ROAD PLANS FOR
SPARROW HILL
TAX MAP 56 PARCELS 26A2, 108A, AND A PORTION OF PARCEL 35
WHITE HALL DISTRICT, ALBEMARLE COUNTY, VIRGINIA

LEGEND

EXIST	NEW	DESCRIPTION
16.5 TC	x 12.5 TC	TOP OF CURB ELEVATION
16.5	x 12.5	SPOT ELEVATION
16.5 TW	x 12.5 TW	TOP OF WALL ELEVATION
16.5 BW	x 12.5 BW	BOTTOM OF WALL ELEVATION
		BENCHMARK
		STORM SEWER
RD	RD	ROOF DRAIN
		SEWER LINE
W	W	WATER LINE
GAS	GAS	GAS LINE
OHE	OHE	OVERHEAD ELECTRIC WIRE
UGE	UGE	UNDERGROUND ELECTRIC
OHT	OHT	OVERHEAD TELEPHONE LINE
UGT	UGT	UNDERGROUND TELEPHONE LINE
		PROPERTY LINE
		ADJACENT PROPERTY LINE
		VACATED PROPERTY LINE
		BUILDING SETBACK
	1	DRAIN INLET (DI)
	1	SANITARY MANHOLE
		PLUG
WV	WV	WATER VALVE & BOX
		FIRE HYDRANT
WM	WM	WATER METER
		LIGHT POLE
		UTILITY POLE
		SANITARY EASEMENT
		GRADING EASEMENT
		DRAINAGE EASEMENT
		UTILITY EASEMENT
		WATER EASEMENT
		ACCESS EASEMENT
		STORM DRAINAGE EASEMENT
		TREE LINE
		FENCE
		STREAM
312	12	INTERVAL CONTOUR
300	00	INDEX CONTOUR
CG-2	CG-2	STANDARD 6" CURB
CG-6	CG-6	COMBINATION 6" CURB & GUTTER
		CONCRETE PAVEMENT / SIDEWALK
		RIPRAP
		ASPHALT
		GRASS
		EC-2 MATTING
		EC-3 MATTING
		WETLAND
10	10	PARKING COUNT
		CROSSWALK
		HANDICAP ACCESSIBLE AISLE
		CG-12
		HANDICAP PARKING

NOTE:
1. THE SIZE OF THE SYMBOLS MAY VARY FROM WHAT IS SHOWN.

VICINITY MAP
SCALE: 1"=2,000'

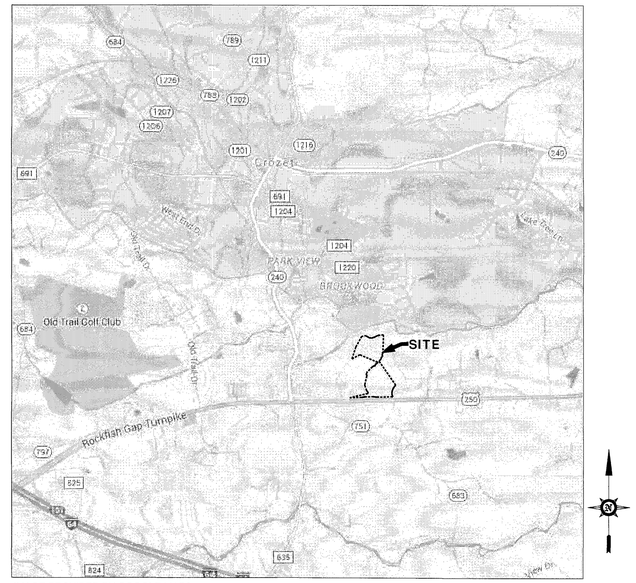

IMAGE PROVIDED BY GOOGLE MAPS

SHEET INDEX

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C2 - EXISTING CONDITIONS & DEMO PLAN
C3 - SITE OVERVIEW
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C12 - ROAD B PLAN AND PROFILE
C13 - ROAD B PLAN AND PROFILE & WATERLINE DETAILS
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SIGNATURE BLOCK	DATE
CURRENT DEVELOPMENT PLANNER	
CURRENT DEVELOPMENT ENGINEER	
ALBEMARLE COUNTY SERVICE AUTHORITY	
FIRE OFFICIAL	
ARCHITECTURAL REVIEW BOARD	
BUILDING OFFICIAL	
VIRGINIA DEPARTMENT OF TRANSPORTATION	

PROPERTY INFORMATION

OWNER (PARCELS 26A2 AND 108A):
HERRING, JUDITH S.
5444 BROWNSVILLE ROAD
CHARLOTTESVILLE VA, 22903

DB 1479 PG 180
DB 666 PG 109

OWNER (PARCEL 35):
LUCKY CREEK, LLC
3626 BLUFTON MILL ROAD
FREE UNION VA, 22940

DB 4054 PG 216

DEVELOPER/ CONTRACT PURCHASER:
ADELAIDE C-VILLE, LLC
250 W. MAIN STREET, SUITE 201
CHARLOTTESVILLE, VA 22902

AREA SUMMARY

AREA OF DEVELOPMENT ..... 34.99 Ac.

DEVELOPMENT LOTS ..... 17.17 Ac
DEDICATED R.O.W ..... 1.66 Ac
OPEN SPACE ..... 16.16 Ac
TOTAL PARCEL AREA ..... 34.99 Ac

R-1 CLUSTER DEVELOPMENT DENSITY CALCULATION:

Standard Density = 0.97 DUA
Bonus Factor 13.4.2 (Internal Road System) = 10.0%
Maximum Density Allowed = 1.067 DUA

Permitted Density = Development Area X Max. Density
= 34.99 AC X 1.067 DUA = 37 Units

Note: A 10% bonus is allowed for provision of an internal road system which is the sole access to the existing state maintained road system.

AREA REQUIREMENTS

Proposed Number of Lots =35 Units
Permitted Density =1.067 DUA

Required Open Space (25%) = 8.75 Acres
Required Unrestricted Open Space = 1.75 Acres
Per 4.7(C)(3) (20% of required).

PARCEL AREA SUMMARY

A portion of parcel 56-35 totalling 15.03 acres is proposed to be transferred to parcel 56-108A through a boundary line adjustment.

AREA OF DEVELOPMENT 34.99 AC
TOTAL OPEN SPACE REQUIRED: 8.75 AC

PARCEL 108A ..... 14.515 Ac.
PLUS PARCEL 26A2 ..... 5.443 Ac.
PLUS PORTION OF PARCEL 35 ..... 15.031 Ac.
TOTAL PARCEL AREA ..... 34.989 Ac

BASE INFORMATION

SOURCE OF BOUNDARY SURVEY:
BOUNDARY SURVEY BY ROGER RAY AND ASSOCIATES.
ADDITIONAL BOUNDARY INFORMATION PROVIDED BY LINCOLN SURVEYING.

SOURCE OF TOPOGRAPHY: ALBEMARLE COUNTY GIS DATA FILES (4 FT. CTI)

BENCHMARK(S): NAVD88
NAD83 VIRGINIA STATE PLANE SOUTH

WATER SOURCE: ALBEMARLE COUNTY SERVICE AUTHORITY

SEWER SERVICE: ALBEMARLE COUNTY SERVICE AUTHORITY

THIS PROPERTY IS ZONED: R1 - RESIDENTIAL

AN R1-CLUSTER RESIDENTIAL DEVELOPMENT IS PROPOSED WITH THIS APPLICATION.

MINIMUM BUILDING SETBACKS:
FRONT: 5' REAR: 20'

MINIMUM BUILDING SEPARATION: 10'

SUBDIVISION NOTES

1. All proposed lots contain a building site (shown on sheet C3) that complies with section 4.2.1 of the Albemarle County Zoning Ordinance.
2. To the best of our knowledge, there are no places of burial within this site.
3. This site does not lie within an agricultural-forestral district.
4. This site lies within Lickinghole Creek Water Supply watershed.
5. The stream buffers shown hereon shall be managed in accordance with the Albemarle County Water Protection Ordinance.
6. See map for limits of the 100 year flood hazard overlay district per FEMA floodmap #51003C0237D effective 02/04/2005.

TRIP GENERATION

Proposed use: Single family detached dwellings, ITE code 210.
Oxbow Drive: 35 dwellings, projected ADT 350 trips/day

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ENGINEERING - LAND PLANNING - PROJECT MANAGEMENT

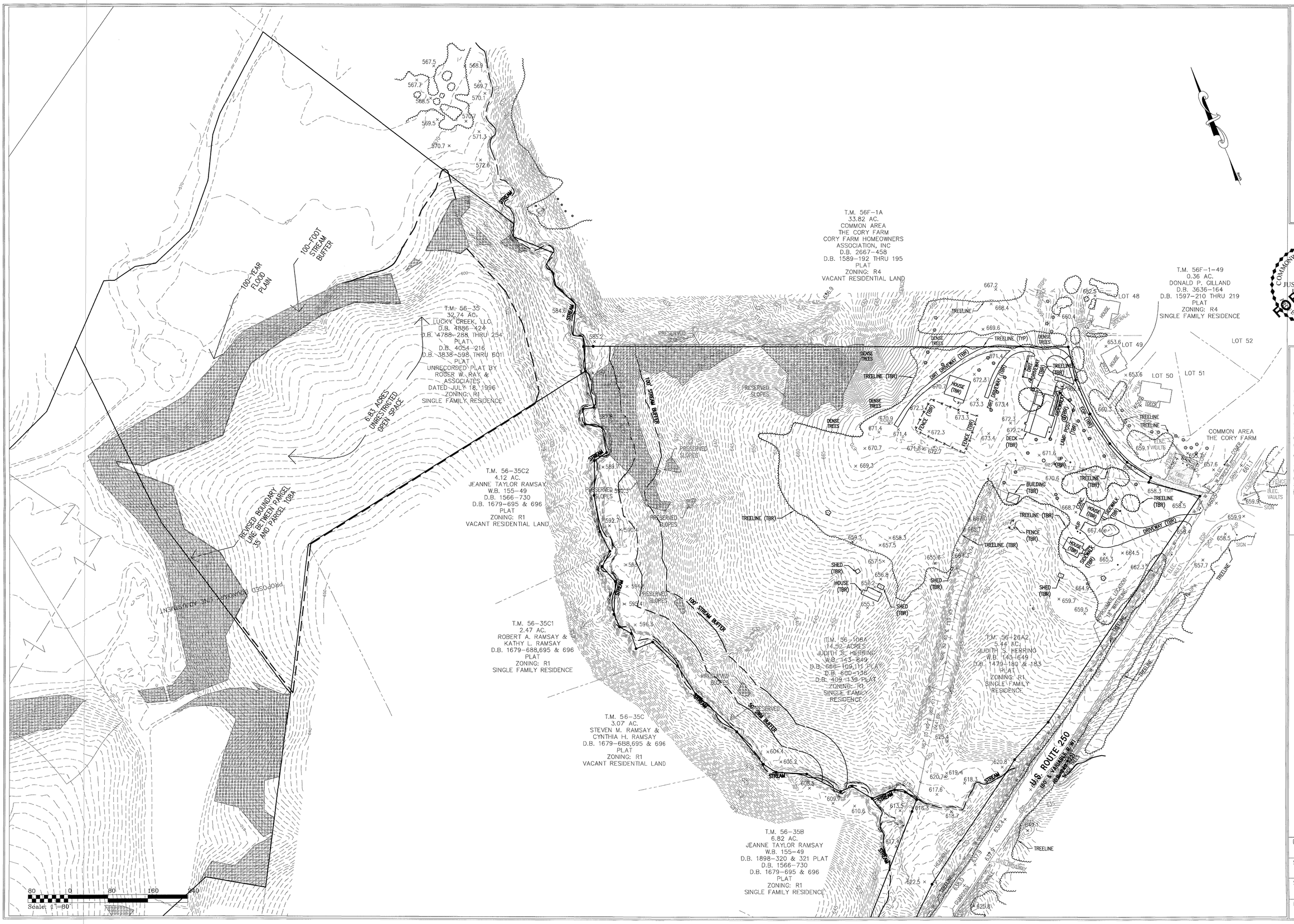
COMMONWEALTH OF VIRGINIA
JUSTIN E. SHIMP
Lic. No. 45183
PROFESSIONAL ENGINEER
FOR REVIEW

COVER PAGE

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 02/03
Scale
Sheet No. C1 OF
File No. 15.



