

OAKHURST INN & APARTMENTS

City of Charlottes ville FINAL SITE PLAN SUBMITTAL prepared by Waterstreetstudio

July 13, 2010

Owner

Tenth & Main, LLC 134 10th Street NW, Ste 4 Charlottesville, VA 22903

Architect

Wolf - Ackerman Design 110b 2nd St NE #201 Charlottesville, VA 22902 Ph: 434 296 4848 Fax: 434 296 4877

Contractor

R.E Lee & Son, Inc. 2811 Hydraulic Road Charlottesville, VA 22901 Ph: 434.973.1321 Fax: 434.973.9784

Surveyor

Roger W. Ray & Assoc., Inc. 1717 Allied St., #1B Charlottesville, VA 22903-5320 Ph: 434.293.3195

Structural Engineer

Dunbar Milby Williams Pittman & Vaughan, PLLC 110 Third Street NE Charlottesvillle, VA 22902 Ph: 434.293.5171 Fax: 434.977.5171

Landscape Architect + Civil Engineer

Waterstreeetstudio 111 Third Street SE Charlottesville, VA 22902 Ph: 434 295 8177

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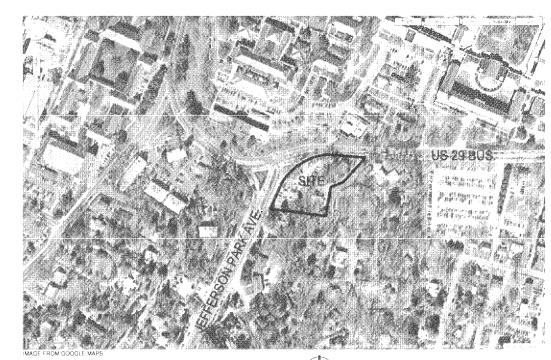
COVER SHEET PROJECT DATA SHEET **EXISTING CONDITIONS PLAN DEMOLITION PLAN** LAYOUT AND DIMENSION PLAN PROPOSED JPA/JPA/EMMETT INTERSECTION LAYOUT GRADING AND UTILITIES PLAN LANDSCAPE PLAN - TREES LANDSCAPE PLAN - SHRUBS & GROUND COVER INLET DA MAP & STORM RUNOFF CALCULATIONS ROAD, STORM DRAIN, & SANITARY SEWER PROFILES

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Location & Vicinity Map



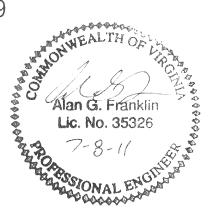
Project Data GENERAL: TAX MAP/PARCEL: TMP 11-1, 11-2, 11-3 AND 11-4 NEIGHBORHOOD: JEFFERSON PARK AVENUE CITY & STATE: CITY OF CHARLOTTESVILLE, VIRGINIA **EXISTING ZONING:** SEE MAP SHT. 01 **EXISTING ZONING ADJACENT PARCELS:** PROPOSED USE: MIXED USE DEVELOPMENT WITH RESIDENTIAL, BED & BREAKFAST AND PARKING GARAGE EXISTING 1 BR APT. UNITS MAX UNITS BY TYPE MAX NEW 2 BR APT. UNITS MAX NEW 1 BR APT. UNITS MAX APT. UNITS MAXIMUM BUILDING HEIGHT: 30' AVG; 40' @ JPA MAXIMUM DENSITY ALLOWABLE: 21 DUA BY-RIGHT, 87 WITH S.U.P. PROPOSED DENSITY: MAXIMUM PARKING/CIRCULATION: 18,005 SF (INCLUDING UNDERGROUND GARAGE) TOTAL PARKING REQUIRED: 48 SPACES (50-2 SPACES FOR BUS STOP CREDITS) TOTAL PARKING PROVIDED: 53 SPACES (INCL. 3 HC SPACES) LIMITS OF WORK (L.O.W.) 69,450 SF (1.59 AC) TOTAL PRE-DEV. IMPERVIOUS AREA: 23,797 SF (0.43 AC) TOTAL POST-REDEV. IMPERVIOUS AREA. 30,146 SF (0.69 AC, 54%) 8,032 SF **EXISTING BUILDING FOOTPRINT:** PROPOSED BUILDING FOOTPRINT: 10,023 SF PARKING GARAGE AREA: INCLUDED (UNDERGROUND) 24,430 SF (0.56 AC, 43%) TOTAL PERVIOUS AREA (OPEN SPACE) 4,672 SF RECREATION AREAS (LAWN & TERRACE GARDENS) 2,150 SF POROUS PAVERS 17,608 SF REMAINING VEGETATED AREAS SITE LIGHTING PARKING DECK = 1FC, SITE = SHIELDED, PER ORDINANCE, WALL SCONCES AND STEP LIGHTS PROVIDED, LIGHTING PLAN TO BE SUBMITTED WITH FINAL

