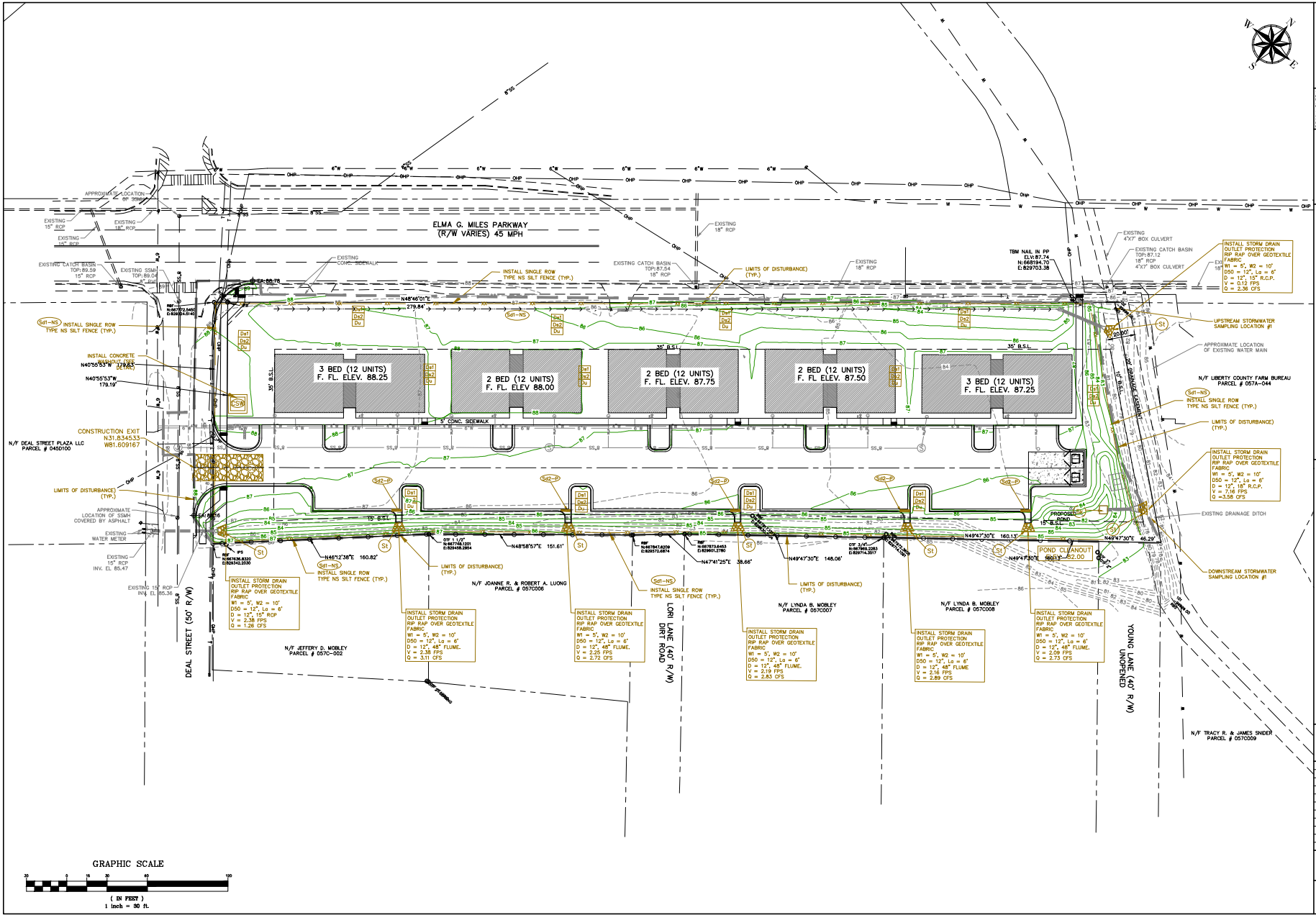
LARGE TREE PLANTING (OVER 6")
NOT TO SCALE



STANDARD CONSTRUCTION DETAILS
TREE PROTECTION

APPROVED: DATE: NOVEMBER 2019 SCALE: N.T.S.

DETAIL NUMBER: T2



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PROJECT: 14. HUNTSVILLE, GEORGIA 37133
 CLIENT: SAVAANAH
 ADDRESS: 208 SAVAANAH DRIVE, SHANNINGHAM, GEORGIA 31406
 PHONE: (912) 335-0148

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**SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET**

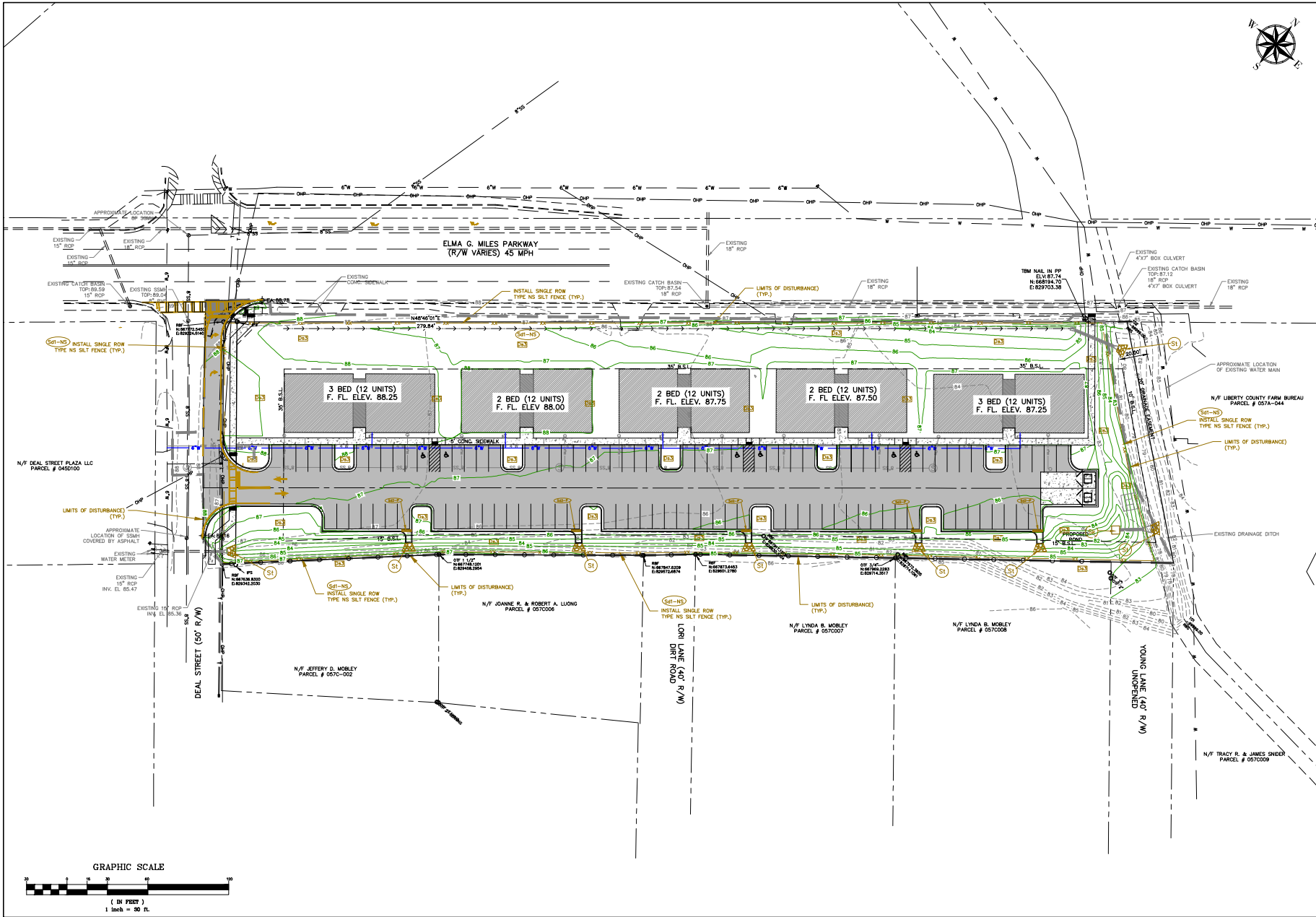
SHEET NAME:
 EROSION CONTROL (INTERMEDIATE)

REVISIONS:

1	1/17/2023	LCPC REVIEW
2	3/7/2023	CONSTRUCTION
3	3/27/2023	LCPC REV
4	6/29/2023	LCPC REV
5		
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9		
10		

INITIAL DATE: 06/23/2021
 DRAWN BY: PJS
 CHECKED BY: THJ
 PROJECT #: 2021-112

SHEET NUMBER:
C6.2



THE ENGINEER HAS REVIEWED THE PROJECT AND HAS FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEORGIA DEPARTMENT OF TRANSPORTATION AND THE GEORGIA DEPARTMENT OF REVENUE. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PROJECT AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PROJECT AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED.

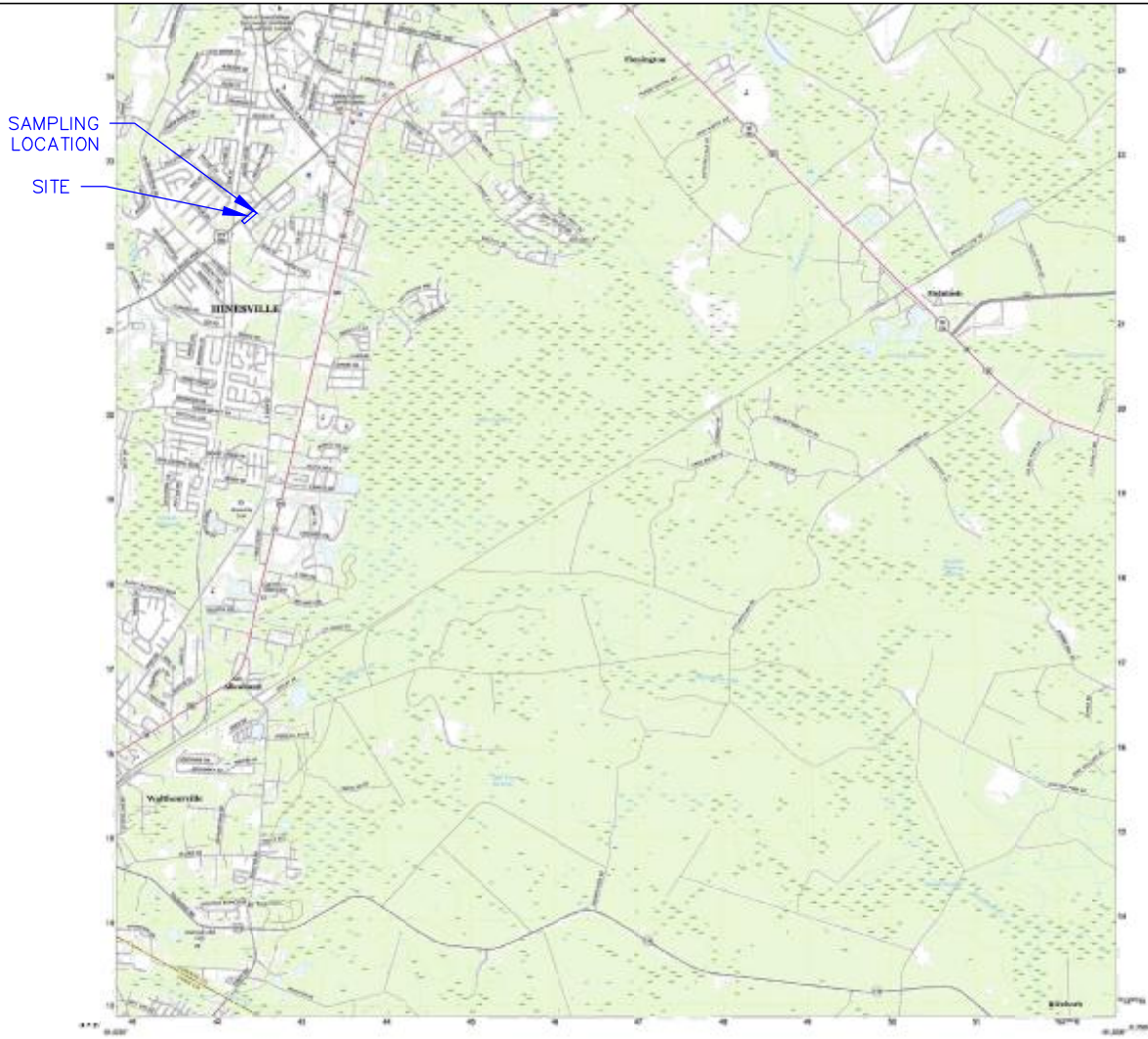


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 11468 Travis Long
 (912) 334-0664
 SAVANNAH, GEORGIA
 30808 Travis Long
 (912) 334-0664