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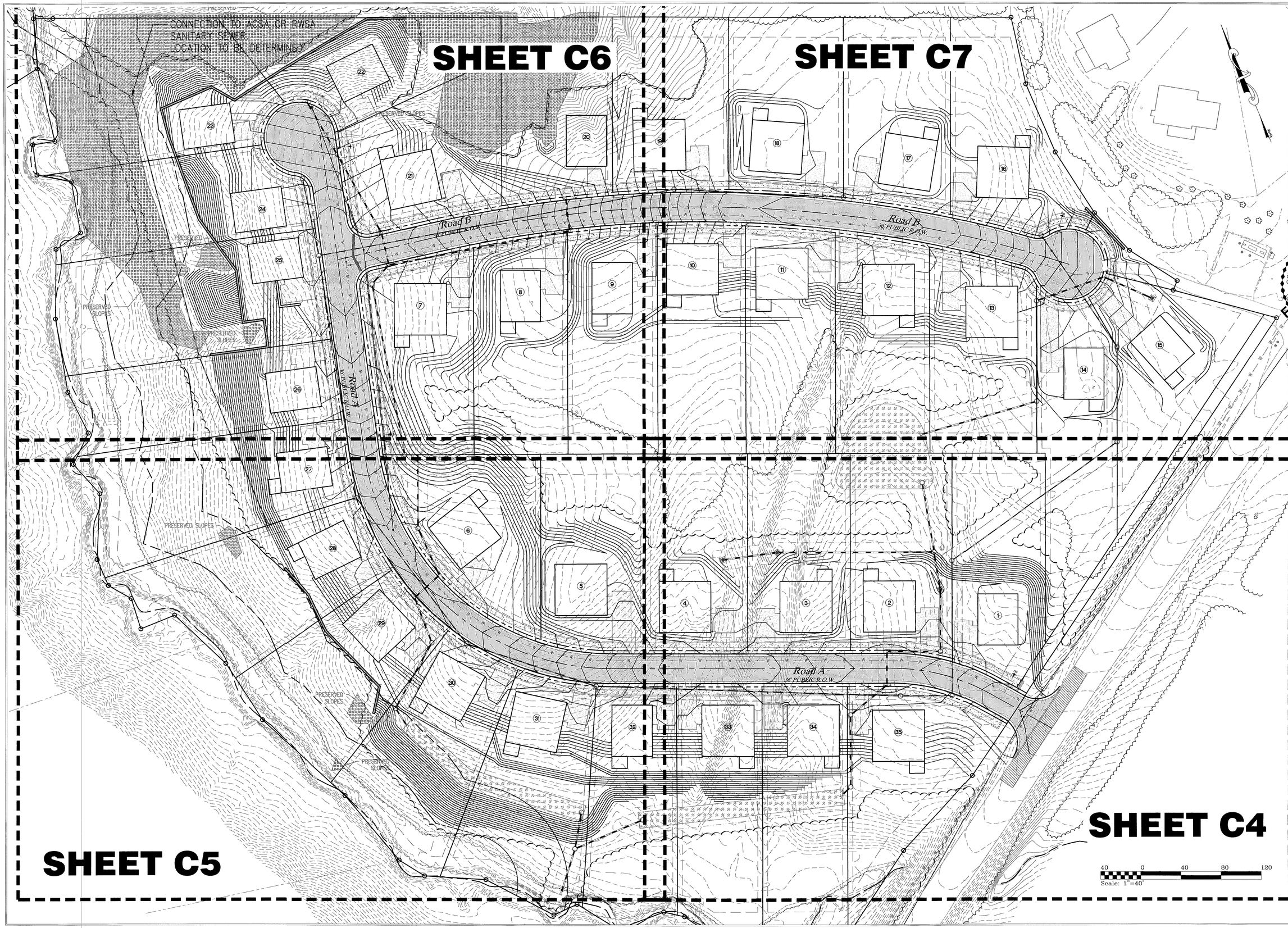
EXISTING CONDITIONS AND DEMO PLAN

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/20
Scale 1"=
Sheet No. C2 OF
File No. 15.



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SUBDIVISION OVERVIEW

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FINAL CONSTRUCTION PLANS FOR

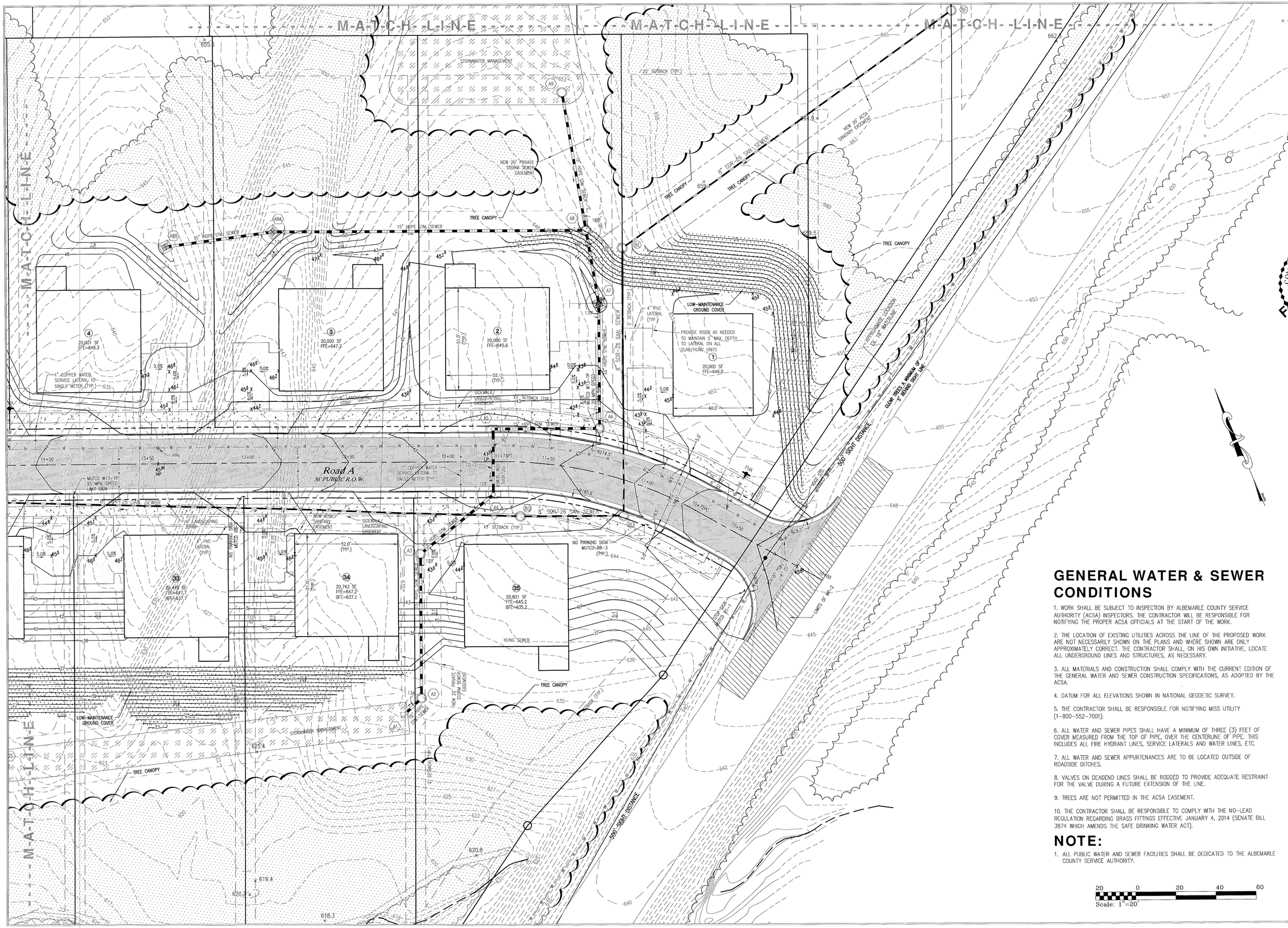
SPARROW HILL

Date 11/21/2

Scale 1"=

Sheet No. C3 0

File No. 15.



GENERAL WATER & SEWER CONDITIONS

1. WORK SHALL BE SUBJECT TO INSPECTION BY ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA) INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER ACSA OFFICIALS AT THE START OF THE WORK.

2. THE LOCATION OF EXISTING UTILITIES ACROSS THE LINE OF THE PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL, ON HIS OWN INITIATIVE, LOCATE ALL UNDERGROUND LINES AND STRUCTURES, AS NECESSARY.

3. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CURRENT EDITION OF THE GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS, AS ADOPTED BY THE ACSA.

4. DATUM FOR ALL ELEVATIONS SHOWN IN NATIONAL GEODETIC SURVEY.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7001).

6. ALL WATER AND SEWER PIPES SHALL HAVE A MINIMUM OF THREE (3) FEET OF COVER MEASURED FROM THE TOP OF PIPE, OVER THE CENTERLINE OF PIPE. THIS INCLUDES ALL FIRE HYDRANT LINES, SERVICE LATERALS AND WATER LINES, ETC.

7. ALL WATER AND SEWER APPURTENANCES ARE TO BE LOCATED OUTSIDE OF ROADSIDE DITCHES.

8. VALVES ON DEADEND LINES SHALL BE RODDED TO PROVIDE ADEQUATE RESTRAINT FOR THE VALVE DURING A FUTURE EXTENSION OF THE LINE.

9. TREES ARE NOT PERMITTED IN THE ACSA EASEMENT.

10. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE NO-LEAD REGULATION REGARDING BRASS FITTINGS EFFECTIVE JANUARY 4, 2014 (SENATE BILL 3874 WHICH AMENDS THE SAFE DRINKING WATER ACT).

NOTE:

1. ALL PUBLIC WATER AND SEWER FACILITIES SHALL BE DEDICATED TO THE ALBEMARLE COUNTY SERVICE AUTHORITY.

20 0 20 40 60
Scale: 1"=20'

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GRADING & UTILITY PLAN

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/20
Scale 1"=
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M-A-T-C-H - L-I-N-E

M-A-T-C-H - L-I-N-E

M-A-T-C-H - L-I-N-E

M-A-T-C-H - L-I-N-E

PRESERVED SLOPES

PRESERVED SLOPES

PRESERVED SLOPES

LOW-MAINTENANCE GROUND COVER

8" SDR-26 SAN. SEWER

NO PARKING SIGN MUTCD R8-3 (TYP.)

NEW 20' ACCESS (SANITARY EASEMENT)

100' STREAM BUFFER

50' STREAM BUFFER

RETAINING WALL MAX. HEIGHT 14'

TREE CANOPY

(WING SEWER)

STORMWATER MANAGEMENT

21' SETBACK (TYP.)

20' SETBACK (TYP.)

24' 3" SETBACK (TYP.)

15' SETBACK (TYP.)

4' LANDSCAPING STRIP

6' LANDSCAPING STRIP

SIDEWALK/ LANDSCAPING EASEMENT

NEW ACCESS (SANITARY EASEMENT)

MUTCD R1-1 STOP SIGN

4" PVC LATERAL (TYP.)

1" COPPER WATER SERVICE LATERAL TO SINGLE METER (TYP.)

Road A

30' PUBLIC R.O.W.

8" SDR-26 SAN. SEWER

6" GV

8" PVC TEE

14+50 PC

PROVIDE RISER AS NEEDED TO MAINTAIN 8' MAX. DEPTH TO LATERAL ON ALL SLAB/HUNG UNITS

52.0' (TYP.)

51.0' (TYP.)

5.0%

20,028 SF
FFE=646.5

24,590 SF
FFE=644.3
BFE=634.3

20,353 SF
FFE=647.2
BFE=637.2

40.0'

15" HDPE STM SEWER

Scale: 1"=20'

20 0 20 40 60

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PROFESSIONAL ENGINEER

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GRADING & UTILITY PLAN

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR

SPARROW HILL

Date 11/21/20

Scale 1"=

Sheet No. C5 OF

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FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

GRADING & UTILITY PLAN

Rev #	Date	Description

Date 11/21/2(
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Sheet No. C6 0f
File No. 15.