DEVELOPER: NO PART OF THIS SITE LIES WITHIN A DESIGNATED 100-YEAR FLOOD PLAIN. BUILDINGS AND SITE TO BE ADA ACCESSIBLE.SITE IS WITHIN OAKHURST-GILDERSLEEVE HISTORIC DISTRICT.

TENTH & MAIN, LLC



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Approvals



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Context Map-Adjacent Tax Map Parcels

Standards and Specifications

- 1. VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, DATED 1994.
- 2. VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION, DIVISION OF SOIL AND WATER CONSERVATION, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, 1992.
- 3. CITY WATER PROTECTION ORDINANCE AND THE CITY OF CHARLOTTESVILLE STORMWATER GUIDANCE MANUAL
- 4. VIRGINIA DEPARTMENT OF TRANSPORTATION DRAINAGE MANUAL, DATED APRIL 2002.
- 5. VIRGINIA STORMWATER MANAGEMENT HANDBOOK, FIRST EDITION, 1999.
- 6. CITY OF CHARLOTTESVILLE CITY STANDARDS AND DESIGN MANUAL

Existing and Proposed Setbacks

| COMPONENT: | EXISTING: | BY ORDINANCE: | PROPOSED: |
|-------------------------|--|--|---|
| FRONT YARD SETBACK: | 11' @ BLDG #1' 7' @ BLDG #1' 19' @ BLDG #1' 41' @ 1616 JPA | O2 (OR STREET AVG.) | 33' AVG; 12' MIN (PER SPECIAL USE PERMIT APPROVED ON 07/14/09) |
| SIDE YARD SETBACK: | 10' AVERAGE | 21-43 DUA: 1/3 HT= 10' MIN | 1/3 HT= 10' MIN |
| REAR YARD SETBACK: | N/A | 25' MIN. | N/A (NO REAR YARD) |
| BUILDING SEPARATION: | N/A SEPARATE LOTS | NOT SPECIFIED FOR R-3H (8' FOR R-UMD & R-UHD) | 8' |

EXISTING FRONT YARD SETBACK ON JEFFERSON PARK AVENUE WITHIN 500' OF SITE ON THE SAME SIDE OF STREET AVERAGES 23.5'.

Existing and Proposed Acreages

| TMP | AREA IN SE | AREA IN A |
|---------------------------------------|------------|-----------|
| | | |
| TMP 11-1: | 9687.77 | 0.22 |
| TMP 11-2: | 16961.71 | 0.39 |
| TMP 11-3: | 14862.83 | 0.34 |
| TMP 11-4: | 8781.82 | 0.20 |
| EXISTING TOTAL ACREAGE: | 50294.14 | 1.15 |
| PROPOSED TOTAL SITE ACREAGE: | 56,094.00 | 1.29 |
| (AFTER PROPOSED INTERSECTION CHANGES) | | |

Required and Provided Laundry Facilities

| TOTAL NUMBER OF UNITS | 41 | |
|--------------------------------------|----------------------------|---------|
| NUMBER OF PROPOSED BEDROOMS | 68 (33 2-BEDROOM UNITS AN | ND |
| | 3 1-BEDROOM UNITS) | |
| | REQUIRED | PROVIDE |
| NUMBER OF WASHERS | 5 | 36 |
| NUMBER OF DRYERS | 5 | 36 |
| STORAGE (3 SF PER BEDROOM) | 201 | 201 |
| LAUNDRY FACILITIES SHALL BE REQUIRED | , AS FOLLOWS: ONE (1) WASH | HER |

AND ONE-HALF (1/2) DRYER FOR EVERY EIGHT (8) UNITS, PLUS ONE (1) ADDITIONAL DRYER FOR EVERY SIXTEEN (16) UNITS; MINIMUM: TWO (2) WASHERS AND TWO (2) DRYERS.