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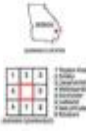
SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET

SHEET NAME: EROSION CONTROL PLAN (FINAL)	
REVISIONS:	
1.	11/7/2023 LCPC REV/COM
2.	12/7/2023 ROUND/REV
3.	3/27/2024 LCPC REV
4.	6/29/2024 LCPC REV
5.	
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10.	
INITIAL DATE: 06/23/2024	
DRAWN BY: TRL	
CHECKED BY: TRL	
PROJECT #: 2023-12	
SHEET NUMBER: C6.3	



SAMPLING LOCATION
SITE

Prepared by the United States Geological Survey
 Department of the Interior
 750 Capitol Mall, Sacramento, CA 95834
 National Center for Earthquake Information Service
 1515 McPherson Ave., Golden, CO 80401
 303-271-4800
 www.fgdl.gov
 11/2002



SYMBOLS

Proposed	Construction
Boundary	Water
Water	Highway
Water	Other
Water	Other

HINESVILLE, GA
 30508



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 SAVANNAH: 306 S. SAVANNAH, Savannah, Georgia 31406 (912) 335-1048



**SITE DEVELOPMENT PLANS
 FOR APARTMENT COMPLEX
 AT DEAL STREET**

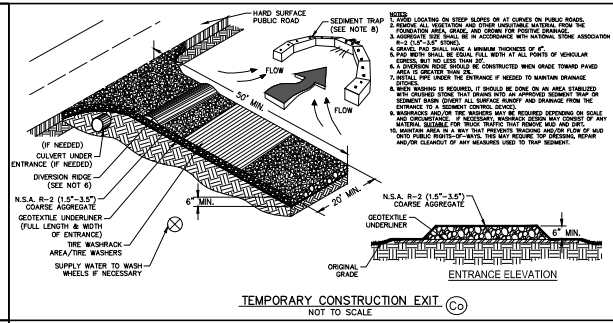
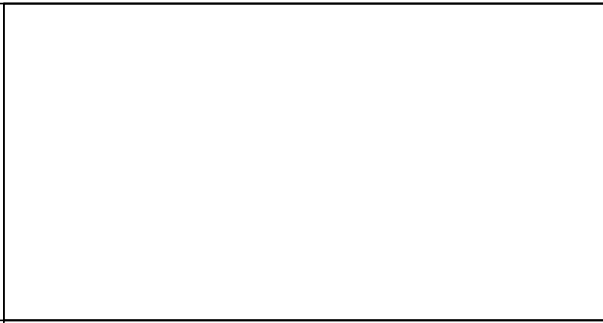
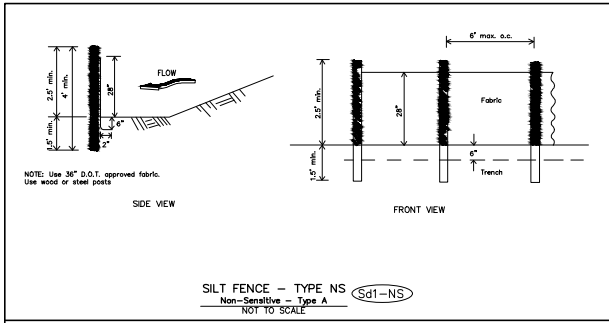
SHEET NAME:
 USGS QUAD MAP

REVISIONS

1	4/7/2021	LCPC REV/COM
2	5/7/2021	BOUNDARY
3	6/2/2022	LCPC REV
4	6/29/2022	LCPC REV
5		
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INITIAL DATE: 06/23/2024
 DRAWN BY: TLU
 CHECKED BY: TLU
 PROJECT #: 2024-12

SHEET NUMBER:
C6.6



SEALING THE JOINTS OF A 4\"/>

CONCRETE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION

1. FLOW THROUGH THE UPPER PORT OF A CURVE ON PUBLIC ROAD.

2. REMOVE ALL WEEDS, STICKS, BRUSH AND OTHER OBSTRUCTIONS FROM THE

3. FLOWLINE AREA, BEFORE AND AFTER THE PUBLIC ROADWAY.

4. SEDIMENT TRAP SHALL BE CONSTRUCTED WITH 18\"/>

5. SEDIMENT TRAP SHALL BE 2\"/>

6. FLOW LINE SHALL BE 2\"/>

7. DIVERSION ROSE SHALL BE CONSTRUCTED WITH 18\"/>

8. AREA TO BE GRADED TO MATCH DRAINAGE

9. SEDIMENT TRAP SHALL BE 2\"/>

10. WHEN BUSHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED

11. WITH GRASS SEED OR OTHER APPROPRIATE VEGETATION. THE

12. SEDIMENT TRAP SHOULD BE MAINTAINED FREE OF ALL

13. OBSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE

14. CONTRACTOR TO MAINTAIN THE SEDIMENT TRAP AND

15. DIVERSION ROSE IN GOOD WORKING ORDER AT ALL

16. TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

17. THE PROTECTION OF ALL EXISTING UTILITIES AND

18. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

19. THE PROTECTION OF ALL EXISTING UTILITIES AND

20. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

21. THE PROTECTION OF ALL EXISTING UTILITIES AND

22. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

23. THE PROTECTION OF ALL EXISTING UTILITIES AND

24. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

25. THE PROTECTION OF ALL EXISTING UTILITIES AND

26. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

27. THE PROTECTION OF ALL EXISTING UTILITIES AND

28. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

29. THE PROTECTION OF ALL EXISTING UTILITIES AND

30. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

31. THE PROTECTION OF ALL EXISTING UTILITIES AND

32. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

33. THE PROTECTION OF ALL EXISTING UTILITIES AND

34. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

35. THE PROTECTION OF ALL EXISTING UTILITIES AND

36. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

37. THE PROTECTION OF ALL EXISTING UTILITIES AND

38. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

39. THE PROTECTION OF ALL EXISTING UTILITIES AND

40. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

41. THE PROTECTION OF ALL EXISTING UTILITIES AND

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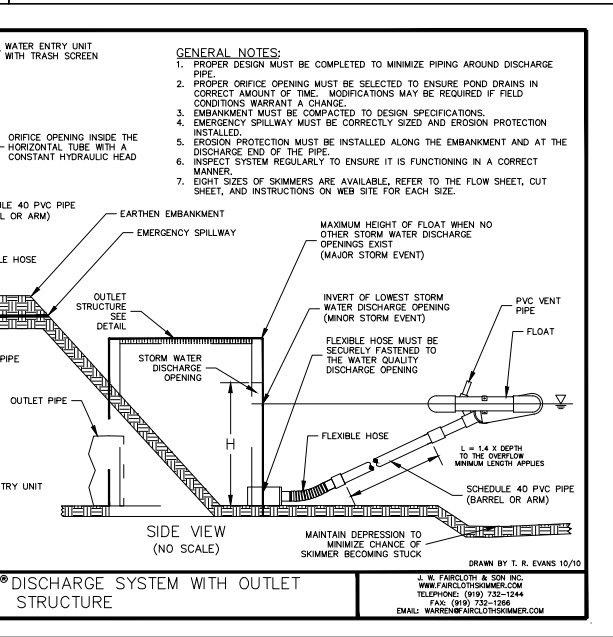
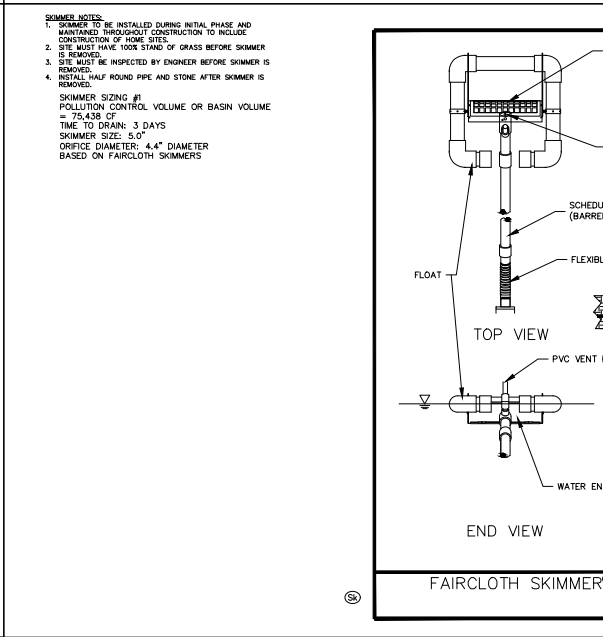
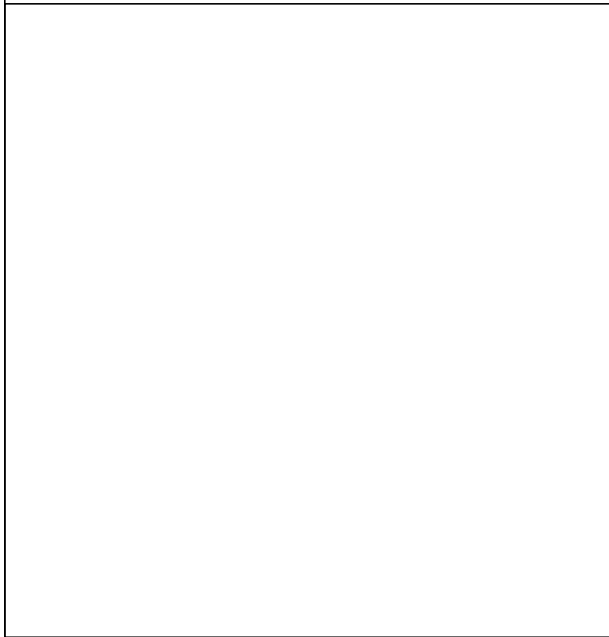
100. STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR



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SITE DEVELOPMENT PLANS
FOR APARTMENT COMPLEX
AT DEAL STREET

SHEET NAME:
EROSION CONTROL
DETAILS

REVISIONS:

1	1.0/6/2021	LCPC REV/COM
2	1.3/7/2021	BOUNDARY
3	3.7/2/2022	LCPC REV
4	6/29/2022	LCPC REV
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10		

INITIAL DATE: 06/23/2021
DRAWN BY: TRL
CHECKED BY: TRL
PROJECT #: 2021-012

SHEET NUMBER:
C6.7

CONCRETE WASHOUT AREA
 PURPOSE - PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, OR PERFORMING ON-SITE WASHOUT IN A DESIGNATED AREA TO PREVENT POLLUTANTS FROM ENTERING SURFACE WATERS OR GROUNDWATER.

CONDITIONS OF USE - CONCRETE WASHOUT AREA BEST MANAGEMENT PRACTICES ARE IMPLEMENTED ON CONSTRUCTION PROJECTS WHERE:

- CONCRETE IS USED AS A CONSTRUCTION MATERIAL.
- IT IS NOT POSSIBLE TO DISPOSE OF ALL CONCRETE WASTEWATER AND WASHOUT OFFSITE (READY MIX PLANT, ETC.).
- CONCRETE TRUCKS, PUMPS, OR OTHER CONCRETE COATED EQUIPMENT ARE WASHED ON-SITE.