Scale: 1"=20'

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GRADING & UTILITY PLAN

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/2(
Scale 1"=
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LANDSCAPING REQUIRED:
20% of Total Site Area of Canopy: 1,524,125 SF * 0.20
= 304,825 SF

LANDSCAPING PROVIDED:
Total Canopy Area: Existing Canopy
= 858,385 * 1.25(Canopy Bonus) = 1,072,981 SF

Existing Canopy = 70.4% Total Site Area

NOTE:
Proposed slopes steeper than 3:1 shall have low maintenance ground cover.

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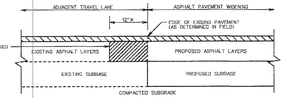
LANDSCAPING PLAN

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/2
Scale 1"
Sheet No. C8 OF
File No. 15.

WP-2



CONSTRUCTION JOINT DETAIL

REMOVE EXISTING ASPHALT LAYERS TO EXISTING SUBBASE AND REPLACE WITH PROPOSED ASPHALT WIDENING LAYERS

PROPOSED MINIMUM 1½ INCH THICK ASPHALT SURFACE COURSE (SEE NOTE 5)

* MINIMUM 12 INCHES OR GREATER AS NECESSARY TO ADJUST THE FULL THICKNESS OF EXISTING ASPHALT LAYERS AS DETERMINED BY CORES (SEE NOTE 3)

NOTES:

1. ASPHALT PAVEMENT WIDENING SHALL HAVE A PAVEMENT DESIGN IN ACCORDANCE WITH CURRENT VDOT PROCEDURES AND BE APPROVED BY THE ENGINEER.
2. THE PAVEMENT DESIGN FOR ASPHALT PAVEMENT WIDENING SHALL MEET OR EXCEED THE DEPTHS AND TYPES OF THE LAYERS OF EXISTING PAVEMENT. SUBGRADE DRAINAGE OF THE EXISTING AND PROPOSED PAVEMENT SHALL BE ADDRESSED IN THE PAVEMENT DESIGN.
3. A MINIMUM OF THREE CORES SHALL BE TAKEN ALONG THE CENTER OF THE ADJACENT TRAVEL LANE TO DETERMINE THE TYPE AND THICKNESS OF EXISTING PAVEMENT LAYERS. THESE CORES SHALL BE SPACED NO MORE THAN 500 FEET APART.
4. THE ADJACENT TRAVEL LANE SHALL BE MILLED A MINIMUM DEPTH OF 1½ INCHES AND REPLACED WITH AN ASPHALT SURFACE COURSE TO MATCH THE PROPOSED PAVEMENT WIDENING SURFACE COURSE UNLESS WAIVED BY THE ENGINEER.
5. THE ENGINEER MAY REQUIRE THE MILLING DEPTH OF THE EXISTING PAVEMENT TO BE ADJUSTED TO ACHIEVE AN ACCEPTABLE PAVEMENT CROSS-SLOPE AND EFFECTIVE SURFACE DRAINAGE.
6. EXISTING PAVEMENT MARKINGS AND MARKERS WITHIN THE PROJECT LIMITS SHALL BE RESTORED SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. FINAL TRANSVERSE PAVEMENT TIE-IN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 315.05(c) OF THE SPECIFICATIONS EXCEPT THAT ALL JOINTS AT TIE-IN LOCATIONS SHALL BE TESTED USING A 10 FOOT STRAightEDGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 315.07(a) OF THE SPECIFICATIONS.

VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | 303.02 | REVISION DATE

ASPHALT PAVEMENT WIDENING
FOR WIDENING SUBJECT TO TRAFFIC
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 315

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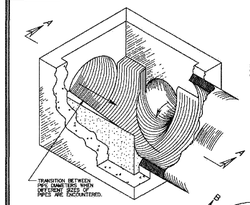
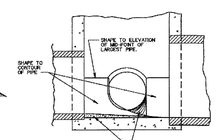




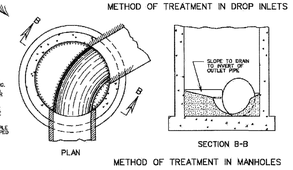
SECTION A-A

METHOD OF TREATMENT IN DROP INLETS

NOTES:
THE LOCATION OF MANHOLE AND INLET INVERTS IN ACCORDANCE WITH THIS DRAWING IS TO APPLY TO THOSE STRUCTURES INSTALLED ON PLANS OR WHERE INVERT OF PIPE IS ABOVE INVERT OF STRUCTURE.

MANHOLE OR DROP INLET IS TO BE FORMED AND CONSTRUCTED IN ACCORDANCE WITH AS FOLLOWS: SUBGRADE TO BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. PLACE 6" OF CLASS I, TYPE I, GRADE 1 PORTLAND CEMENT CONCRETE MIX CONFORMING TO CLASS A3 OR CLASS C3 CONCRETE MIX AS DEFINED IN SPECIFICATIONS. PLACE CLASS C3 CONCRETE MIX ON SUBGRADE IMMEDIATELY AFTER BRUSH COATING OF UNGROUNDED SURFACE OF SUBGRADE. BRUSH COAT THE SURFACE OF THE CONCRETE SMOOTH BY HAND TROWELLING. NONE OF THE CONCRETE AGGREGATE SHALL REMAIN EXPOSED.

DETAILS OF INVERT SHAPING AS SHOWN BELOW ARE FOR EXAMPLE PURPOSES ONLY. THE ACTUAL INVERT SHAPING SHALL BE DESIGNED INDIVIDUALLY TO SUIT FOR THE PARTICULAR INLET AND OUTLET CONFIGURATION AND FLOW LINES.



PLAN

SECTION B-B

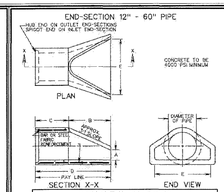
METHOD OF TREATMENT IN MANHOLES

VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | 166.08 | REVISION DATE

STANDARD METHOD OF SHAPING
MANHOLE & INLET INVERTS
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 302

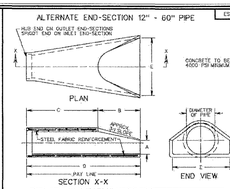
END-SECTION 12" - 60" PIPE



END SECTION DIMENSIONS

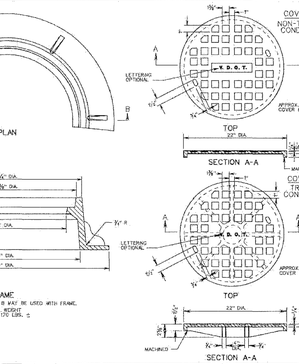
PIPE DIAMETER	A*	B	C	D	E
12"	4"	2'-0"	2'-0"	4'-0"	8'-0"
15"	4"	2'-3"	2'-3"	4'-6"	9'-0"
18"	4"	2'-3"	2'-6"	4'-6"	9'-0"
21"	10½"	2'-6"	2'-9"	5'-0"	9'-6"
24"	10½"	3'-0"	2'-9"	6'-0"	9'-6"
27"	10½"	4'-0"	2'-9"	6'-0"	9'-6"
30"	1'-0"	4'-6"	1'-7½"	6'-10½"	9'-0"
33"	1'-0"	4'-10½"	1'-7½"	7'-10½"	9'-0"
36"	1'-3"	5'-3"	2'-10½"	8'-10½"	8'-0"
42"	1'-3"	5'-3"	2'-10½"	8'-10½"	8'-0"
48"	2'-0"	5'-0"	3'-0"	8'-0"	7'-0"
54"	2'-3"	5'-0"	3'-10½"	8'-10½"	7'-0"
60"	2'-10"	5'-0"	4'-7½"	9'-7½"	7'-0"

ALTERNATE END-SECTION 12" - 60" PIPE



END SECTION DIMENSIONS

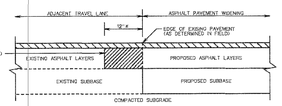
PIPE DIAMETER	A*	B	C	D	E
15"	4"	2'-0"	4'-0"	8'-0"	3'-0"
18"	4"	2'-3"	3'-10"	8'-0"	3'-0"
18"	9"	2'-3"	3'-10"	8'-0"	3'-0"
21"	9"	2'-6"	3'-10"	8'-0"	3'-0"
24"	10"	3'-0"	2'-8"	8'-0"	4'-0"
27"	10½"	4'-0"	2'-10"	8'-10½"	4'-6"
30"	1'-0"	4'-6"	1'-7½"	8'-10½"	5'-0"
33"	1'-0"	4'-10½"	1'-7½"	8'-10½"	5'-0"
36"	1'-3"	5'-3"	2'-10½"	8'-10½"	8'-0"
42"	1'-3"	5'-3"	2'-10½"	8'-10½"	8'-0"
48"	2'-0"	5'-0"	3'-0"	8'-0"	7'-0"
54"	2'-3"	5'-0"	3'-10"	8'-4"	7'-0"
60"	2'-10"	5'-0"	4'-7½"	9'-2"	8'-0"



NOTES:
PIPE LENGTHS SHOWN ON PLANS ARE BASED ON THE USE OF THE END-SECTIONS ON THE LEFT OF THE CONVENTIONAL PLANS. TO USE THE ALTERNATE DESIGN SHOWN ON THE RIGHT, THE LENGTHS MUST BE REDUCED BY THE DIFFERENCE IN DIMENSION "D".

SPECIFICATION REFERENCE 307 | FLARED END-SECTION FOR 12"-60" CONCRETE PIPE CULVERTS | VIRGINIA DEPARTMENT OF TRANSPORTATION | REV. 7/02 | 122.01

WP-2



CONSTRUCTION JOINT DETAIL

REMOVE EXISTING ASPHALT LAYERS TO EXISTING SUBBASE AND REPLACE WITH PROPOSED ASPHALT WIDENING LAYERS

PROPOSED MINIMUM 1½ INCH THICK ASPHALT SURFACE COURSE (SEE NOTE 5)

* MINIMUM 12 INCHES OR GREATER AS NECESSARY TO ADJUST THE FULL THICKNESS OF EXISTING ASPHALT LAYERS AS DETERMINED BY CORES (SEE NOTE 3)

NOTES:

1. ASPHALT PAVEMENT WIDENING SHALL HAVE A PAVEMENT DESIGN IN ACCORDANCE WITH CURRENT VDOT PROCEDURES AND BE APPROVED BY THE ENGINEER.
2. THE PAVEMENT DESIGN FOR ASPHALT PAVEMENT WIDENING SHALL MEET OR EXCEED THE DEPTHS AND TYPES OF THE LAYERS OF EXISTING PAVEMENT. SUBGRADE DRAINAGE OF THE EXISTING AND PROPOSED PAVEMENT SHALL BE ADDRESSED IN THE PAVEMENT DESIGN.
3. A MINIMUM OF THREE CORES SHALL BE TAKEN ALONG THE CENTER OF THE ADJACENT TRAVEL LANE TO DETERMINE THE TYPE AND THICKNESS OF EXISTING PAVEMENT LAYERS. THESE CORES SHALL BE SPACED NO MORE THAN 500 FEET APART.
4. THE ADJACENT TRAVEL LANE SHALL BE MILLED A MINIMUM DEPTH OF 1½ INCHES AND REPLACED WITH AN ASPHALT SURFACE COURSE TO MATCH THE PROPOSED PAVEMENT WIDENING SURFACE COURSE UNLESS WAIVED BY THE ENGINEER.
5. THE ENGINEER MAY REQUIRE THE MILLING DEPTH OF THE EXISTING PAVEMENT TO BE ADJUSTED TO ACHIEVE AN ACCEPTABLE PAVEMENT CROSS-SLOPE AND EFFECTIVE SURFACE DRAINAGE.
6. EXISTING PAVEMENT MARKINGS AND MARKERS WITHIN THE PROJECT LIMITS SHALL BE RESTORED SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. FINAL TRANSVERSE PAVEMENT TIE-IN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 315.05(c) OF THE SPECIFICATIONS EXCEPT THAT ALL JOINTS AT TIE-IN LOCATIONS SHALL BE TESTED USING A 10 FOOT STRAightEDGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 315.07(a) OF THE SPECIFICATIONS.