STORAGE FACILITIES (OTHER THAN THAT WITHIN THE DWELLING UNITS): THREE (3) SQUARE FEET PER BEDROOM, MIN

Legend/Abbreviations

| ITEM | EXISTING | PROPOSED |
|------------------------------|---|--|
| BENCH MARK | Z.A. | |
| PROPERTY / RIGHT OF WAY LINE | | |
| SETBACK LINE | | |
| CONTOUR | | |
| INDEX CONTOUR | | |
| BUILDING | | ACT AND ACT OF THE PARTY OF THE |
| FENCE | x x x x x x | |
| PAVEMENT | | |
| WATER MAIN | | W |
| WATER VALVE | | \longrightarrow |
| STORM SEWER | | 2007AUANN SANIHANNAN 2007AUAN 3007AUAN |
| SANITARY SEWER | \$ \$ \$ \$ | S |
| MANHOLE | | |
| INLET | | |
| UTILITY POLE | 0 | |
| TELEPHONE PEDESTAL | \boxtimes | |
| OVERHEAD TELEPHONE | Ot-ly-Ot-ly-Ot-ly-Ot-ly- | |
| EASEMENT | | |
| BITUMINOUS PAVEMENTS | | |
| CONCRETE PAVEMENT | | |
| CURB | | |
| CURB WITH GUTTER | | |
| GAS LINE | —————————————————————————————————————— | GAS GAS GAS |
| SWALE/DITCH | | |
| RIP RAP | | Appellment month per electronic excellent interest at relative succellar conscious quantita est inchi est interest interest inchi est interest inchi est interest inchi est interest inchi est inchi est interest inchi est interest inchi est interest inchi est inchi es |
| STORM DRAIN IDENTIFIER | | A B |
| SANITARY SEWER IDENTIFIER | | (5-3) |
| UNDERGROUND ELECTRIC LINE | UGE | UGE was UGE |
| OVERHEAD ELECTRIC LINE | OF CONTROL | OHE OHE OH |
| UNDERGROUND TELEPHONE LINE | | —— ugt —— ugt —— ugt |
| OVERHEAD TELEPHONE LINE | | OHTOHT- |
| REINFORCED CONCRETE PIPE | RCP | RCP |
| FIRE HYDRANT | +H | FH |
| YARD DRAIN | | V-000 |
| TOP OF CURB | <i>1C</i> | TC |
| BOTTOM OF CURB | BC | BC |
| LOW POINT | LP. | LP |
| DROP INLET | D/ | [)] |
| CLEAN OUT | CO | |
| WATER METER | WM | WM |
| TOP OF THE STAIRS | 75 | TS |
| BOTTOM OF THE STAIRS | BS | BS |