DESIGN AND INSTALLATION SPECIFICATIONS

IMPLEMENTATION - THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:

- PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
- CONCRETE WASHOUT AREAS MAY BE PREFABRICATED CONCRETE WASHOUT CONTAINERS, OR SELF-INSTALLED STRUCTURES (ABOVE-GRADE OR BELOW-GRADE).
- PREFABRICATED CONTAINERS ARE MOST RESISTANT TO DAMAGE AND PROTECT AGAINST SPILLS AND LEAKS. COMPANIES MAY OFFER DELIVERY SERVICE AND PROVIDE REGULAR MAINTENANCE AND DISPOSAL OF SOLID AND LIQUID WASTE.
- IF SELF-INSTALLED CONCRETE WASHOUT AREAS ARE USED, BELOW-GRADE STRUCTURES ARE PREFERRED OVER ABOVE-GRADE STRUCTURES BECAUSE THEY ARE LESS PRONE TO SPILLS AND LEAKS.
- SELF-INSTALLED ABOVE-GRADE STRUCTURES SHOULD ONLY BE USED IF EXCAVATION IS NOT PRACTICAL.

EDUCATION - THE FOLLOWING EDUCATION PRACTICES ARE RECOMMENDED:

- DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BEST MANAGEMENT PRACTICE WITH THE READY-MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES ARE MADE.
- EDUCATE EMPLOYEES AND SUBCONTRACTORS ON THE CONCRETE WASTE MANAGEMENT TECHNIQUES DESCRIBED IN THIS SECTION.
- ARRANGE FOR CONTRACTORS' SUPERINTENDENT OR LEVEL 1A CERTIFIED PERSONNEL TO OVERSEE AND ENFORCE CONCRETE WASTE MANAGEMENT PROCEDURES.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

CONTRACTS - INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO CONCRETE SUPPLIER AND SUBCONTRACTOR AGREEMENTS.

LOCATION AND PLACEMENT - THE FOLLOWING GUIDELINES SHALL BE USED WHEN LOCATING AND PLACING THE CONCRETE WASH-OUT AREA:

- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
- ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
- IF TRUCKS NEED TO LEAVE A PAVED AREA TO ACCESS WASHOUT, PREVENT TRACK-OUT WITH A CONSTRUCTION ERT.
- THE NUMBER OF FACILITIES YOU INSTALL SHOULD DEPEND ON THE EXPECTED DEMAND FOR STORAGE CAPACITY.
- ON LARGE SITES WITH EXTENSIVE CONCRETE WORK, WASHOUTS SHOULD BE PLACED IN MULTIPLE LOCATIONS FOR EASE OF USE BY CONCRETE TRUCK DRIVERS.

ON-SITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:

- TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE SITED A MINIMUM OF 50 FT. FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK QUOTE.
- APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK.
- WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OFF-SITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY

- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

TEMPORARY BELOW-GRADE CONCRETE WASHOUT FACILITY

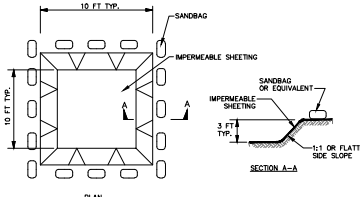
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

INSPECTION AND MAINTENANCE

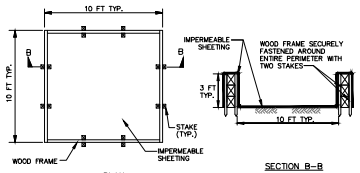
- INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
- DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE.
- CHECK OVERALL CONDITION AND PERFORMANCE.
- CHECK REMAINING CAPACITY (IF FULL).
- IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SEWALS ARE NOT DAMAGED.
- IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
- WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEDOMS OF 12 INCHES.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
- DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ON GROUND.
- DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
- PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT POLLUTANT ACCUMULATION AND OVERFLOW OR PRECIPITATION.
- REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ON-SITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
- WHEN YOU REMOVE MATERIALS FROM THE SELF-INSTALLED CONCRETE WASHOUT, BUILD A NEW STRUCTURE, OR, IF THE PREVIOUS STRUCTURE IS STILL INTACT, INSPECT FOR SIGNS OF WEAR/TEAR OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING.

REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

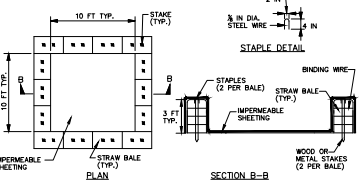
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



EXCAVATED WASHOUT STRUCTURE



WASHOUT STRUCTURE WITH WOOD PLANKS



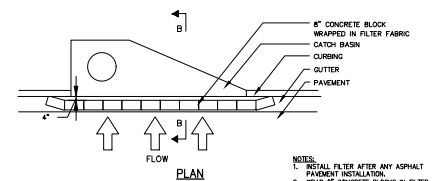
WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

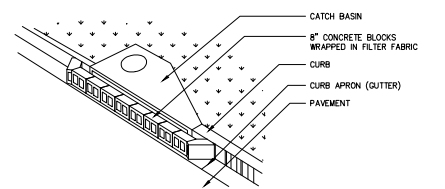
- LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
- SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEDOMS. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
- PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER FOR USE. USE 10 MIL OR THICKER LY RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
- PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
- KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPLED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER, NET-WEAVE STORM LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINFALLS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

NOTE: WASHOUT OF THE CONCRETE TRUCK DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

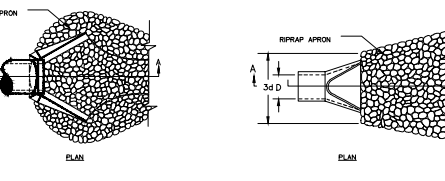
CONCRETE WASHDOWN AREA DETAIL (CSW) NOT TO SCALE



PIPS IN BLANKET (Sd2-P) NOT TO SCALE



PIPE OUTLET TO WELL DEFINED CHANNEL (S1) NOT TO SCALE



PIPE OUTLET TO FLAT AREA (S1) NOT WELL DEFINED CHANNEL

NOTES:

- Lo IS THE LENGTH OF THE RIPRAP APRON.
- D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
- IN A WELL-DEFINED CHANNEL, EXTEND TO APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAIL WATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
- A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

RIPRAP OUTLET PROTECTION (S1) NOT TO SCALE



REGISTERED PROFESSIONAL ENGINEER
 STATE OF GEORGIA
 TRAVIS LONG
 LICENSE NO. 12048
 EXPIRES 12/31/2024



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TR LONG ENGINEERING P.C.
 www.trlongeng.com

SITE DEVELOPMENT PLANS FOR APARTMENT COMPLEX AT DEAL STREET

SHEET NAME: EROSION CONTROL DETAILS

REVISIONS:

1	1/7/2024	LCPK REV/COM
2	3/7/2024	FOUR REV
3	3/27/2024	LCPK REV
4	6/29/2024	LCPK REV
5		
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INITIAL DATE: 06/23/2024
 DRAWN BY: PLS
 CHECKED BY: TLL
 PROJECT #: 2024-12

SHEET NUMBER: **C6.8**

D51
DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

PURPOSE

1. TO REDUCE RUNOFF EROSION
2. TO CONSERVE MOISTURE
3. TO PREVENT SURFACE COMPACTION OR CRUSTING
4. TO CONTROL UNDESIRABLE VEGETATION
5. TO INCREASE BIOLOGICAL ACTIVITY IN THE SOIL.

REQUIREMENT FOR REGULATORY COMPLIANCE
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGLE-EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS SOIL COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND SOIL COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATION TECHNIQUES SHALL BE EMPLOYED.

SPECIFICATIONS
MULCHING WITHOUT SEEDING
THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

SITE PREPARATION

1. GRADE TO PREPARE THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DROPS, DIVERSIONS, BERMES, TERRACES AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS
SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:

1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE, ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.
2. CLEANING STRIPS OF TEMPORARY BANKS SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEANING STRIPS OF TEMPORARY BANKS SHALL BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
3. POLYETHYLENE FILM SHALL BE LAYED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND REUSED.

APPLYING MULCH
WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORM BY HAND OR BY MECHANICAL EQUIPMENT.
2. THE MULCH COVER DEPTH SHALL BE 2 TO 4 INCHES. MULCH SHALL BE APPLIED TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPLIFTION CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCH.
3. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH
1. STRAW OR HAY MULCH CAN BE PRESSSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL PART. A SPECIAL DISK HARROW WITH THE DISK SET AT AN ANGLE TO THE SOIL SURFACE WILL BE USED TO ANCHOR MULCH INTO THE SOIL. LEAVING THE EDGES OF THE DISK SHOULD NOT CUT THE MULCH BUT TO PRESS IT INTO THE SOIL, LEAVING THE EDGES OF THE DISK TO ANCHOR MULCH INTO THE SOIL. SPECIAL APPLICATORS FOR STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED, TACKLERS, BINDERS AND HYDRALIC MULCH TACKLERS SPECIFICALLY DESIGNED FOR MULCHING PURPOSES. SPECIAL APPLICATORS WITH TACKLER OR TACKLER-TACKLER TACKLERS, PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCIDENTALLY AS NECESSARY.

APPLICATION RATE FOR EACH TYPE OF SOIL ENCLOSED ON THE SITE.

MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD CELLULOSE OR WOOD PULP FIBER SHALL BE USED WITH HYDRALIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 LBS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AFTER HYDRALIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKLER SHALL BE USED WITH HYDRALIC SEEDING ON SLOPES 7/41 OR STEEPER.
4. SERICA LESPEDeza HAY CONTAINING WATERSHED SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3" FOR BROADCAST PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPLICABLE FOR SEEDING AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL, BLANKETS OR BLOCK SOIL, MULCHING IS NOT REQUIRED.

MULCHING [D51]
NOT TO SCALE

D52
DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION
THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENuded AREAS.

PURPOSE

1. TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWN STREAM RESOURCES
2. TO PREVENT THE SOIL SURFACE FROM EROSION
3. TO IMPROVE WILDLIFE HABITAT
4. TO IMPROVE AESTHETICS
5. TO IMPROVE TILTH, INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS

REQUIREMENT FOR REGULATORY COMPLIANCE
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO FALLOW GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY GRASSING SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.

CONITIONS
TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO FALLOW GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY GRASSING SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.

SPECIFICATIONS
GRASSING AND SHARPING
EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CROPPED BANKS, DITCHES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHARPENING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRALIC SEEDING EQUIPMENT IS TO BE USED.

SEEDING PREPARATION
WHEN A HYDRALIC SEEDER IS USED, SEEDING PREPARATION IS NOT REQUIRED, WHEN USING CONVENTIONAL SEEDING, SEEDING PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE, AND NOT SEALED BY RAINFALL OR CONSISTS OF SMOOTH-OUT SLOPES. THE SOIL SHALL BE TESTED, TRENCHED OR OTHERWISE SCOURED TO PROVIDE A PLACE FOR SEED TO LIE AND GERMINATE.

SEEDING
SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEEDING SHALL BE APPLIED UNIFORM BY HAND, OR BY MECHANICAL EQUIPMENT. SEEDS OF HYDRALIC SEEDER (EXCEPT FOR WOOD CELLULOSE OR WOOD PULP FIBER) SHALL BE APPLIED AT A RATE OF 500 LBS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE. MULCHING SHALL BE APPLIED TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPLIFTION CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCH. THE SEED DIAMETER, SOIL SHOULD BE RAKED LIGHTLY TO COVER SEED WITH SOIL, IF SEED BY HAND.