VDOT ROAD AND BRIDGE STANDARDS | SHEET 1 OF 1 | 303.02 | REVISION DATE

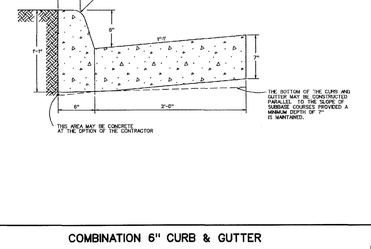
ASPHALT PAVEMENT WIDENING
FOR WIDENING SUBJECT TO TRAFFIC
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 315

CG-6

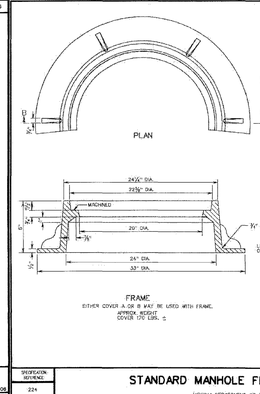
NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, ASTM PS-9 PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED BASE COURSE. THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL.



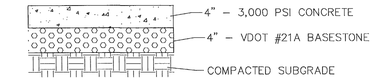
SPECIFICATION REFERENCE 505, 502 | COMBINATION 6" CURB & GUTTER | VIRGINIA DEPARTMENT OF TRANSPORTATION | REV. 9/08 | 301.03

MH-1

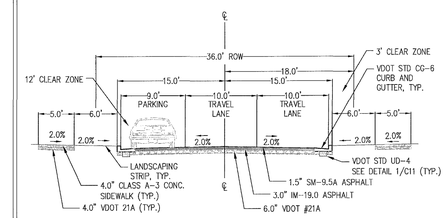


SHEET 4 OF 5

SPECIFICATION REFERENCE 224, 202 | STANDARD MANHOLE FRAME AND COVER | VIRGINIA DEPARTMENT OF TRANSPORTATION | REV. 7/02 | 106.04



1 C9 TYPICAL SIDEWALK SECTION
Not To Scale



NOTES:
1. PARKING ON ONE SIDE OF STREET ONLY. SEE C4-C7 FOR DETAILS.
2. DESIGN SPEED = 25 MPH.
3. DESIGN STANDARD: GS-SSAR.

2 C9 TYPICAL RIGHT-OF-WAY CROSS-SECTION
1"=10'

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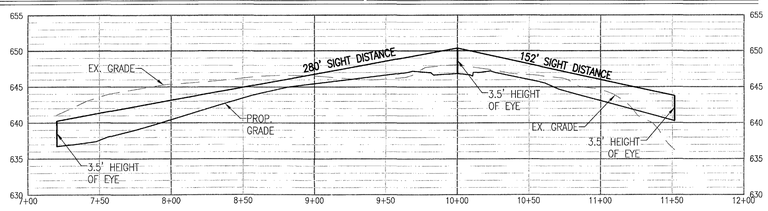
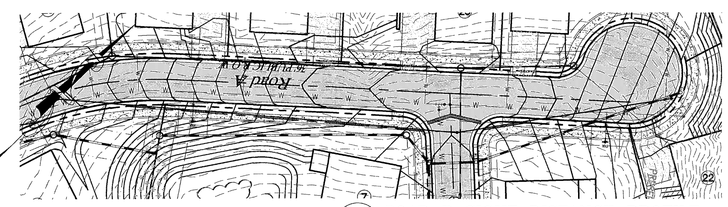
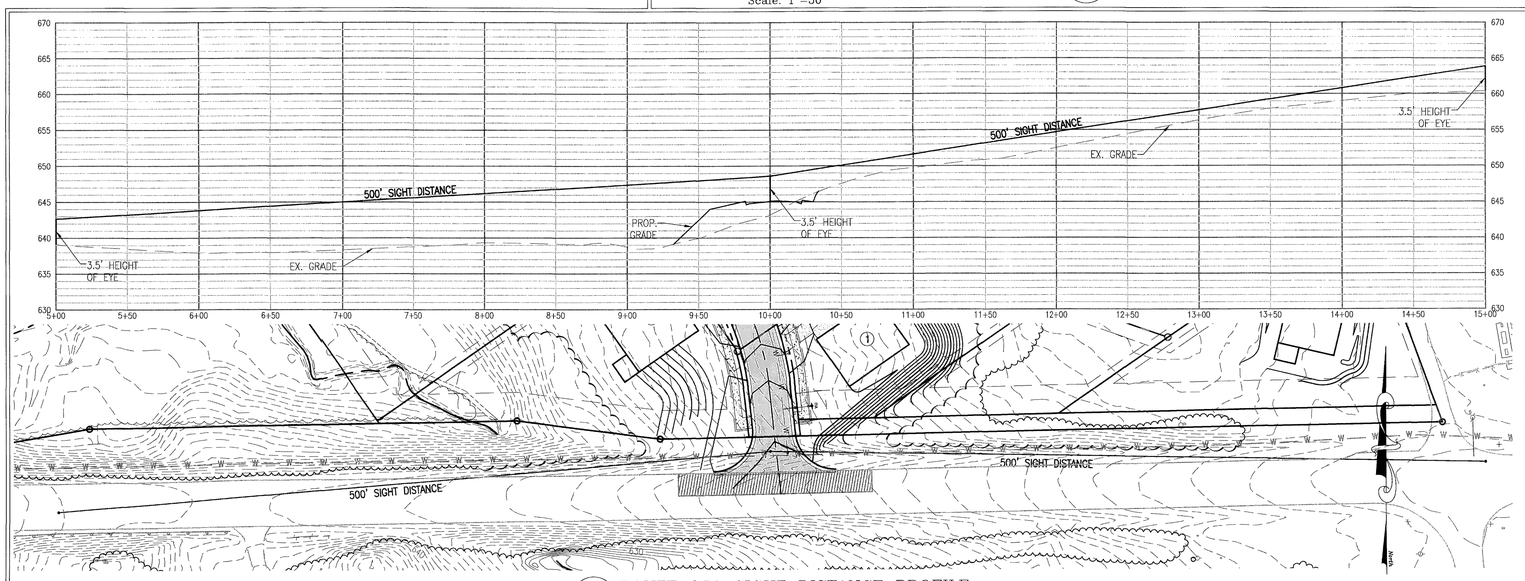
FOR REVIEW





50 0 50 100 150
Scale: 1"=50'

3 C9 ROAD B SIGHT DISTANCE PROFILE
SCALE: 1"=50' HORIZONTAL, 1"=10' VERTICAL



50 0 50 100 150
Scale: 1"=50'

4 C9 ROUTE 250 SIGHT DISTANCE PROFILE
SCALE: 1"=50' HORIZONTAL, 1"=10' VERTICAL

LANDSCAPING AND SITE DETAILS

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FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/20
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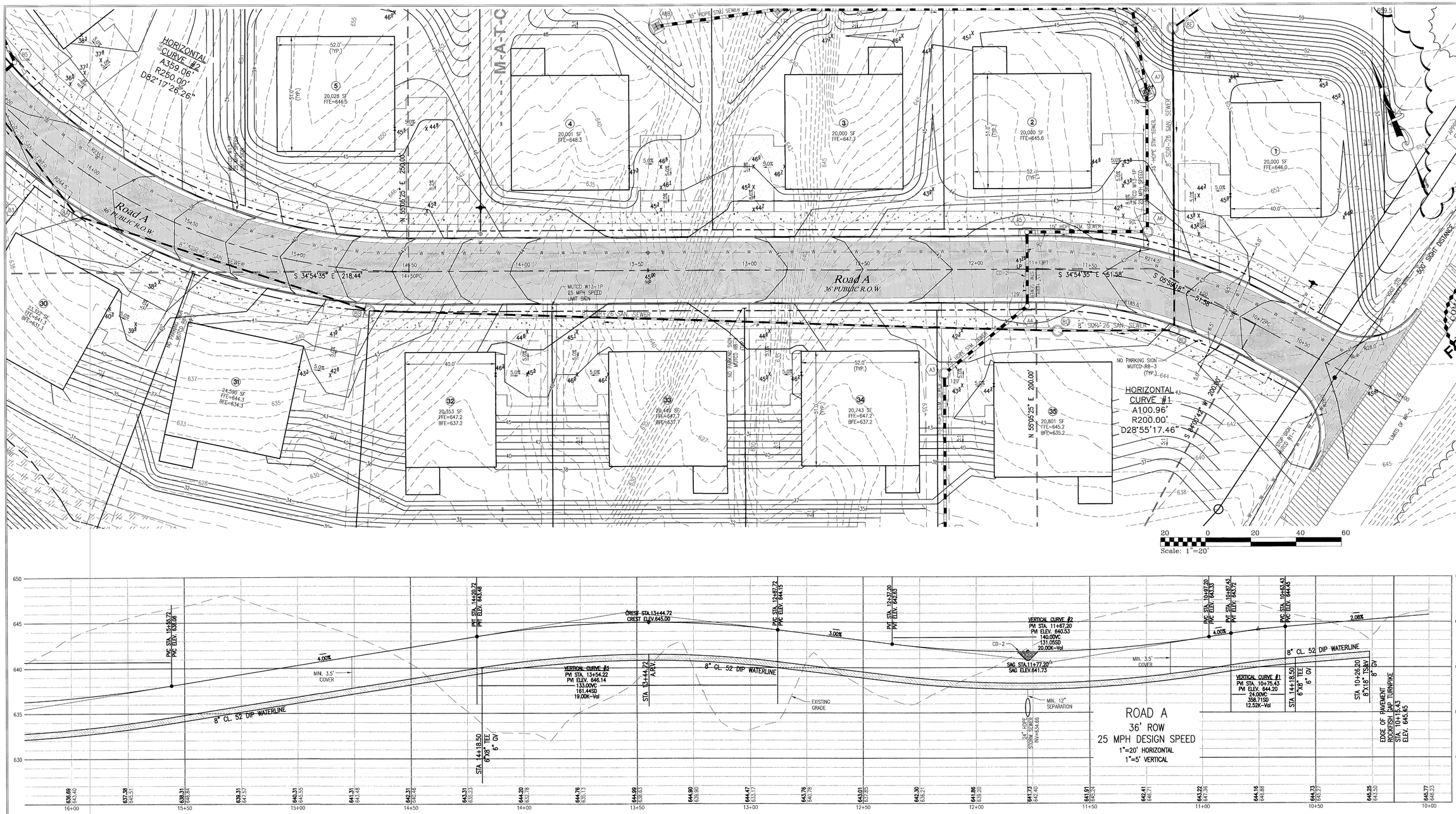

GENERAL CONSTRUCTION NOTES FOR STREETS

1. Construction inspection of all proposed roads within the development will be made by the County. The contractor must notify the Department of Community Development (296-5832) 48 hours in advance of the start of construction.
2. Upon completion of fine grading and preparation of the roadbed subgrade, the contractor shall have CBR tests performed on the subgrade soil. Three (3) copies of the test results shall be submitted to the County. An additional three (3) copies of the test results shall be submitted to VDOT prior to placement of pavement to ensure adequate design. If a subgrade soil CBR of 6 or greater is not obtainable, a revised pavement design shall be made by the design engineer and submitted with the test results for approval.
3. Surface drainage and pipe discharge must be retained within the public right-of-way or within easements prior to acceptance by the County. All drainage outfall easements are to be extended to a boundary line or a natural watercourse.
5. Where urban cross sections are installed, all residential driveway entrances shall conform to VDOT CG-9(A, B or C).
6. Where rural cross sections are installed, all residential driveway entrances shall conform to VDOT standard PE-1.
7. Compliance with the minimum pavement width, shoulder width and ditch sections, as shown on the typical pavement section detail, shall be strictly adhered to.
8. Road plan approval for subdivisions is subject to final subdivision plat validation. Should the final plat for this project expire prior to signing and recordation, then approval of these plans shall be null and void.
9. All signs or other regulatory devices shall conform with the Virginia Manual for Uniform Traffic Control Devices, the Virginia Supplement, and the Albemarle County Road Naming and Property Numbering Ordinance and Manual.
10. Traffic control or other regulatory signs or barricades shall be installed by the developer when, in the opinion of the County Engineer, or designee, they are deemed necessary in order to provide safe and convenient access.
11. The speed limits to be posted on speed limit signs are 5 mph below the design speed, or as determined by VDOT for public roads.
12. VDOT standard CD-1 or CD-2 cross-drains under to be installed under the subbase material at all cut and fill transitions and grade sag points as shown on the road profiles.
13. A video camera inspection is required for all storm sewers and culverts that are deemed inaccessible to VDOT or County inspections. The video inspection shall be conducted in accordance with VDOT's video camera inspection procedure and with a VDOT or County inspector present.