General Notes

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS, BONDS AND OTHER APPROVAL RELATED ITEMS IN ACCORDANCE WITH LOCAL AND STATE POLICY. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WITHIN ANY EXISTING PUBLIC RIGHT-OF-WAY, INCLUDING CONNECTION TO ANY EXISTING ROAD, A PERMIT FOR SAID CONSTRUCTION SHALL BE OBTAINED FROM THE CITY TRAFFIC ENGINEER.
- 2. ALL PAVING AND DRAINAGE RELATED MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF CITY OF CHARLOTTESVILLE UNLESS OTHERWISE NOTED.
- 3. EROSION AND SEDIMENT 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. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
- 5. DEVIATIONS FROM OR CHANGES TO THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE CITY ENGINEER AND OWNER.
- 6. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OR NON-EXISTENCE OF UNDERGROUND UTILITIES. PRIOR TO ANY CONSTRUCTION OR EXCAVATION, THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF, OR THE NON-EXISTENCE OF, UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" (1-800-552-7001).
- 7. THE CONSTRUCTION MANAGER IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONSTRUCTION MANAGER SHALL BE RESPONSIBLE FOR REPAIRING AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. IF A UTILITY IS DAMAGED DURING CONSTRUCTION, STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER.
- 8. CONSTRUCTION MANAGER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONSTRUCTION MANAGER SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER".
- 9. ANY DAMAGE TO EXISTING PHYSICAL FEATURES (WALKS, LIGHTS, TREES, SHRUBS, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. REPAIRS OR REPLACEMENT SHALL BE MADE AS NECESSARY AT NO COST TO THE OWNER.
- 10. ALL TURF AREAS THAT ARE IMPACTED OR DISTURBED BY CONTRACTOR VEHICLES, EQUIPMENT OR ACTIVITY SHALL BE REPAIRED, REGRADED, AND RESEEDED.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE FOLLOWING AUTHORITIES TO SCHEDULE ON-SITE INSPECTIONS AS APPROPRIATE THROUGHOUT THE COURSE OF HIS/HER WORK.

 EROSION AND SEDIMENT CONTROL E&S/ZONING ADMINISTRATOR (970-3182)

 SANITARY SEWER MAINS CITY ENGINEERING (970-3182)

 POTABLE WATER MAINS PUBLIC UTILITIES (970-3800)

 STORM WATER STRUCTURES CITY ENGINEERING (970-3182)

 STREET CUT PUBLIC SERVICE (970-3800)

 OTHER CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY

(SIDEWALKS, FILL, OVERHEAD, ETC)- (970-3182)

- 12. ALL WORK WITHIN THE EXISTING CITY RIGHT-OF-WAY REQUIRES TWO PERMITS:
 STREET CUT/RIGHT-OF-WAY DISTURBANCE PERMIT- PUBLIC WORKS DEPARTMENT, PUBLIC SERVICE DIVISION.
 TRAFFIC DISTURBANCE PERMIT/PARTIAL OR FULL STREET CLOSURE PERMIT- CITY TRAFFIC ENGINEER, NDS.
- 13. THE FOLLOWING INSPECTIONS ARE REQUIRED:
 WATER LINE PUBLIC WORKS DEPARTMENT, PUBLIC SERVICE DIVISION.
 SANITARY SEWER, ROADS & OTHER INFRASTRUCTURE (R-O-W STORM CULVERTS-DITCHES, SIDEWALKS, ETC)-CITY ENGINEER'S OFFICE,
 NDS INSPECTOR. (970-3182)
 E&SC CONTROL MEASURES AND ON-SITE STORMWATER-ZONING
 ADMINISTRATOR. (970-3182)

WATER AND SEWER

- 1. WORK SHALL BE SUBJECT TO INSPECTION BY CITY OF CHARLOTTESVILLE INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER SERVICE AUTHORITY 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 GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS AS ADOPTED BY THE CITY OF CHARLOTTESVILLE.
- 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 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. AS-BUILT CONSTRUCTION DATA SHALL BE MAINTAINED BY THE CONTRACTOR IN THE FIELD. A MARKUP SET OF PLANS SHALL BE PROVIDED TO THE OWNER OR HIS REPRESENTATIVE TO SERVE AS THE BASIS FOR THE FINAL AS-BUILT PLANS. THE DATA RECORDED SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AS SPECIFIED IN THE CITY OF CHARLOTTESVILLE AS-BUILT PLAN CHECKLIST, LATEST EDITION.

PAVEMENT CONSTRUCTION

- THE TERM CITY REFERS TO THE CITY OF CHARLOTTESVILLE, VIRGINIA.
- 2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WITHIN ANY EXISTING PUBLIC RIGHT OF WAY, INCLUDING CONNECTION TO ANY EXISTING ROAD, A PERMIT FOR SAID CONSTRUCTION SHALL BE OBTAINED FROM CITY OF CHARLOTTESVILLE. THIS PLAN AS DRAWN MAY NOT ACCURATELY REFLECT THE REQUIREMENTS OF THE PERMIT. WHERE ANY DISCREPANCIES OCCUR THE REQUIREMENTS OF THE PERMIT SHALL GOVERN.
- 3. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT SPECIFICATIONS AND STANDARDS OF CITY OF CHARLOTTESVILLE UNLESS OTHERWISE NOTED. ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY (29 CFR PART 1926).
- 4. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN AND MUST BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR OTHER CONSTRUCTION.