MULCHING
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WILL BE USED WHERE SEEDING IS CONSIDERED FOR SHORT TERM PROTECTION, REFER TO D51-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

IRRIGATION
WHEN SEEDING AREAS OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NECESSARY.

GRASSING TEMPORARY [D52]
NOT TO SCALE

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE PER 1,000 SQ.FT. ACRE	RATE PER ACRE	PLANTING DATES*
RYE	3.9 LBS.	3 BU	8/1 - 3/1
RYE GRASS	0.9 LBS.	40 LBS.	6/15 - 4/1
ANNUAL LESPEDEZA	0.9 LBS.	40 LBS.	7/15 - 9/15
WHEAT	4.1 LBS.	3 BU	7/15 - 2/1
WHEAT	4.1 LBS.	3 BU	7/15 - 2/1

* UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.
** SEEDING DATES MAY BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.

TABLE 6-5.1 FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS FOR N-P-K	RATE	N	
				TOP DRESSING RATE	SOIL INCORPORATION RATE
1. COOL SEASON GRASSES	FIRST SEEDING	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 1/2	50-100 LBS./AC.
	SECOND MAINTENANCE	6-12-12	1500 LBS./AC.	50-100 LBS./AC.	50-100 LBS./AC.
2. COOL SEASON GRASSES AND LEGUMES	FIRST SEEDING	6-12-12	1500 LBS./AC.	0-30 LBS./AC. 1/	0-30 LBS./AC. 1/
	SECOND MAINTENANCE	6-12-12	1500 LBS./AC.	0-30 LBS./AC.	0-30 LBS./AC.
3. WARM SEASON GRASSES	FIRST SEEDING	10-10-10	1300 LBS./AC.	-	-
	SECOND MAINTENANCE	10-10-10	1300 LBS./AC.	-	-
4. PINE SEEDLINGS	FIRST SEEDING	20-10-0	700 LBS./AC.	ONE 1/2 GILMAN PELLETS PER THE SQUARE FOOT	ONE 1/2 GILMAN PELLETS PER THE SQUARE FOOT
	SECOND MAINTENANCE	20-10-0	700 LBS./AC.	-	-
5. SHRUB LESPEDEZA	FIRST SEEDING	6-12-12	1500 LBS./AC.	50-100 LBS./AC.	50-100 LBS./AC.
	SECOND MAINTENANCE	6-12-12	1500 LBS./AC.	50-100 LBS./AC.	50-100 LBS./AC.
6. TEMPORARY COVER GROUPS	FIRST SEEDING	10/10/2010	500 LBS./AC.	50 LBS./ACRE 5/1	50 LBS./ACRE 5/1
	SECOND MAINTENANCE	10-10-10	1500 LBS./AC.	50-100 LBS./AC. 2/1	50-100 LBS./AC. 2/1
7. BARN SEASON GRASSES	FIRST SEEDING	10-10-10	1500 LBS./AC.	50-100 LBS./AC. 2/1	50-100 LBS./AC. 2/1
	SECOND MAINTENANCE	10-10-10	1500 LBS./AC.	50-100 LBS./AC.	50-100 LBS./AC.
8. WARM SEASON GRASSES AND LEGUMES	FIRST SEEDING	6-12-12	1500 LBS./AC.	50 LBS./AC./1/	50 LBS./AC./1/
	SECOND MAINTENANCE	6-12-12	1500 LBS./AC.	50 LBS./AC./1/	50 LBS./AC./1/

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EXACTLY COVERED WHEN APPLIED. WATER, THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL MEETING AND AN IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH
MULCHING SHALL BE APPLIED UNIFORM WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING STRAW OR HAY MULCH WILL BE SPREAD UNIFORM WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

ANCHORING MULCH
MULCHING SHALL BE APPLIED UNIFORM WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

ANCHORING MULCH
MULCHING SHALL BE APPLIED UNIFORM WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF 100 GALLONS OF GRASS SEED OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MIXTURE.

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD CELLULOSE OR WOOD PULP FIBER SHALL BE USED WITH HYDRALIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AFTER HYDRALIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKLER, SHALL BE USED WITH HYDRALIC SEEDING ON SLOPES 7/41 OR STEEPER.
4. SERICA LESPEDeza HAY CONTAINING WATERSHED SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BROADCAST PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPLICABLE FOR SEEDING AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL, BLANKETS OR BLOCK SOIL, MULCHING IS NOT REQUIRED.

DUST CONTROL [Du]
NOT TO SCALE

Month	Temporary Cover	Rate per Acre		Permanent Cover	Rate per Acre	
		Top Dressing	Soil Incorporation		Top Dressing	Soil Incorporation
January	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Annual Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
February	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Annual Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
March	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Annual Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
April	Wooling Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Annual Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
May	Wooling Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Annual Lespedeza	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
June	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
July	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
August	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
September	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
October	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
November	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
December	Rm grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.
	Sudan Grass	40 lb.	2 bu.	Unifilm Bermudax	10 lb.	6 bu.

FERTILIZER:

YEAR	ANALYSIS N-P-K	RATE	N TOP DRESSING RATE
FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC.
SECOND	6-12-12	800 LBS./AC.	50-100 LBS./AC.
MAINTENANCE	10-10-10	400 LBS./AC.	50 LBS./AC.

FOR BEST RESULTS TAKE AT LEAST ONE SAMPLE OF SOIL TO THE COUNTY EXTENSION AGENT FOR ANALYSIS TO DETERMINE THE BEST FERTILIZER.

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD CELLULOSE OR WOOD PULP FIBER SHALL BE USED WITH HYDRALIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AFTER HYDRALIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKLER, SHALL BE USED WITH HYDRALIC SEEDING ON SLOPES 7/41 OR STEEPER.
4. SERICA LESPEDeza HAY CONTAINING WATERSHED SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BROADCAST PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPLICABLE FOR SEEDING AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL, BLANKETS OR BLOCK SOIL, MULCHING IS NOT REQUIRED.

GRASSING PERMANENT [D53]
NOT TO SCALE

D53
DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION
THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

CONDITIONS
PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENuded AREAS.

SPECIFICATIONS
GRASSING AND SHARPING
EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CROPPED BANKS, DITCHES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHARPENING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRALIC SEEDING EQUIPMENT IS TO BE USED.

SEEDING PREPARATION
WHEN A HYDRALIC SEEDER IS USED, SEEDING PREPARATION IS NOT REQUIRED, WHEN USING CONVENTIONAL SEEDING, SEEDING PREPARATION WILL BE DONE AS FOLLOWS:

1. TILLAGE AT A MINIMUM SHALL AGGREGATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 8 INCHES. ALLEVIATE COMPACTED LAY AND FERTILIZER, SMOOTH AND FIRM THE SOIL, ALLOW FOR THE NORMAL SINKING OF PLANTS, AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
2. TILLAGE SHALL BE DONE ON THE CONTOUR WHERE FEASIBLE.
3. TILLAGE SHALL BE DONE ON THE CONTOUR WHERE FEASIBLE.
4. IN SLOPES TOO STEEP FOR THE USE OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LOOSE AND GERMINATE. HYDRALIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS

1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIGGING PLANTINGS.
2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT COMPACTING.
3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR TO 12 TO 18 INCHES DEEP IN THE ROWS. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

PLANTING
HYDRALIC SEEDING
MIX THE SEED (INCULCATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

CONVENTIONAL SEEDING
SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDING. FOR BROADCAST PLANTING, USE A CULPACHER SEEDER, DRILL, NOTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/2 TO 1 INCH OF SOIL. SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULPACHER OR OTHER SUITABLE EQUIPMENT.

NO-TILL SEEDING
NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING THE END OF THE HARVESTING OR AT THE END OF THE HARVESTING SEASON. SEEDING SHOULD BE DONE AT ADEQUATE DEPTH OF THE PERMANENT (PERENNIAL) SEEDS. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEEDS MUST BE UNIFORM DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

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SITE DEVELOPMENT PLANS FOR APARTMENT COMPLEX AT DEAL STREET

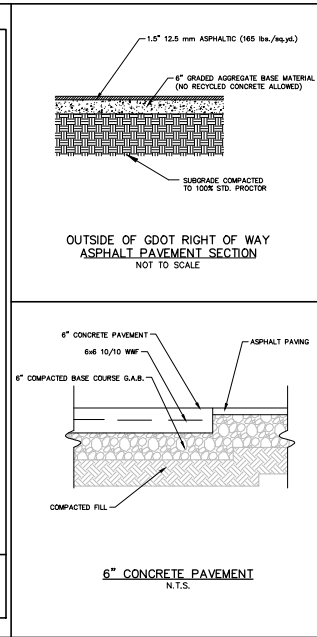
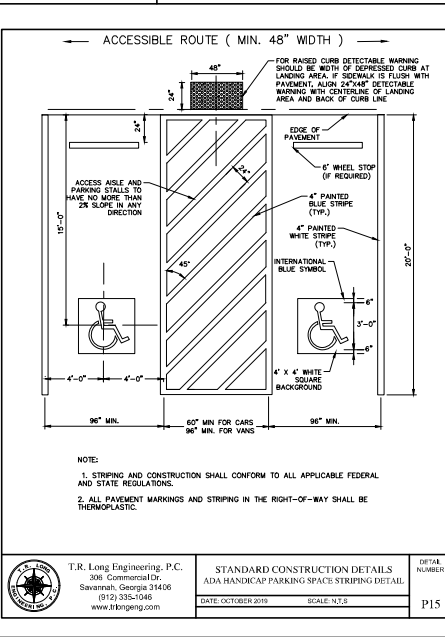
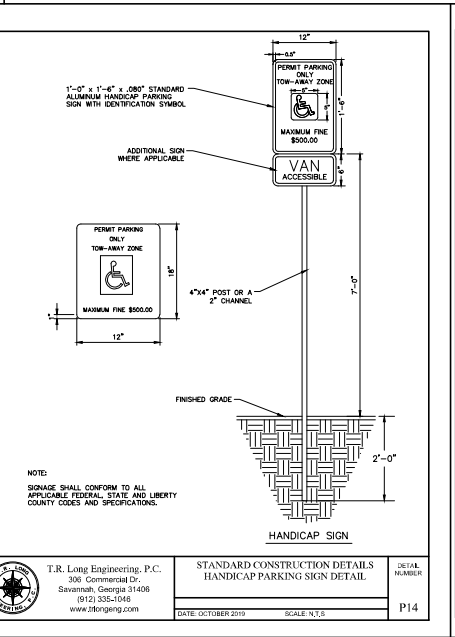
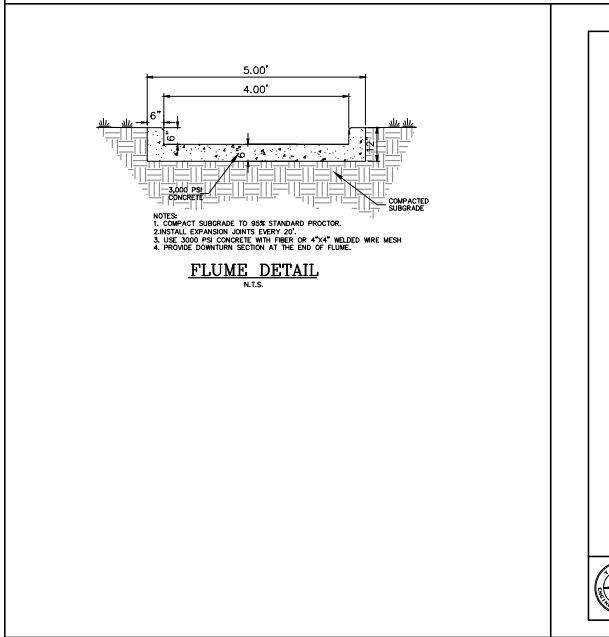
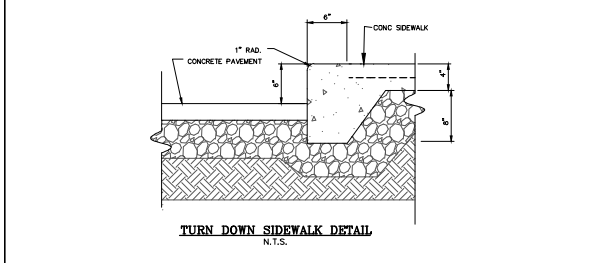
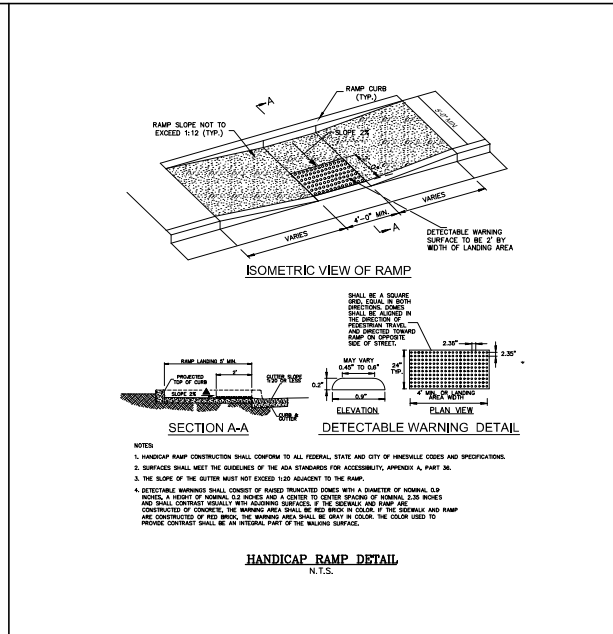
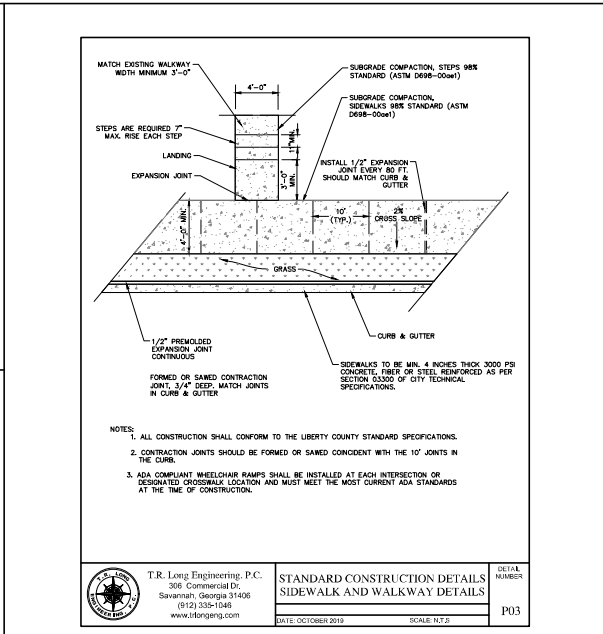
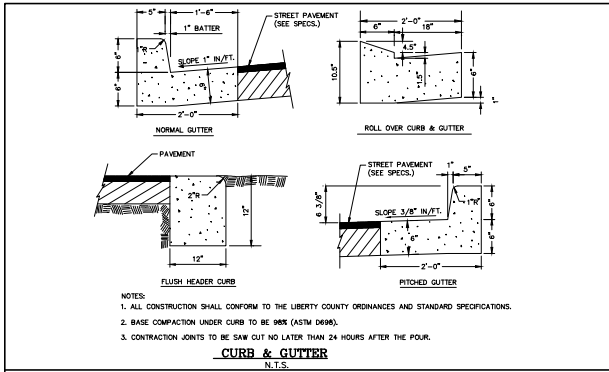
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REVISIONS:

1. 1/7/2024	LPC REV COM
2. 3/7/2024	REV COM
3. 5/7/2024	LPC REV
4. 6/29/2024	LPC REV

DATE: 06/23/2024
DRAWN BY: [Name]
CHECKED BY: [Name]
PROJECT: [Name]

SHEET NUMBER: C6.9



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SHEET NUMBER: C7.I

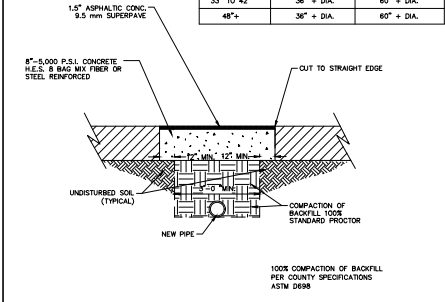
DATE: OCTOBER 2019

SCALE: N.T.S.

REVISIONS:
 1. 7/7/2022 LCPC REVIEW
 2. 7/7/2022 COUNTY REVIEW
 3. 7/27/2022 LCPC REV
 4. 6/29/2022 LCPC REV
 5.
 6.
 7.
 8.
 9.
 10.

PREPARED BY: THL
 PROJECT #: 2019-012

PIPE DIAMETER	MAXIMUM TRENCH WIDTH	MAXIMUM PAVEMENT WIDTH
6" TO 15"	16" + DIA.	40" + DIA.
18" TO 21"	20" + DIA.	44" + DIA.
24" TO 30"	24" + DIA.	48" + DIA.
33" TO 42"	36" + DIA.	60" + DIA.
48"	36" + DIA.	60" + DIA.

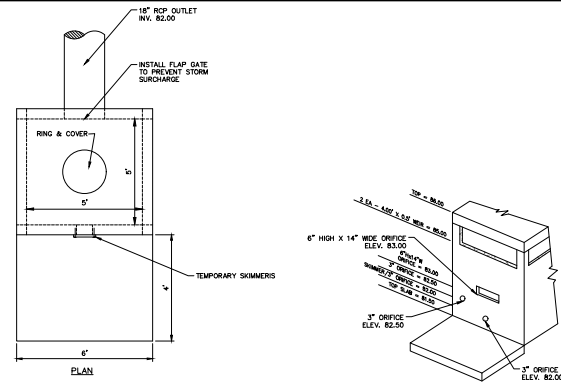


- NOTES:
1. COMPACT BASE AND SUB-BASE TO 100% STANDARD PROCTOR.
 2. CONCRETE IN THE RIGHT OF WAY TO BE 5000 PSI AND REINFORCED WITH FIBERMESH OR STEEL.
 3. ALL LATERAL STREET CUTS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICABLE DEFLECTION. PLATES TO REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HOUR MINIMUM).
 4. ALL LONGITUDINAL CUTS EXCEEDING 100' IN LENGTH WILL REQUIRE AN ASPHALT OVERLAY OF THE ENTIRE ROADWAY WIDTH. CONCRETE IN THE TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT FINISH. FINISH WILL BE SAW CUT TO A STRAIGHT EDGE AND THE ENTIRE WIDTH OF THE ROADWAY WILL BE RESURFACED WITH A MINIMUM OF 1.5" OF 9.5mm ASPHALT SUPERPAVE.
 5. ALL STREET PATCHES MUST BE SQUARE OR RECTANGULAR WITH STRAIGHT, SAW CUT EDGES.

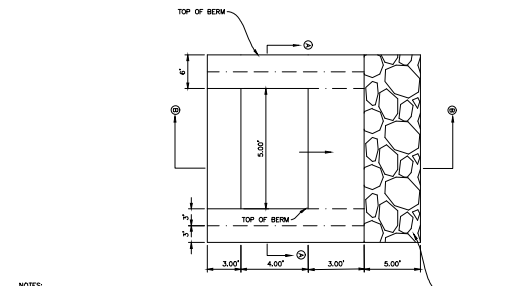
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Savannah, Georgia 31406
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www.trlorg.com

STANDARD CONSTRUCTION DETAILS
BITUMINOUS PAVEMENT REPLACEMENT

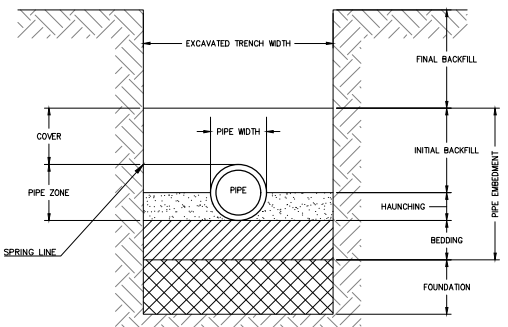
DATE: OCTOBER 2019 SCALE: N.T.S. [P07]



OUTLET CONTROL DETAIL #01
N.T.S.

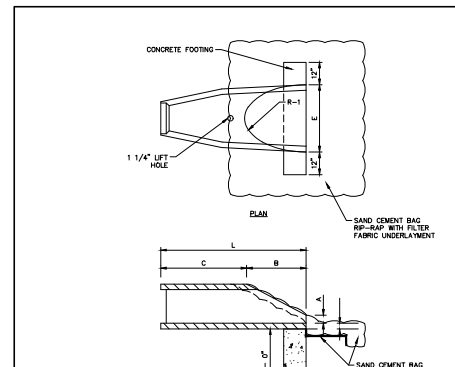


EMERGENCY OVERFLOW
N.T.S.



- NOTE: PIPE BEDDING
- A. THE SOIL AT THE SIDES OF A PIPE AND ABOVE IT IS THE BACKFILL.
 - B. PRIOR TO BACKFILLING ANY EXCAVATION, ALL PIPING AND STRUCTURES, THE ENGINEER AND GOVERNING AUTHORITY'S INSPECTOR SHALL BE NOTIFIED FOR OBSERVATION.
 - C. AFTER PIPES HAVE BEEN TESTED AND APPROVED, BACKFILLING SHALL BE DONE WITH APPROVED MATERIAL FREE FROM LARGE CLUMPS ON BOTH SIDES OF THE PIPE AND THOROUGHLY COMPACTED WITH PNEUMATIC OR HAND TAMPER. THE BACKFILL SHALL BE BROUGHT UP UNIFORM ON BOTH SIDES OF THE PIPE AND COMPACTED TO AN ELEVATION OF ONE FOOT ABOVE THE TOP OF THE PIPE. AFTER WHICH THE SOIL SHALL BE LAPPED IN 6" TO 12" INTERVALS. NO ROCK WILL BE ALLOWED IN THE BACK WITHIN AN DISTANCE OF ONE FOOT FROM THE PIPE, AND ROCK LARGER THAN SIX INCHES IN THE GREATEST DIMENSION WILL NOT BE PERMITTED IN ANY PART OF THE TRENCH OR BACKFILL.
 - D. BACKFILL SHALL BE PLACED IN UNIFORM LAYERS, FOUR INCHES THICK, ON BOTH SIDES OF THE PIPE AND THOROUGHLY COMPACTED WITH PNEUMATIC OR HAND TAMPER. THE BACKFILL SHALL BE BROUGHT UP UNIFORM ON BOTH SIDES OF THE PIPE AND COMPACTED TO AN ELEVATION OF ONE FOOT ABOVE THE TOP OF THE PIPE. AFTER WHICH THE SOIL SHALL BE LAPPED IN 6" TO 12" INTERVALS. NO ROCK WILL BE ALLOWED IN THE BACK WITHIN AN DISTANCE OF ONE FOOT FROM THE PIPE, AND ROCK LARGER THAN SIX INCHES IN THE GREATEST DIMENSION WILL NOT BE PERMITTED IN ANY PART OF THE TRENCH OR BACKFILL.
1. BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MINIMUM DRY WEIGHT FOR CLAYS FOOT AS DETERMINED BY ASTM METHOD T-99 (STANDARD PROCTOR TEST).
 2. THE TOP 18 INCHES OF BACKFILL UNDER ANY PAVED AREA SHALL BE COMPACTED TO 100% STANDARD PROCTOR.
 3. STATES SETTLING WILL NOT BE PERMITTED IN CLAY SOILS. IT MAY BE ALLOWED AT THE OPTION OF THE GOVERNING AUTHORITY'S INSPECTOR AND DESIGN ENGINEER IN SANDY SOILS.
- NOTE: WATER MAIN 36" BURY MINIMUM.