GENERAL CONSTRUCTION NOTES

1. Prior to any construction within any existing public right-of-way, including connection to any existing road, a permit shall be obtained from the Virginia Department of Transportation (VDOT). This plan as drawn may not accurately reflect the requirements of the permit. Where any discrepancies occur the requirements of the permit shall govern.
2. All materials and construction methods shall conform to current specifications and standards of VDOT unless otherwise noted.
3. Erosion and siltation control measures shall be provided in accordance with the approved erosion control plan and shall be installed prior to any clearing, grading or other construction.
4. All slopes and disturbed areas are to be fertilized, seeded and mulched.
5. The maximum allowable slope is 2:1 (horizontal:vertical). Where reasonably obtainable, lesser slopes of 3:1 or better are to be achieved.
6. Paved, rip-rap or stabilization mat lined ditch may be required when in the opinion of the County Engineer, or designee, it is deemed necessary in order to stabilize a drainage channel.
7. All traffic control signs shall conform with the Virginia Manual for Uniform Traffic Control Devices.
8. Unless otherwise noted all concrete pipe shall be reinforced concrete pipe -Class III.
9. All excavation for underground pipe installation must comply with OSHA Standards for the Construction Industry (29 CFR Part 1926).

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PROFESSIONAL ENGINEER

ROAD A PLAN AND PROFILE

Rev #	Date	Description

FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

Date 11/21/2(
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Sheet No. C10 Of
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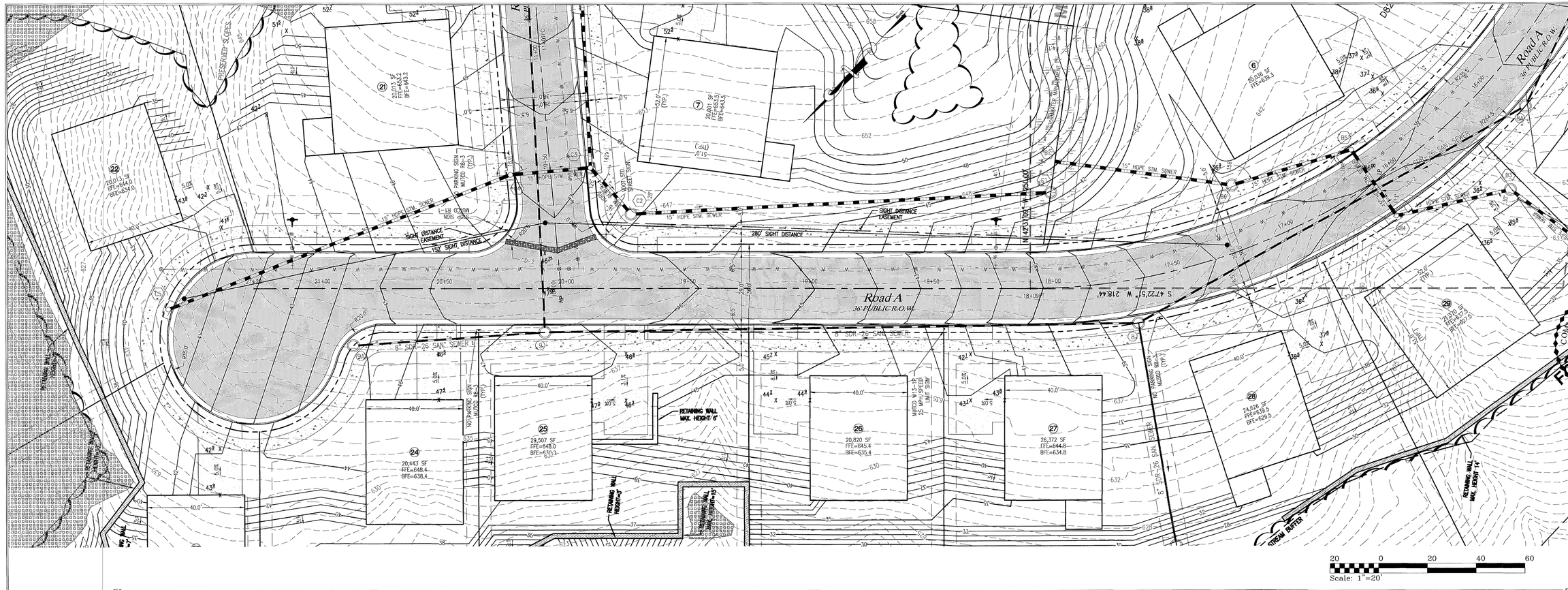

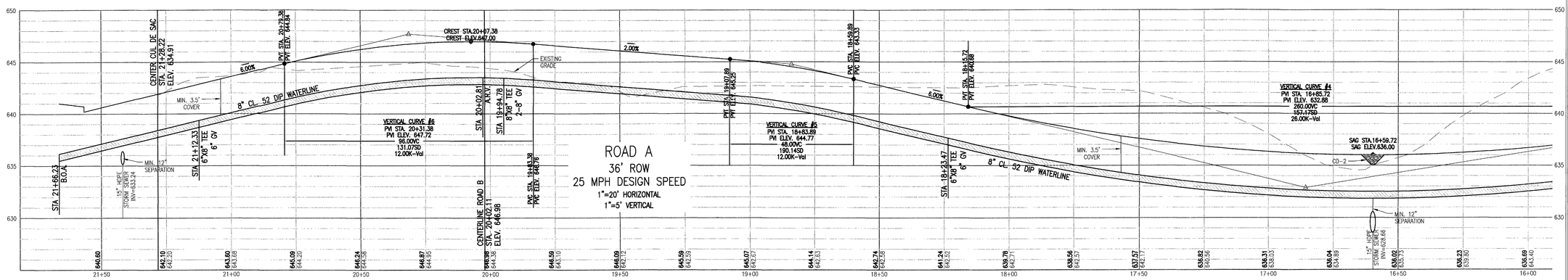

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PROFESSIONAL ENGINEER
FOR REVIEW

ROAD A PLAN AND PROFILE

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FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

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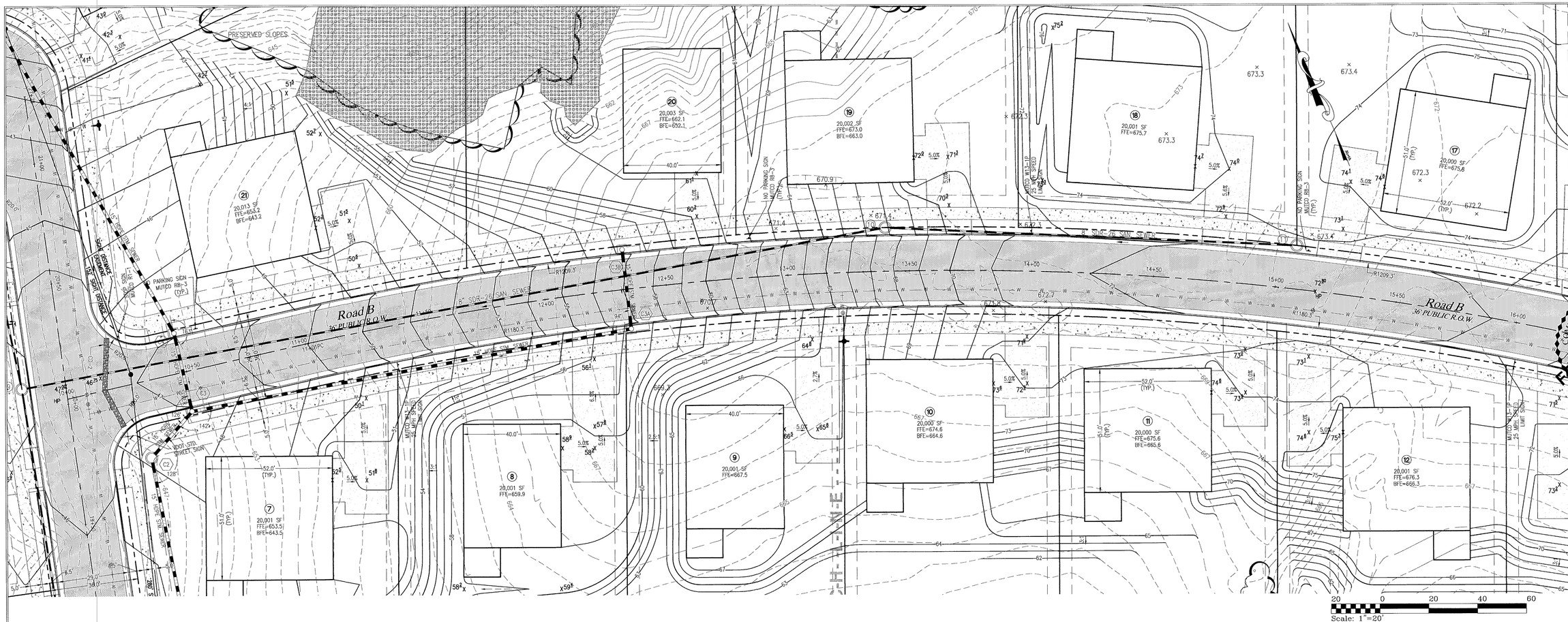