- UPON COMPLETION OF FINE GRADING AND PREPARATION OF THE PARKING LOT SUBGRADE, THE CONTRACTOR SHALL HAVE CBR TESTS PERFORMED ON THE SUBGRADE SOIL. THREE (3) COPIES OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER. IF A SUBGRADE SOIL CBR OF 10 OR: GREATER IS NOT OBTAINABLE, A REVISED PAVEMENT DESIGN SHALL BE MADE BY THE DESIGN ENGINEER AND SUBMITTED WITH THE TEST RESULTS FOR APPROVAL.
- 6. ALL SLOPES AND DISTURBED AREAS ARE TO BE FERTILIZED, SEEDED AND MULCHED. MAXIMUM ALLOWABLE FILL OR CUT SLOPE IS 2:1. WHERE REASONABLY OBTAINABLE, LESSER SLOPES OF 4:1 OR BETTER ARE TO BE ACHIEVED.
- 7. TRAFFIC CONTROL OR OTHER IREGULATORY SIGNS OR BARRICADES SHALL BE INSTALLED BY THE DIEVELOPER WHEN, IN THE OPINION OF CITY ENGINEER OR HIS DESIGNEE, THEY ARE DEEMED NECESSARY IN ORDER TO PROVIDE SAFE AND CONVENIENT ACCESS. ALL SIGNS OR OTHER REGULATORY DEVICES SHALL CONFORM WITH THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- 8. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED AT THE CONSTRUCTION
- 9. ALL CONCRETE WORK WITHIN THE CITY RIGHT-OF-WAY SHALL CONFORM TO THE CITY STANDARDS (COLOR, MIX AND DESIGN).