PIPE BEDDING
N.T.S.



PIPE	A	B	C	D	E	R-1
18"	6"	2"	20"	10"	6"	2'-6"
24"	8"	2"	26"	14"	8"	3'-0"
30"	10"	2"	32"	18"	10"	3'-6"
36"	12"	2"	38"	22"	12"	4'-0"
42"	14"	2"	44"	26"	14"	4'-6"
48"	16"	2"	50"	30"	16"	5'-0"

REINFORCEMENT CONFORMS TO ASTM A1064

T.R. Lorg Engineering, P.C.
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046
www.trlorg.com

STANDARD CONSTRUCTION DETAILS
FLARED END SECTION

DATE: OCTOBER 2019 SCALE: N.T.S.

DETAIL NUMBER
D12



INVESTIGATE: T.R. Lorg, License No. 12041
Huntsville, Georgia 37433
(917) 384-0661

SAVANNAH: T.R. Lorg, License No. 12041
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046

TRLONG
ENGINEERING P.C.
www.trlong.com

SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

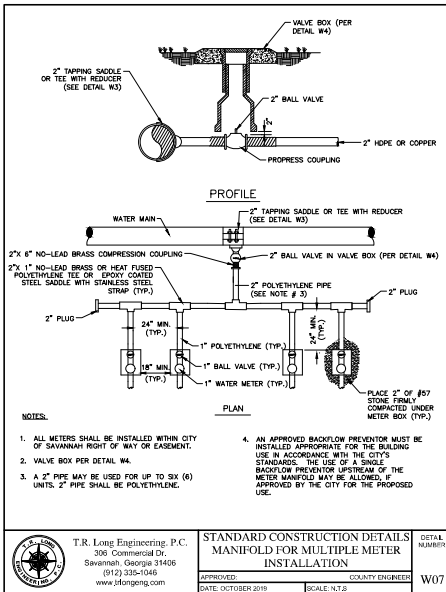
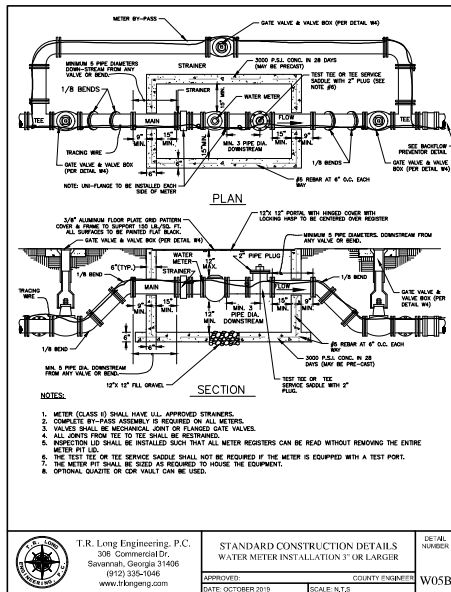
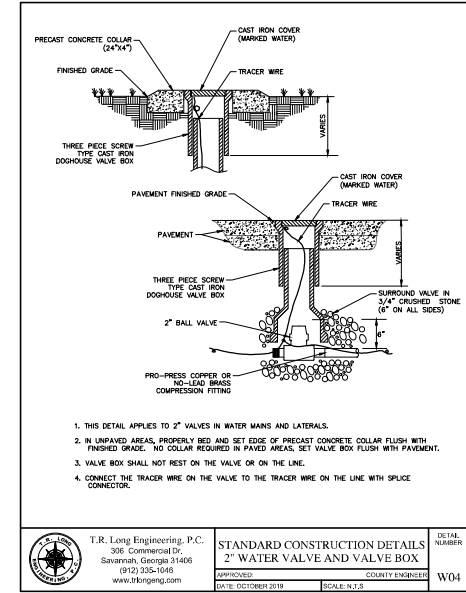
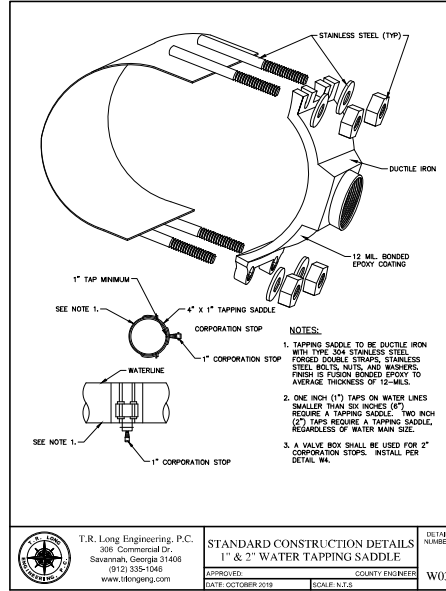
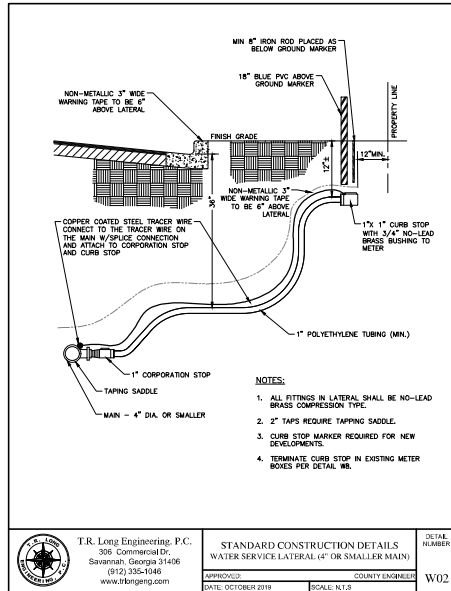
SHEET NAME: SITE DETAILS

REVISIONS:

1	11/7/2024	LCPC REV/COM
2	3/7/2023	REV/REV
3	8/27/2022	LCPC REV
4	6/29/2022	LCPC REV
5		
6		
7		
8		
9		
10		

INITIAL DATE: 06/23/2024
CREATED BY: TRL
PROJECT: 19-212-412

SHEET NUMBER: C7.2



INNESVILLE:
14 Innesville, Georgia 31033
(912) 388-6664

SAVANNAH:
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046



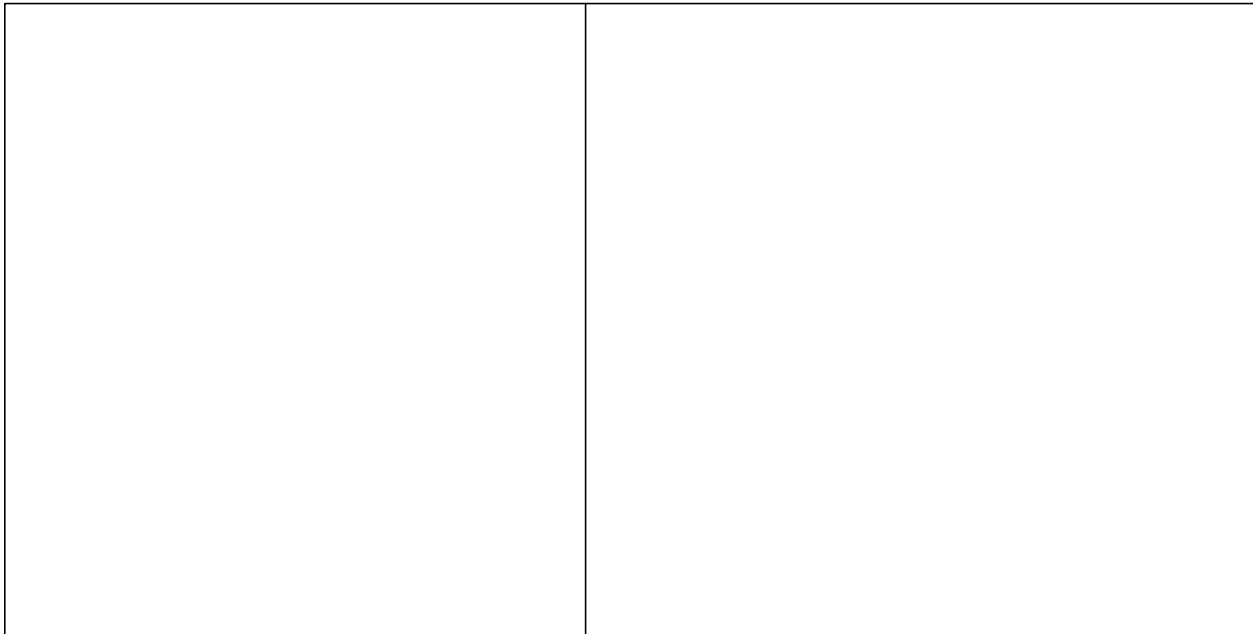
SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

ISSUED FOR: _____

DATE: _____

REVISIONS:
1. 1/7/2024 LCP REVCOM
2. 3/7/2024 REVCOM
3. 5/7/2024 LCP REV
4. 6/29/2024 LCP REV
5.
6.
7.
8.
9.
10.
INITIAL DATE: 06/23/2024
DESIGNED BY: TUL
PROJECT #: 2024-12
SHEET NUMBER:

C7.3



MATERIALS

ITEM	QUAN.	DESCRIPTION
1	1	REDUCED PRESSURE ZONE DEVICE
2	2	0.5 & 1" RESILIENT GATE VALVES
3	4	TEST COCKS W/ NO-LEAD BRASS PLUGS
4	2	2" SCH 40 GALV. PIPE STAND & BASE BOLTED TO FLANGE
5	2	MJ 45° OR 90° BENDS
6	2	FLANGED 45° OR 90° BENDS
7	6	RESTRAINED FLANGE JOINTS, MEGALUG (OR EQUIVALENT)
8	1	2' x 2' MIN. HATCH W/ LOCKING HASP
9	15	15 OR PVC PIPE, MECHANICAL JOINT W/ MEGALUG (OR EQUIVALENT)
10	10	DUCTILE IRON PIPE, CUT TO FIT W/ MEGALUGS
11	10	GRAVEL OR CONCRETE SLAB WITH GRAVEL DEAN (BELOW GRADE VAULT)
12	2	DRAIN PORTS SIZE ACCORDING TO PIPE SIZE (ABOVE GRADE VAULT)
13	1	3/8" ALUMINUM TREAD PLATE / HATCH COVER W/ SUPPORTS AS NECESSARY
14	1	BOX-CONCRETE BLOCK, POURED CONCRETE OR PREFABRICATED BOX, HOT BOX OR EQUAL, ALL BACKFLOWS SHALL BE ENCLOSED

NOTES:

- FOR FINAL APPROVAL, ASSEMBLY MUST BE CENTERED IN ENCLOSURE, UNDER NO CONDITION WILL ANY CONNECTION BE ALLOWED BETWEEN THE SERVICE METER AND BACKFLOW PREVENTER. BACKFLOW PREVENTER SHALL ALWAYS BE INSTALLED IMMEDIATELY DOWNSTREAM OF METER.
- IF A PRESSURE MONITOR IS TO BE INSTALLED, ADD A TEE, VALVE, FITTINGS, AND MOUNT ON SUPPLY SIDE PRIOR TO BACKFLOW PREVENTER. UNDER NO CIRCUMSTANCES SHALL TEST PORTS BE MODIFIED OR UTILIZED FOR ANY USE, OTHER THAN BACKFLOW PREVENTER TESTING.
- ALL MECHANICAL JOINTS MUST BE RESTRAINED. PROVIDE A MINIMUM CLEARANCE OF 12 INCHES BETWEEN THE INSIDE FACE OF THE ENCLOSURE AND THE PIPING AND VALVES.