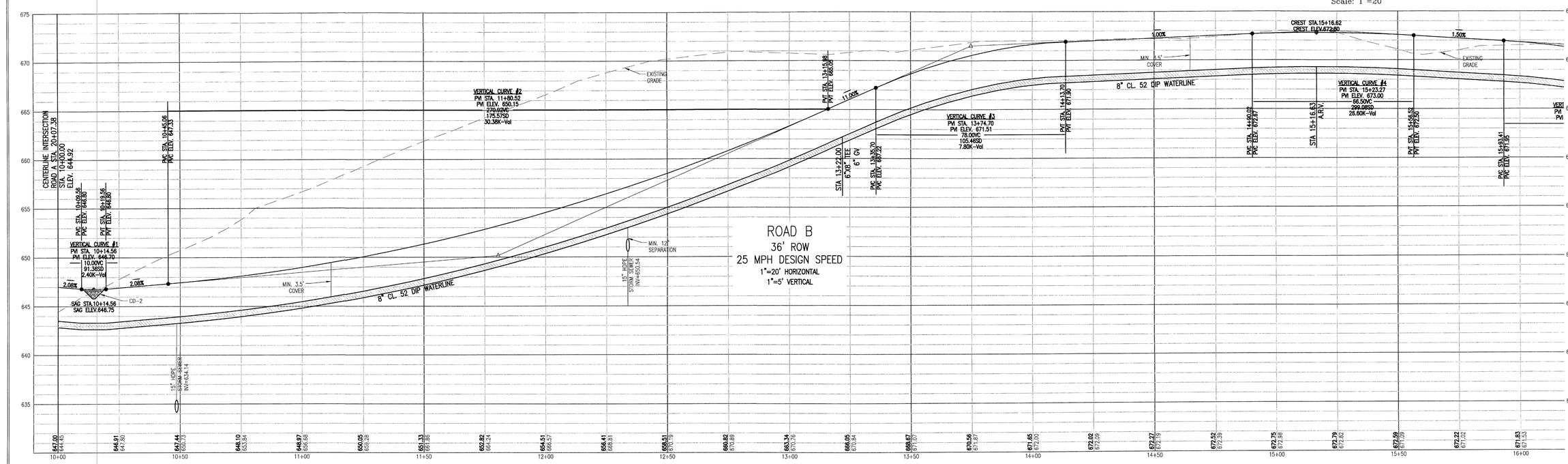

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ROAD B PLAN AND PROFILE

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FINAL CONSTRUCTION PLANS FOR
SPARROW HILL

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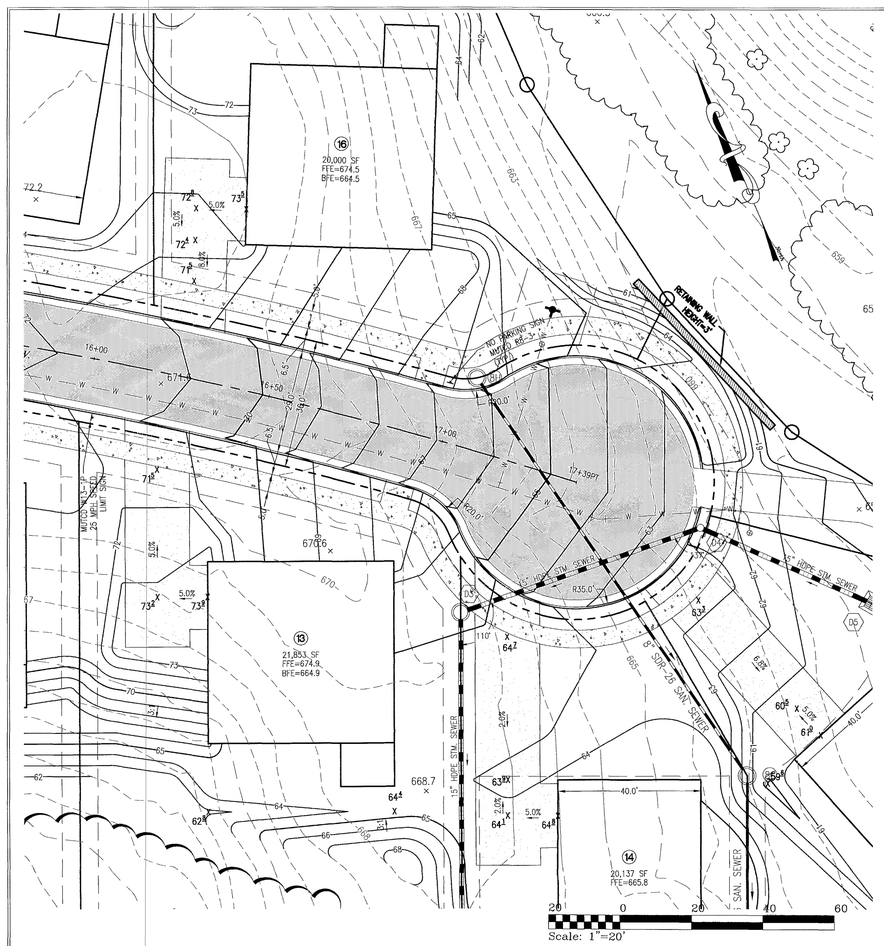
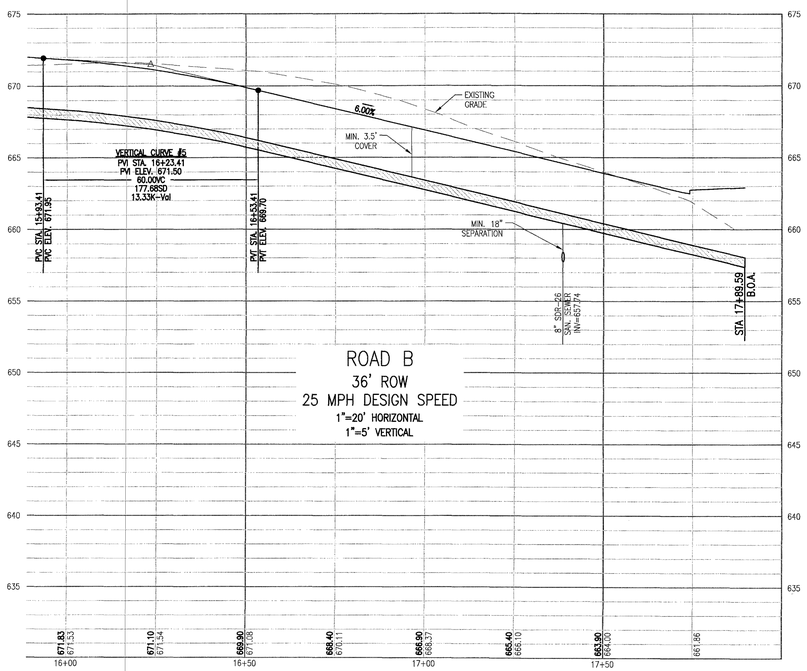
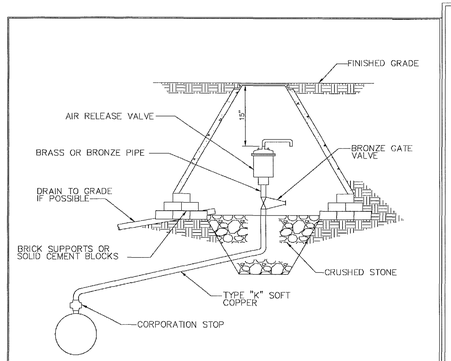
File No. 15.







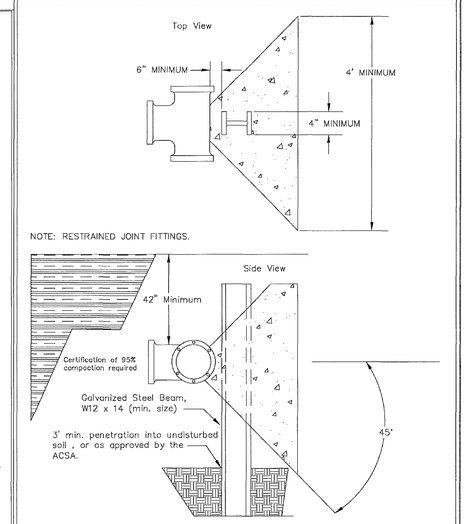
NOTES:
1) A PRECAST MANHOLE CONE AND COVER WITH WATER CAST ON LID FOR TRAFFIC AREAS, OR A METER BOX ASSEMBLY IN NON-TRAFFIC AREAS, OR APPROVED EQUAL, SHALL BE USED.
2) FOR WATERLINES SMALLER THAN 12" USE A 1" A.R.V. AND FITTINGS. FOR WATER LINES 12" AND LARGER USE 2" A.R.V. AND FITTINGS.
3) IN SITUATIONS WHERE THE A.R.V. ASSEMBLY CANNOT BE OFFSET FROM THE MAIN AN ADEQUATE FOUNDATION SHALL BE INSTALLED SO THE WATER LINE DOES NOT SUPPORT THE MANHOLE CONE.

AIR RELEASE VALVE (ARV)

NTS
FIG. W-9

TD-20

1 C13 AIR RELEASE VALVE
Not To Scale

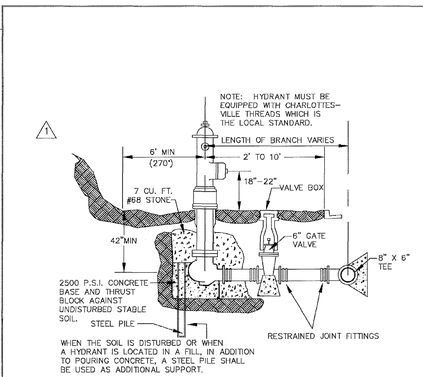


TYPICAL THRUST BLOCK IN FILL AREA

NTS
FIG. W-3B

TD-5

2 C13 TYP. THRUST BLOCK IN FILL AREA
Not To Scale



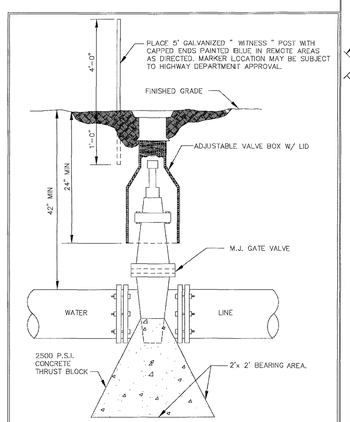
NOTE :
1. SURROUND WEEP HOLES WITH GRAVEL AND KEEP FREE OF CONCRETE.
2. MAINTAIN A 3 1/2' MIN. COVER FROM THE MAIN TO THE FIRE HYDRANT (INCLUDING DITCHES)
3. FINISHED GRADE SHALL SLOPE AWAY FROM THE FIRE HYDRANT AND VALVE BOX.
4. THE GATE VALVE IS ALLOWED IN SHOULDER OR BEHIND THE DITCH. IT IS NOT ALLOWED IN THE DITCH.
5. FIRE HYDRANTS SHALL BE INSTALLED AT LOCATIONS WHERE WEEP HOLES ARE ABOVE THE PREVAILING GROUNDWATER ELEVATION. IF REQUIRED TO BE IN WET AREAS, THE WEEP HOLES SHALL BE PLUGGED AND THE HYDRANT SHALL BE PUMPED DRY.

TYPICAL FIRE HYDRANT ASSEMBLY DETAIL

N.T.S.
FIG. W-4

TD-8

3 C13 TYP. FIRE HYDRANT ASSEMBLY
Not To Scale



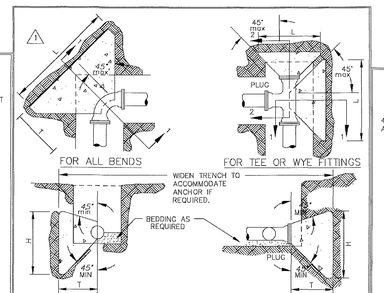
NOTE : IN REMOTE AREAS, VALVE BOXES SHALL EXTEND SIX (6) INCHES ABOVE GRADE.

TYPICAL GATE VALVE

NTS
FIG. W-5

TD-9

4 C13 TYPICAL GATE VALVE
Not To Scale



PIPE SIZE	DEGREE OF BEND	BEND DIMENSIONS (FEET)			VOL. CU.YD.	TEE AND PLUGS (FEET)			VOL. CU.YD.
		L	H	T		L	H	T	
4" & 6"	90	2.50	2.50	3.01	0.24	2.00	2.25	2.50	0.15
	45	2.00	2.25	2.60	0.15				
	22 1/2	1.50	2.00	2.52	0.10				
	11 1/4	1.50	2.00	2.50	0.10				
8"	90	3.66	3.16	3.21	0.48	3.16	2.91	2.66	0.32
	45	2.66	2.68	2.77	0.26				
	22 1/2	1.66	2.16	2.69	0.13				
	11 1/4	1.66	2.16	2.67	0.13				
10" & 12"	90	4.83	3.83	3.42	0.83	3.83	4.00	2.83	0.52
	45	3.33	3.58	2.95	0.43				
	22 1/2	2.33	2.58	2.86	0.24				
	11 1/4	1.83	2.33	2.84	0.18				

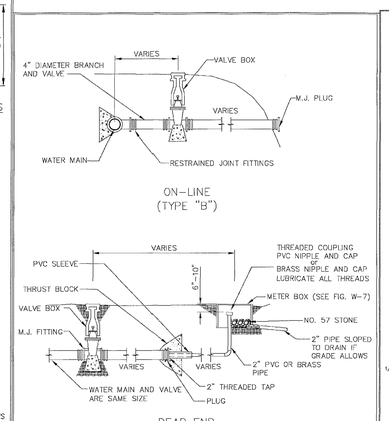
1. THRUST BLOCKS ARE REQUIRED WHENEVER THE PIPELINE : CHANGES DIRECTION, CHANGES SIZE, DEAD ENDS AND AT VALVES.
2. USE 2500 P.S.I. CONCRETE.
3. NO CONCRETE SHALL BE POURED ON ANY PART OF THE JOINT.
4. THE CONSULTING ENGINEER SHALL BE RESPONSIBLE TO THE VERIFY THE TYPE & SIZE OF ALL THRUST BLOCKS.