IFC CONSTRUCTION AND DEMOLITION NOTES

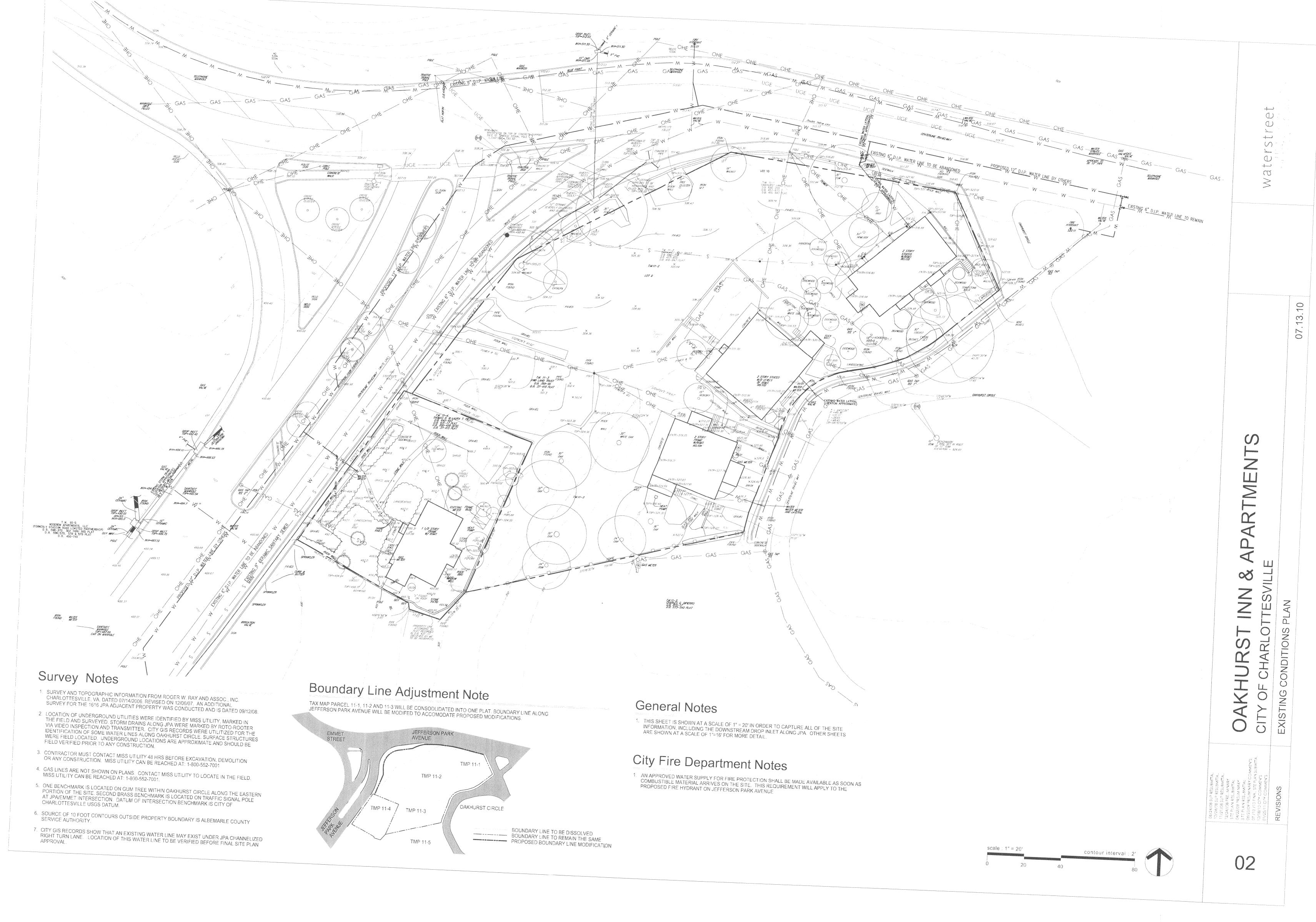
- 1. IFC 1404.1: SMOKING TO BE ALLOWED IN ONLY DESIGNATED SPACES WITH PROPER RECEPTACLES.
- 2. IFC 1404.2: WASTE DISPOSAL OF COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH WORKDAY.
- 3. IFC 1410.1: ACCESS TO THE BUILDING DURING DEMOLITION AND CONSTRUCTION SHALL BE MAINTAINED.
- 4. IFC 1404.6: CUTTING AND WELDING. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 26, OF THE INTERNATIONAL FIRE CODE, ADDRESSING WELDING AND HOTWORK OPERATIONS.
- 5. IFC 1414.1: FIRE EXTINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.
- 6. REQUIRED VEHICLE ACCESS FOR FIRE FIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.