TYPICAL OUTSIDE INSTALLATION
(3", 4", 6", 8", 10" & 12" SIZES)

T.R. Long Engineering, P.C.
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046
www.trlongeng.com

STANDARD CONSTRUCTION DETAILS
REDUCED PRESSURE ZONE DEVICES FOR DOMESTIC SYSTEM (3" AND LARGER)

APPROVED: DATE: NOVEMBER 2019 SCALE: N.T.S.

DETAIL NUMBER: W15

INGRESVILLE, Savannah, Georgia 31403
(912) 335-1046

SAVANNAH, Georgia 31406
(912) 335-1046

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NOTE:

- THE TAPPING SLEEVE AND VALVE MUST BE INSTALLED IN A BOX. (SEE DETAIL FOR DETAILS)

PLAN VIEW

T.R. Long Engineering, P.C.
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046
www.trlongeng.com

STANDARD CONSTRUCTION DETAILS
TYPICAL TAPPING SLEEVES & TAPPING VALVES

APPROVED: DATE: NOVEMBER 2019 SCALE: N.T.S.

DETAIL NUMBER: W24

PVC LINE

PIPE DIA.	11 1/4"	22"	45"	90"
4	2	4	8	18
6	3	5	11	25
8	4	7	14	33
10	4	8	16	39
12	5	9	19	45
16	5	9	19	45
20	6	11	23	54
24	8	16	26	63

POLYETHYLENE WRAPPED DUCTILE IRON LINE

PIPE DIA.	11 1/4"	22"	45"	90"
4	3	5	9	20
6	3	6	12	26
8	4	8	16	36
10	5	9	19	43
12	6	11	22	51
16	7	14	28	65
20	8	16	33	79
24	9	19	38	92

MINIMUM RESTRAINED LENGTH (L)

T.R. Long Engineering, P.C.
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046
www.trlongeng.com

STANDARD CONSTRUCTION DETAILS
HORIZONTAL BEND RESTRAINT

APPROVED: DATE: NOVEMBER 2019 SCALE: N.T.S.

DETAIL NUMBER: W28

PVC

PIPE DIA.	11 1/4"	22"	45"	90"
4	3	5	9	20
6	3	6	12	26
8	4	8	16	36
10	5	9	19	43
12	6	11	22	51
16	7	14	28	65
20	8	16	33	79
24	9	19	38	92

MINIMUM RESTRAINED LENGTH (L)

T.R. Long Engineering, P.C.
306 Commercial Dr.
Savannah, Georgia 31406
(912) 335-1046
www.trlongeng.com

STANDARD CONSTRUCTION DETAILS
TEE RESTRAINT (PVC TYPE)

APPROVED: DATE: NOVEMBER 2019 SCALE: N.T.S.

DETAIL NUMBER: W30

SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

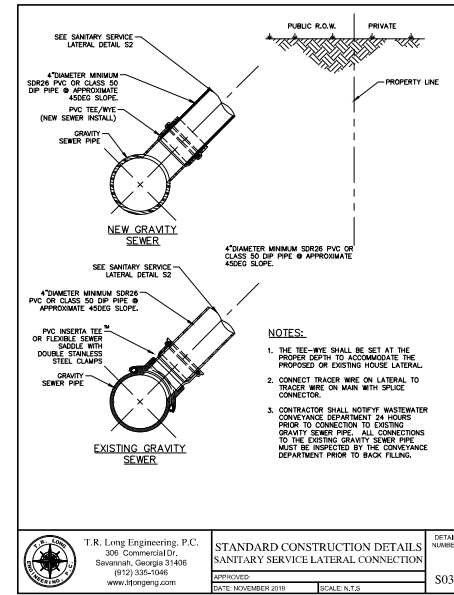
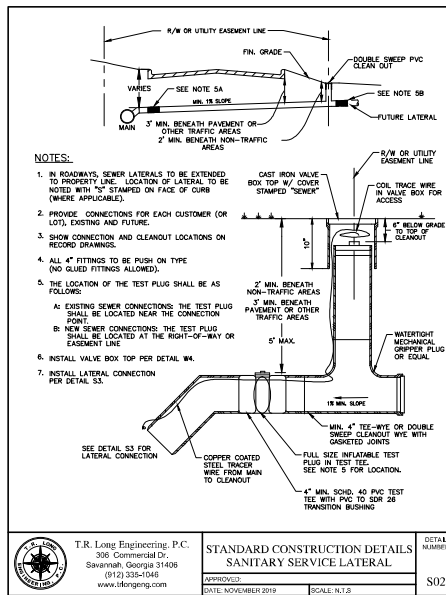
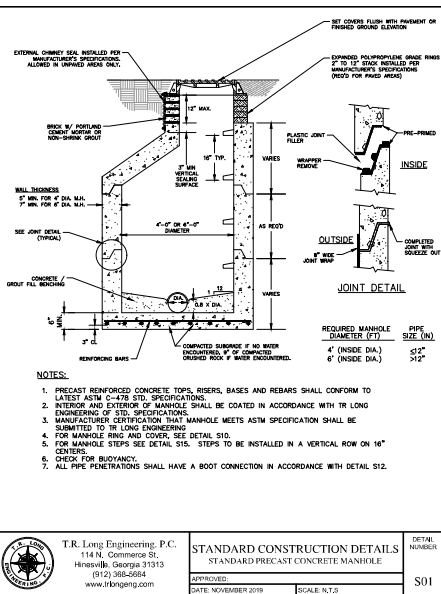
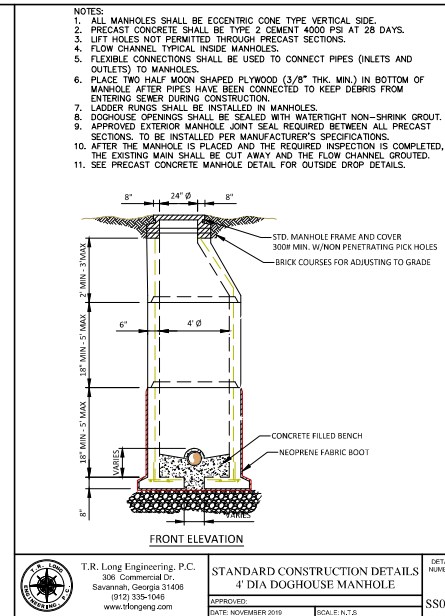
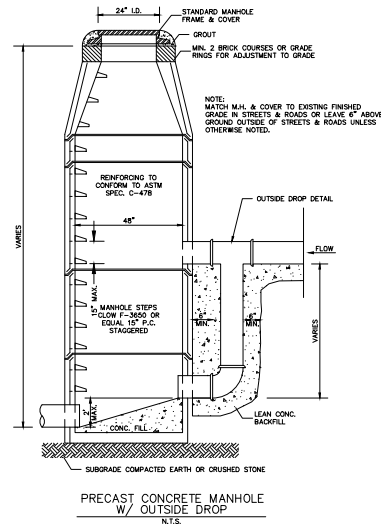
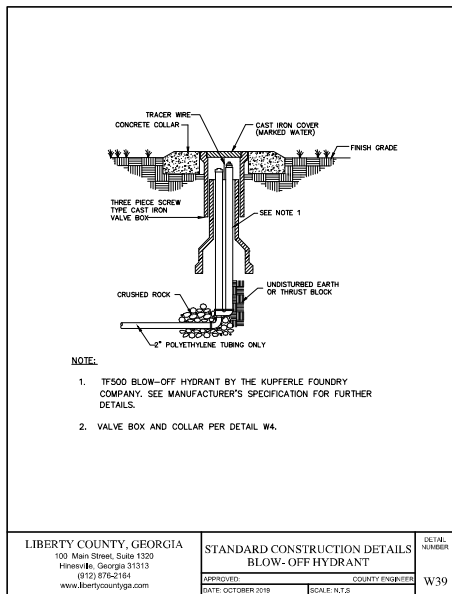
SHEET NAME: SITE DETAILS

REVISIONS:

1	3/7/2023	LKPC REV/COM
2	3/7/2023	REV/CORRECTION
3	3/7/2023	LKPC REV
4	6/29/2023	LKPC REV
5		
6		
7		
8		
9		
10		

INITIAL DATE: 06/23/2024
CREATED BY: TRL
PROJECT #: 2023-012

SHEET NUMBER: C7.4



REGISTERED PROFESSIONAL ENGINEER
STATE OF GEORGIA
NO. 0000000000

TR LONG ENGINEERING, P.C.
www.trlongeng.com

HINESVILLE, GA
114 Commons St.
Hinesville, Georgia 31313
(812) 398-6684

SAVANNAH, GA
306 Commercial Dr.
Savannah, Georgia 31408
(912) 335-1046

SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

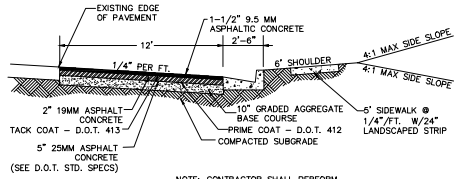
SHEET NAME:
SITE DETAILS

REVISIONS:

1.3/7/2023	LCPC REV/COM
2.3/7/2023	FOUND/REV
3.3/7/2023	LCPC REV
4.6/29/2023	LCPC REV
5.	
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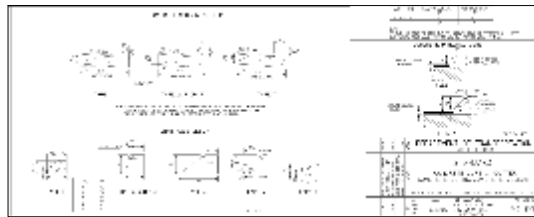
DETAIL DATE: 06/23/2018
DRAWN BY: PLS
CHECKED BY: TLL
PROJECT #: 2018-112

SHEET NUMBER:
C7.5



NOTE: CONTRACTOR SHALL PERFORM ALL WORK ON D.O.T. P/W ACCORDING TO D.O.T. "STANDARD SPECIFICATIONS" AND ACCORDING TO D.O.T. PERMIT BY AUTHORIZED D.O.T. PERSONNEL.

TYPICAL DOT PAVEMENT SECTION
SCALE: N.T.S. *min curb & curbs*



Copy of www.FDOT.gov, A. Paved Shoulder Control Manual

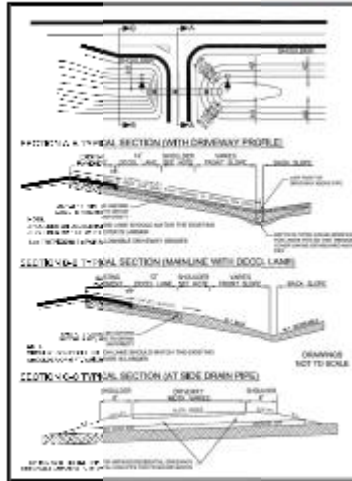


Figure 4-1 Driveway Connection to Rural Roadways

Page 4-1

Page 4-2

Copy of www.FDOT.gov, A. Paved Shoulder Control Manual

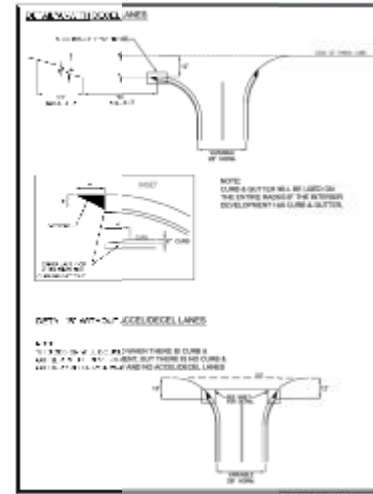


Figure 4-2 Connecting Driveways with Curb & Gutter to Rural Roadways

Page 4-3

Page 4-4



TR LONG
ENGINEERING, P.C.
114 Hinesville, Georgia 31033
(912) 335-0044
2008 Savannah, Georgia 31405
(912) 335-0146