CONCRETE THRUST BLOCKS

NTS
FIG. W-3

TD-3

5 C13 CONCRETE THRUST BLOCKS
Not To Scale

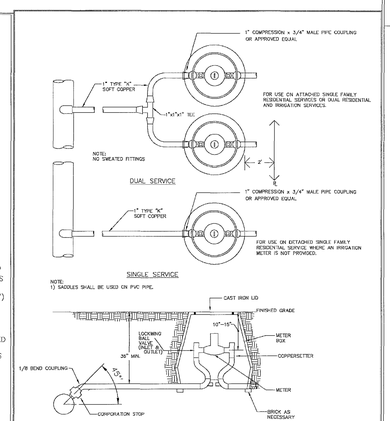


TYPICAL BLOW-OFF ASSEMBLY

NTS
FIG. W-8

TD-16

6 C13 TYPICAL BLOW-OFF ASSEMBLY
Not To Scale



TYPICAL SERVICE LATERAL INSTALLATION
(5/8" & 1" METERS)

NTS
FIG. W-6A

TD-10

7 C13 TYPICAL SERVICE LATERAL INSTALLATION
Not To Scale

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ROAD B PLAN AND PROFILE
& WATERLINE DETAILS

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FINAL CONSTRUCTION PLANS FOR
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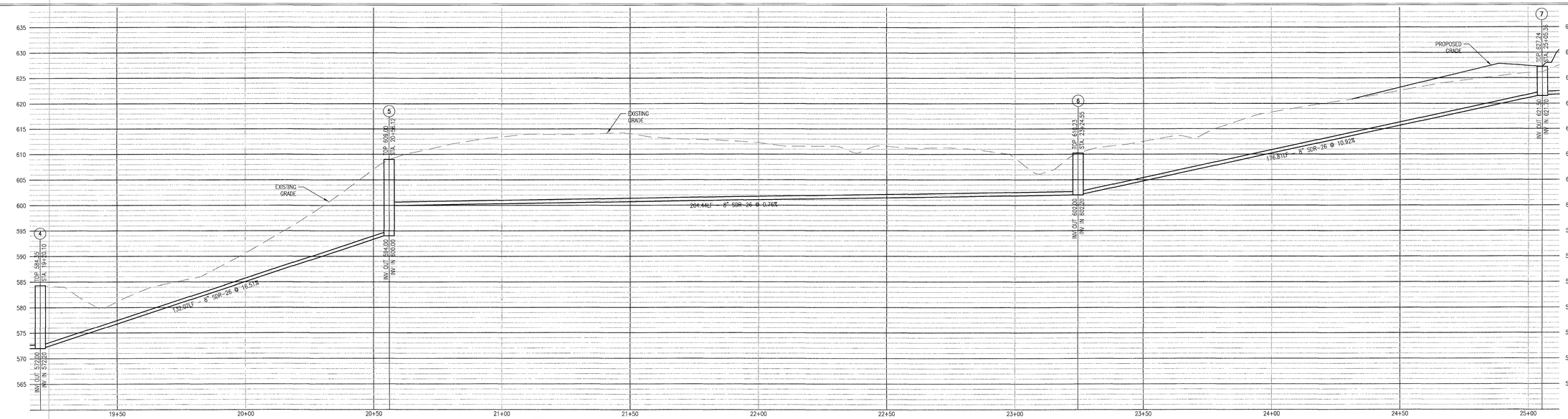
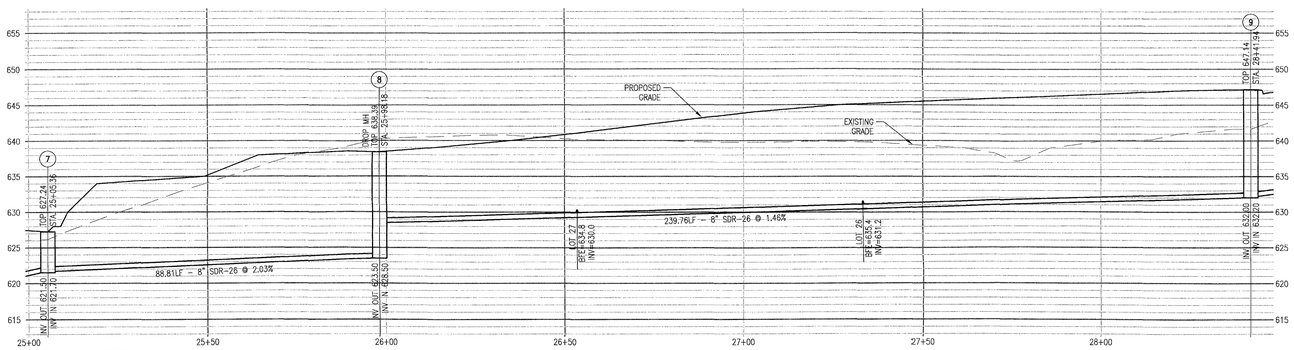


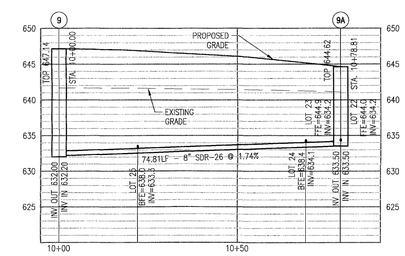
1 C14 SANITARY SEWER PROFILE: SAN 4–7

SCALE: 1"=20' Horizontal, 1"=10' Vertical



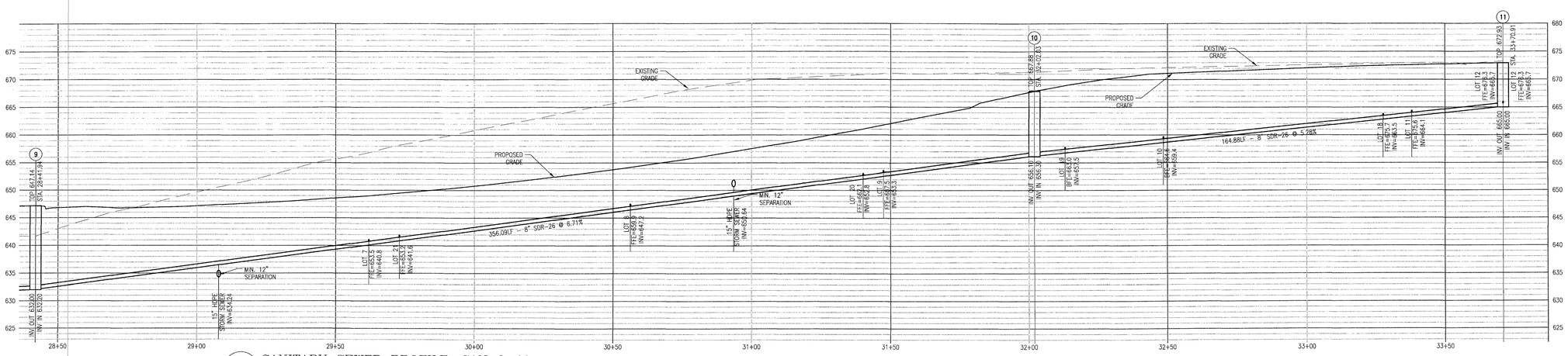
2 C14 SANITARY SEWER PROFILE: SAN 7–9

SCALE: 1"=20' Horizontal, 1"=10' Vertical



3 C14 SANITARY SEWER PROFILE: SAN 9–9A

SCALE: 1"=20' Horizontal, 1"=10' Vertical



4 C14 SANITARY SEWER PROFILE: SAN 9–11

SCALE: 1"=20' Horizontal, 1"=10' Vertical

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SANITARY PROFILES

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SPARROW HILL

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Scale 1"

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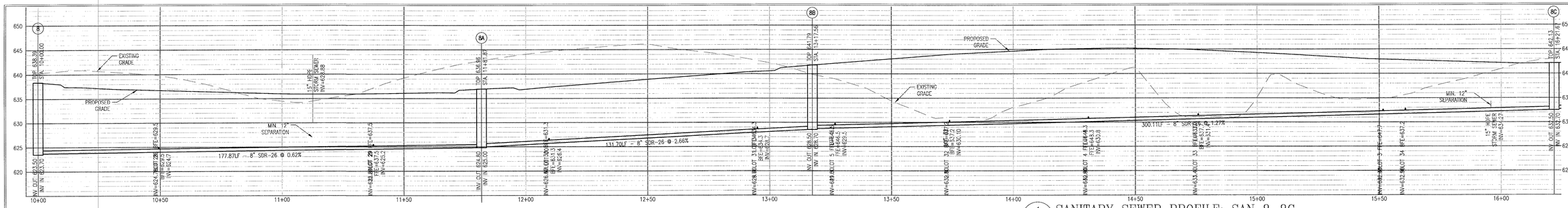
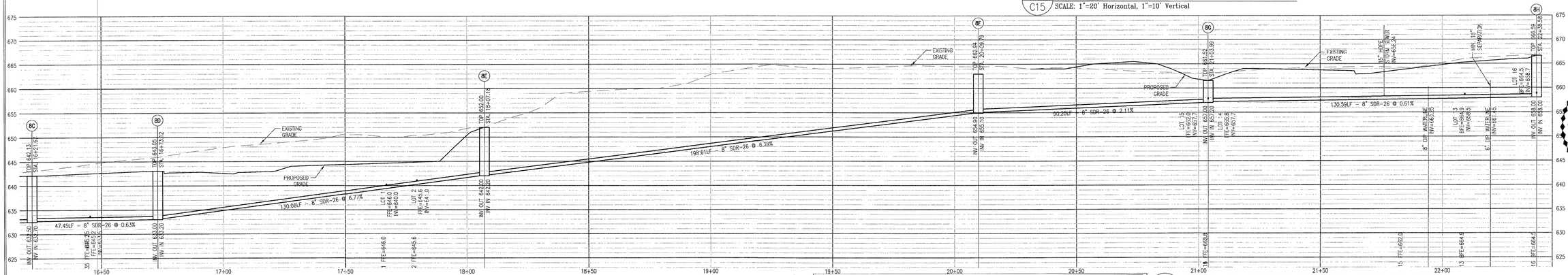
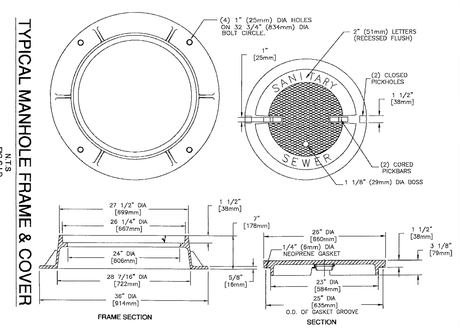


1 SANITARY SEWER PROFILE: SAN 8–8C
C15 SCALE: 1"=20' Horizontal, 1"=10' Vertical



2 SANITARY SEWER PROFILE: SAN 8C–8G
C15 SCALE: 1"=20' Horizontal, 1"=10' Vertical

TYPICAL MANHOLE FRAME & COVER



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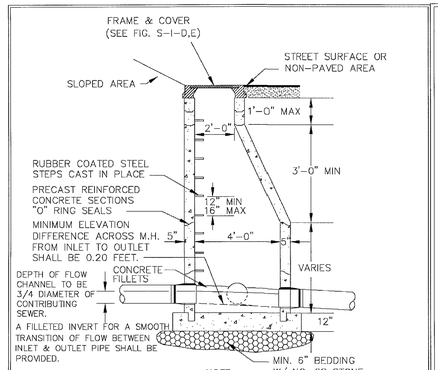
REV 8/18



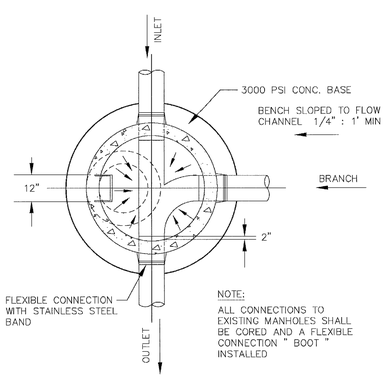
NOTE :

1. BEDDING THICKNESS REQUIREMENT SHOWN IS MINIMUM AND SHALL BE SPECIFICALLY DETERMINED BY THE CONSULTANT FOR THE SOIL CONDITIONS.
2. THE CONSULTANT WILL DETERMINE WHETHER MANHOLES SHALL HAVE EXTENDED OR NON-EXTENDED BASES.
3. ALL JOINTS, LIFT HOLES, INLETS, OUTLETS TO BE SEALED & GROUTED INSIDE AND OUT.

TYPICAL MANHOLE SECTION SHOWING BRANCH TIE–IN

N.T.S
FIG. S–I–A

TD–25

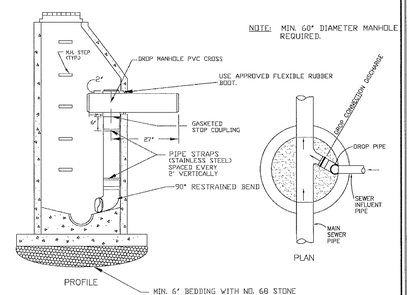


NOTE:
ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE CORED AND A FLEXIBLE CONNECTION " BOOT " INSTALLED

TYPICAL MANHOLE PLAN SHOWING BRANCH TIE – IN

NTS
FIG. S–I–B

TD–27

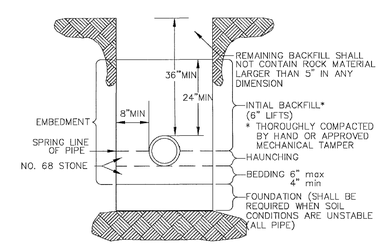


1. HEIGHT OF THE VERTICAL DROP PIPE WILL BE DETERMINED BY THE ACSA, BUT SHALL NOT BE LESS THAN TWO (2) FEET.
2. VERTICAL DROP PIPE SHALL BE SDR 26 P.V.C, SIZED THE SAME AS THE INCOMING PIPE AND CONNECTED TO THE DROP FITTING WITH STANDARD GASKET JOINT.
3. VERTICAL DROP PIPE SHALL BE STRAPPED TO THE MANHOLE AT PIPE JOINTS. STRAPS SHALL BE MADE OF STAINLESS STEEL.
4. SHAPE INVERT AS NEEDED TO PROVIDE SMOOTH TRANSITION FROM DROP CONNECTION DISCHARGE POINT TO SPRING LINE OF MANHOLE INVERT.
5. DROP CONNECTION DISCHARGE FITTING SHALL BE ORIENTED AT 45 DEGREES, INTO THE FLOW.
6. VERTICAL DROP PIPE SHALL BE INSTALLED AT 90 DEGREES FROM THE ACCESS STEPS.
7. MINIMUM 72" DIAMETER MANHOLE REQUIRED FOR A SINGLE 10" OR 12" DIAMETER DROP CONNECTION, OR TWO 8" DIAMETER DROP CONNECTIONS.

STANDARD INTERNAL DROP CONNECTION

N.T.S.
FIG. S–1–C2

TD–30



NOTE :

1. OPEN CUTS IN PAVED AREAS WITHIN EXISTING VDOT RIGHT–OF–WAY SHALL BE BACKFILLED ENTIRELY WITH NO. 21A STONE.
2. FOR DUCTILE IRON PIPE THE BOTTOM OF THE TRENCH SHALL BE SCRAPED AND COMPACTED, AND ALL STONES REMOVED OR A 4" BEDDING OF NO. 68 STONE SHALL BE PROVIDED
3. WHERE ROCK IS ENCOUNTERED PIPE SHALL BE INSTALLED ON A MINIMUM 6" BEDDING OF NO. 68 STONE

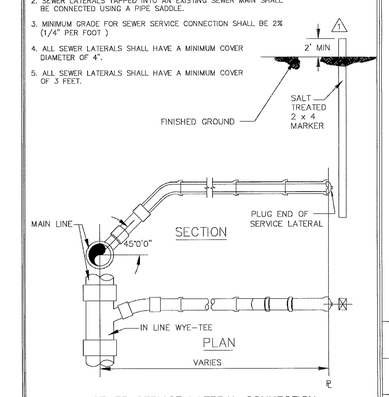
TYPICAL SEWER PIPE INSTALLATION IN TRENCH

NTS
FIG. S–3

TD–34

SEWER SERVICE LATERAL CONNECTION NOTES:

1. WHERE A SEWER SERVICE LATERAL CONNECTS TO A MANHOLE AND NO INVERT ELEVATION FOR THE SERVICE LATERAL IS INDICATED , THE TOP (CROWN) ELEVATION OF THE SERVICE LATERAL PIPE SHALL BE AT LEAST 0.2' HIGHER THAN THE TOP (CROWN) ELEVATION OF THE THE LOWEST PIPE CONNECTED TO THE MANHOLE.
2. SEWER LATERALS TAPPED INTO AN EXISTING SEWER MAIN SHALL BE CONNECTED USING A PIPE SADDLE.
3. MINIMUM GRADE FOR SEWER SERVICE CONNECTION SHALL BE 2% (1/4" PER FOOT)
4. ALL SEWER LATERALS SHALL HAVE A MINIMUM COVER DIAMETER OF 4".
5. ALL SEWER LATERALS SHALL HAVE A MINIMUM COVER OF 3 FEET.



SEWER SERVICE LATERAL CONNECTION

N.T.S.
FIG. S–2

TD–33

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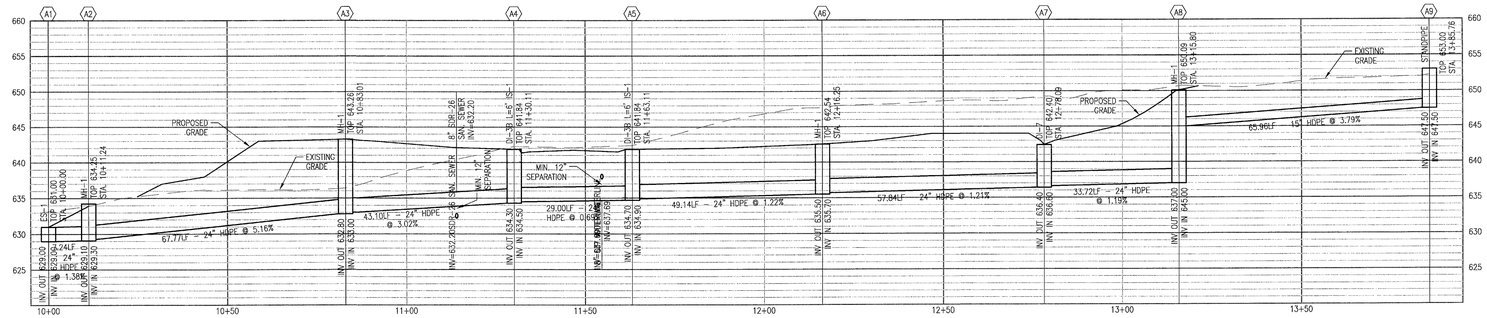
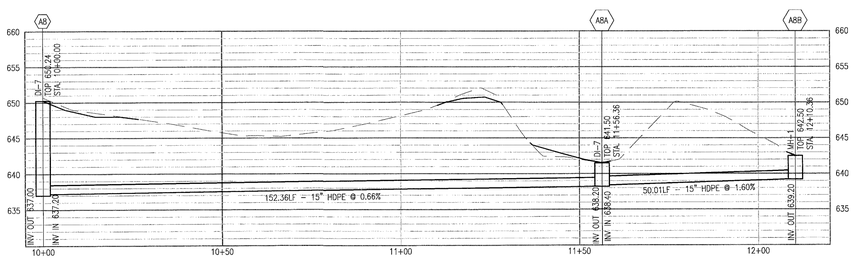


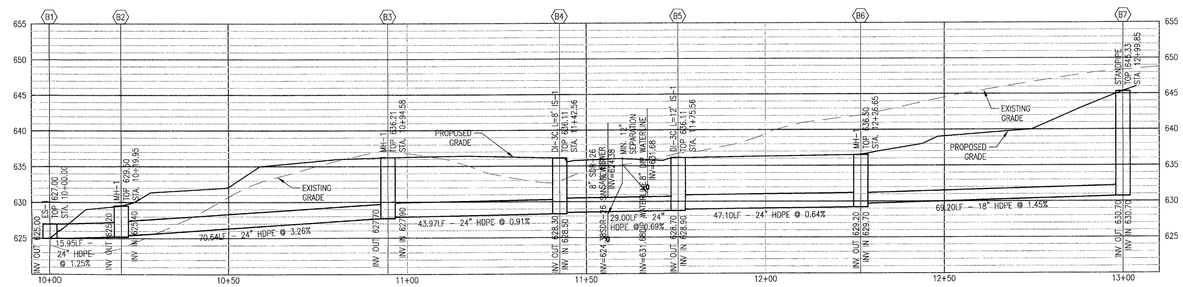
1 C16 STORM SEWER PROFILE: STM A1–A9

SCALE: 1"=20' Horizontal, 1"=10' Vertical



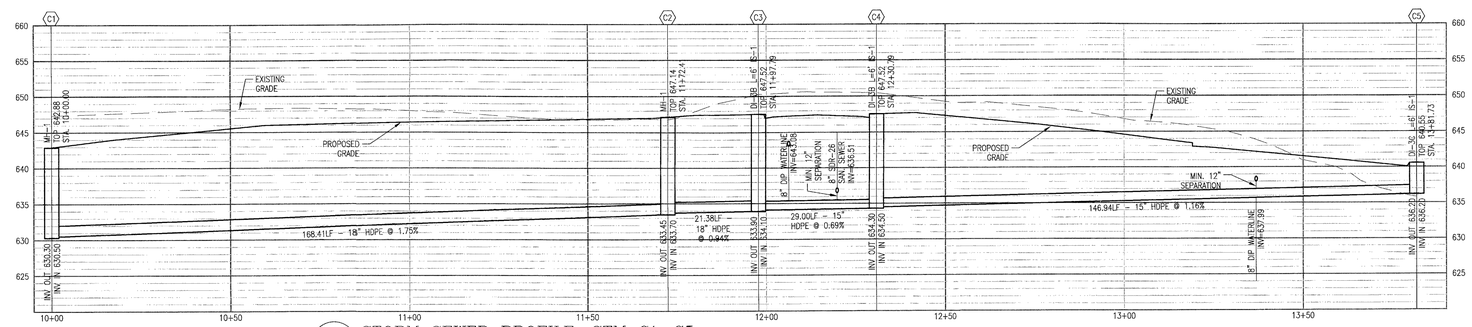
2 C16 STORM SEWER PROFILE: STM A8–A8B

SCALE: 1"=20' Horizontal, 1"=10' Vertical



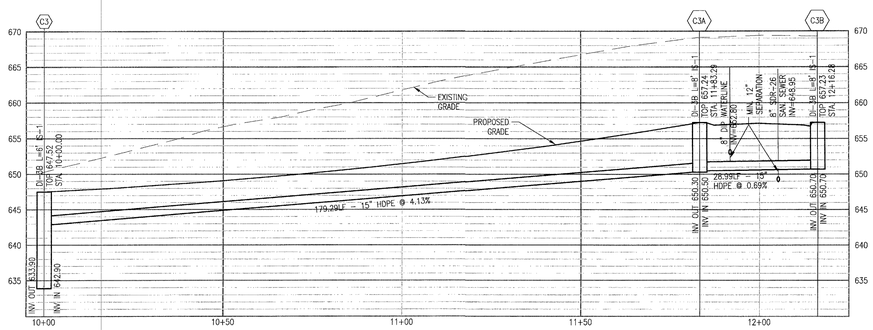
3 C16 STORM SEWER PROFILE: STM B1–B4

SCALE: 1"=20' Horizontal, 1"=10' Vertical



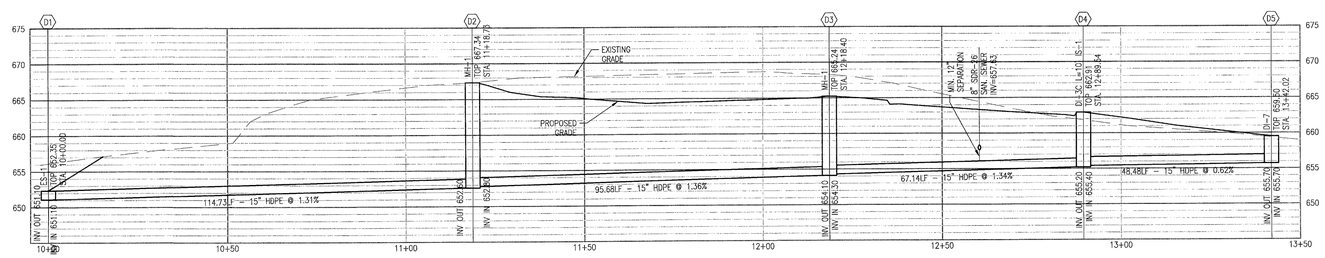
4 C16 STORM SEWER PROFILE: STM C1–C5

SCALE: 1"=20' Horizontal, 1"=10' Vertical



5 C16 STORM SEWER PROFILE: STM C3–C3B

SCALE: 1"=20' Horizontal, 1"=10' Vertical



6 C16 STORM SEWER PROFILE: STM D1–D6

SCALE: 1"=20' Horizontal, 1"=10' Vertical

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STORM SEWER PROFILES

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