TR LONG
ENGINEERING, P.C.
www.trlong.com

SITE DEVELOPMENT PLANS FOR
APARTMENT COMPLEX
AT DEAL STREET

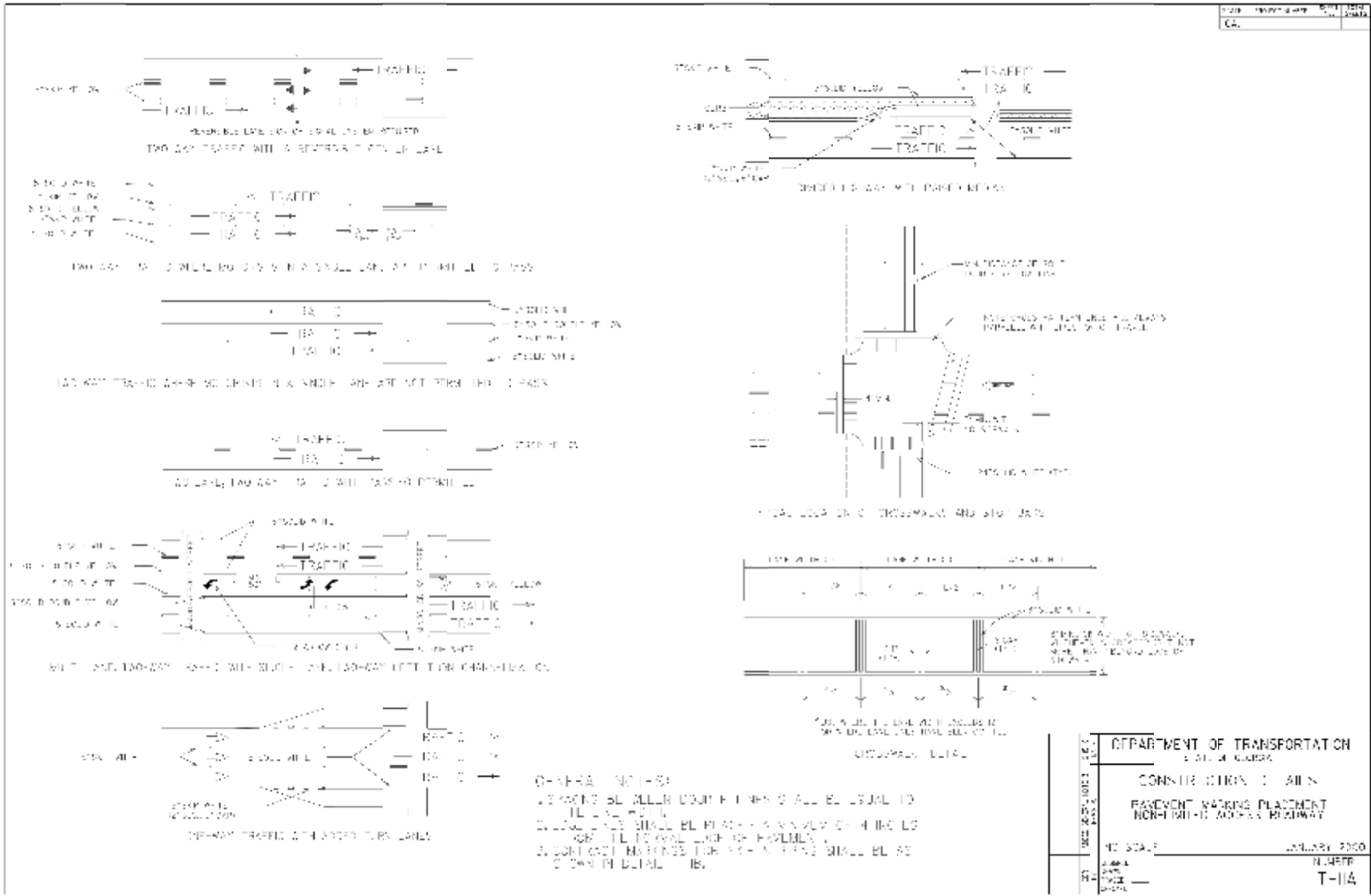
SHEET NAME:
SITE DETAILS

REVISIONS	
1	11/17/2021 LCP REV COM
2	12/27/2021 BOUNDARY
3	3/27/2022 LCP REV
4	6/29/2022 LCP REV
5	
6	
7	
8	
9	
10	

ISSUE DATE: 06/23/2024
DRAWN BY: TLR
CHECKED BY: TLR
PROJECT #: 2021-011

SHEET NUMBER:

C7.7



SCALE: 1" = 20'-0"

GENERAL NOTES:
 1. PAVEMENT SHALL BE MILL DOWN FIFTEEN (15) FEET TO EXIST GRADE.
 2. ALL PAVEMENT SHALL BE PLACED IN A SINGLE COURSE.
 3. ALL PAVEMENT SHALL BE PLACED TO THE FACE OF THE CURB.
 4. ALL PAVEMENT SHALL BE PLACED TO THE FACE OF THE CURB.
 5. ALL PAVEMENT SHALL BE PLACED TO THE FACE OF THE CURB.

DEPARTMENT OF TRANSPORTATION SOUTH CAROLINA	
CONSTRUCTION: ALL	
PAVEMENT MARKING PLACEMENT NON-TURNED ADDRESS ROADWAY	
NO SCALE	JANUARY 2020
SCALE	1" = 40'-0"
SCALE	T-114



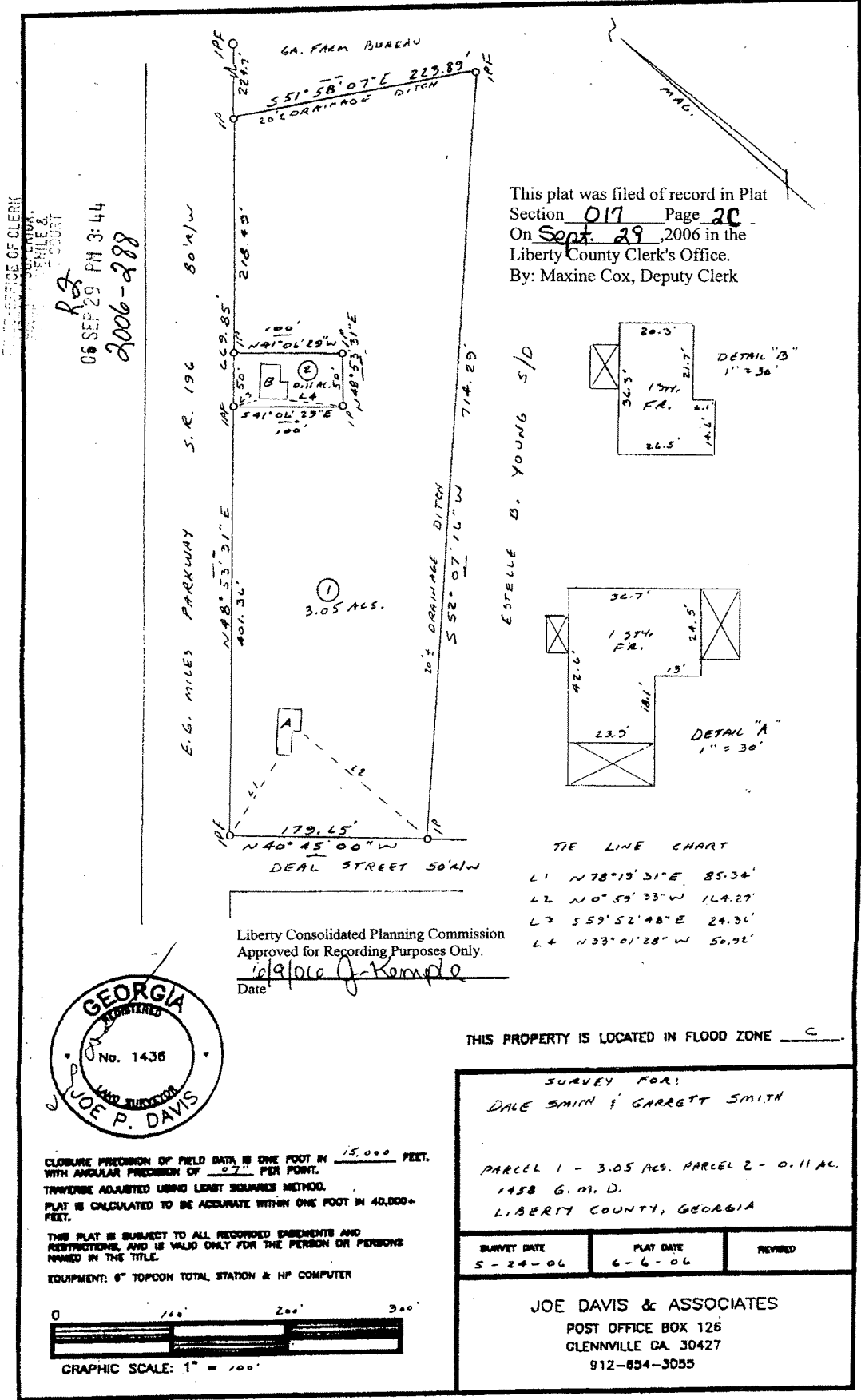
TR LONG
 ENGINEERING P.C.
 114 Northville Street
 Northville, Georgia 30339
 (877) 388-6664
 2008 SWANNANAWAY
 Savannah, Georgia 31405
 (912) 335-0106
 www.trlong.com

SITE DEVELOPMENT PLANS FOR
 APARTMENT COMPLEX
 AT DEAL STREET

SHEET NAME: SITE DETAILS	
REVISIONS:	
1	11/17/2021 LPC REVISED
2	12/3/2021 FOUNDATION
3	11/27/2021 LPC REV
4	11/29/2021 LPC REV
5	
6	
7	
8	
9	
10	
INITIAL DATE: 06/23/2014	
DESIGNED BY: [Name]	
CHECKED BY: [Name]	
PROJECT #: 2014-11	
SHEET NUMBER:	

C7.8

Deal Street Apartments - Recorded Plat (Tracts 1 & 2)



This plat was filed of record in Plat Section 017 Page 20 On Sept. 29, 2006 in the Liberty County Clerk's Office.
 By: Maxine Cox, Deputy Clerk

LIBERTY COUNTY CLERK'S OFFICE
 300 E. MAIN ST.
 LIBERTY, GA. 30427
 R2
 06 SEP 29 PM 3:44
 2006-288

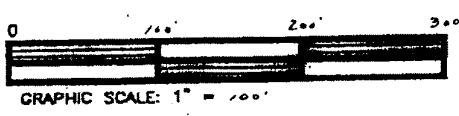
Liberty Consolidated Planning Commission
 Approved for Recording Purposes Only.
 Date: 10/10/06



THIS PROPERTY IS LOCATED IN FLOOD ZONE C

CLOSURE PRECISION OF FIELD DATA IS ONE FOOT IN 15,000 FEET. WITH ANGULAR PRECISION OF 2.7" PER POINT.
 TRANSFORMS ADJUSTED USING LEAST SQUARES METHOD.
 PLAT IS CALCULATED TO BE ACCURATE WITHIN ONE FOOT IN 40,000+ FEET.

THIS PLAT IS SUBJECT TO ALL RECORDED EMBODIMENTS AND RESTRICTIONS, AND IS VALID ONLY FOR THE PERSON OR PERSONS NAMED IN THE TITLE.
 EQUIPMENT: 6" TOPCON TOTAL STATION & HP COMPUTER



SURVEY FOR:
 DALE SMITH & GARRETT SMITH

PARCEL 1 - 3.05 ACES. PARCEL 2 - 0.11 AC.
 1458 G.M.D.
 LIBERTY COUNTY, GEORGIA

SURVEY DATE 5-24-06	PLAT DATE 6-6-06	REVIEWED
------------------------	---------------------	----------

JOE DAVIS & ASSOCIATES
 POST OFFICE BOX 126
 GLENNVILLE GA. 30427
 912-854-3055