SP-08-06-09 - Special Use Permit Conditions SUP APPROVED BY PC ON 12-9-08

1. A MINIMUM OF FOUR (4) BICYCLES WILL BE PROVIDED FOR USE BY THE RESIDENTS

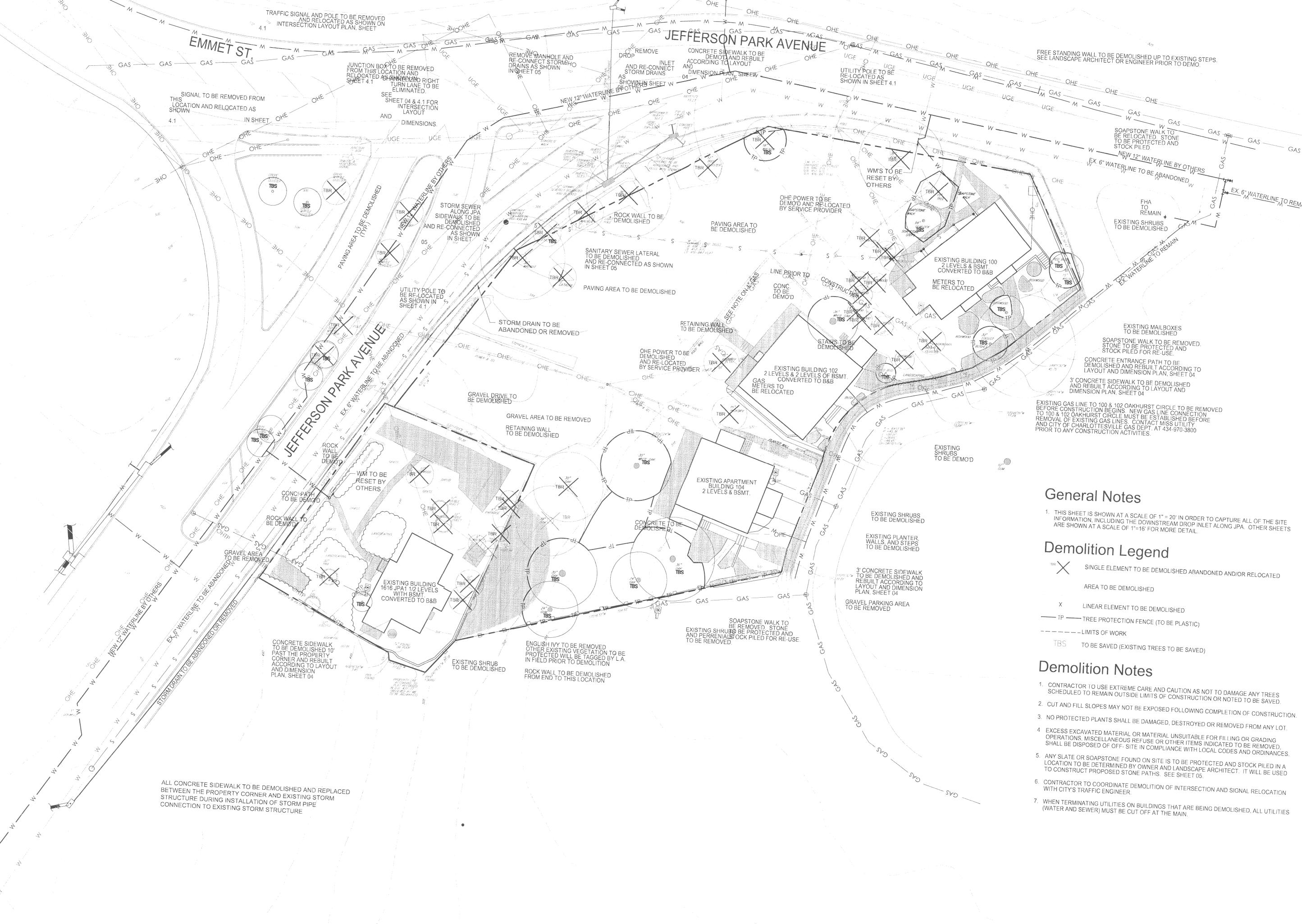
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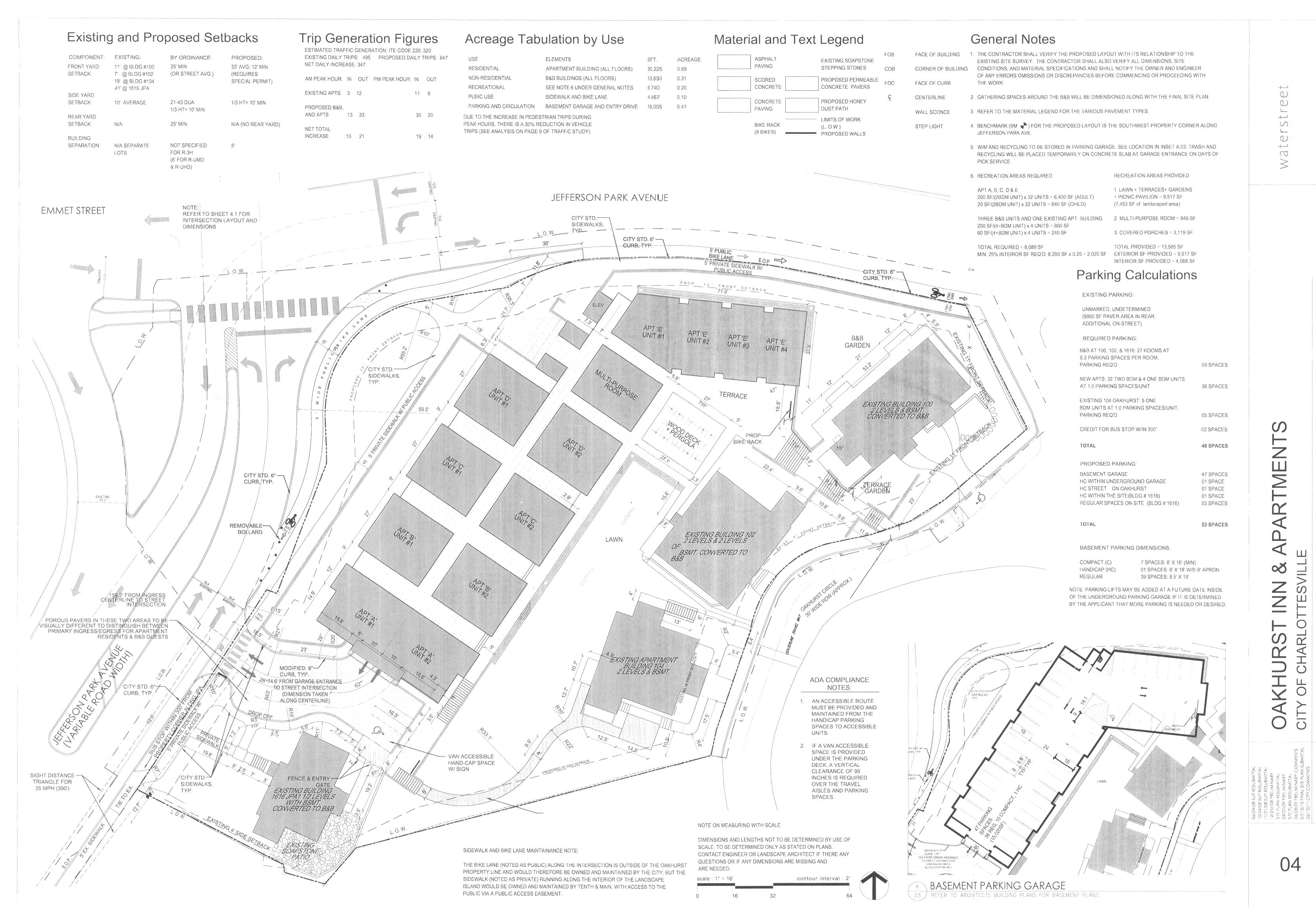
- 2. REALIGNMENT OF THE JEFFERSON PARK AVENUE/EMMET STREET INTERSECTION IN CONJUNCTION WITH THE CITY AS A CITY/TENTH AND MAIN LLC COST SHARE PROJECT.
- 3. ACQUISITION OF APPROXIMATELY 0.13 ACRES OF LAND CURRENTLY IN THE CITY OF CHARLOTTESVILLE RIGHT-OF-WAY FROM THE CITY OF CHARLOTTESVILLE BY TENTH AND MAIN LLC AS A RESULT OF THE REALIGNMENT OF JEFFERSON PARK AVENUE AND EMMET STREET IN A MANOR SUBSTANTIALLY IN CONFORMANCE WITH THE APPLICANT CONCEPTUAL PLAN APPROVED AT THE JOINT PUBLIC HEARING ON DECEMBER 9TH, 2008.
- 4. REDUCTION OF THE FRONT YARD SETBACK TO TWELVE (12) FEET AS REPRESENTED ON THE CONCEPTUAL SITE PLAN APPROVED AT THE JOINT PUBLIC HEARING ON DECEMBER 9TH 2008.
- 5. ACHIEVEMENT OF AT LEAST 10 POINTS ON THE CITY'S LID WORKSHEET
- 6. DEVELOPMENT SHALL INCLUDE 36 NEW APARTMENTS (33 TWO-BEDROOM UNITS AND 3 ONE-BEDROOM UNITS) AND THE CONTINUED USE OF 104 OAKHURST CIRCLE AS 5-ONE BEDROOM APARMENTS.

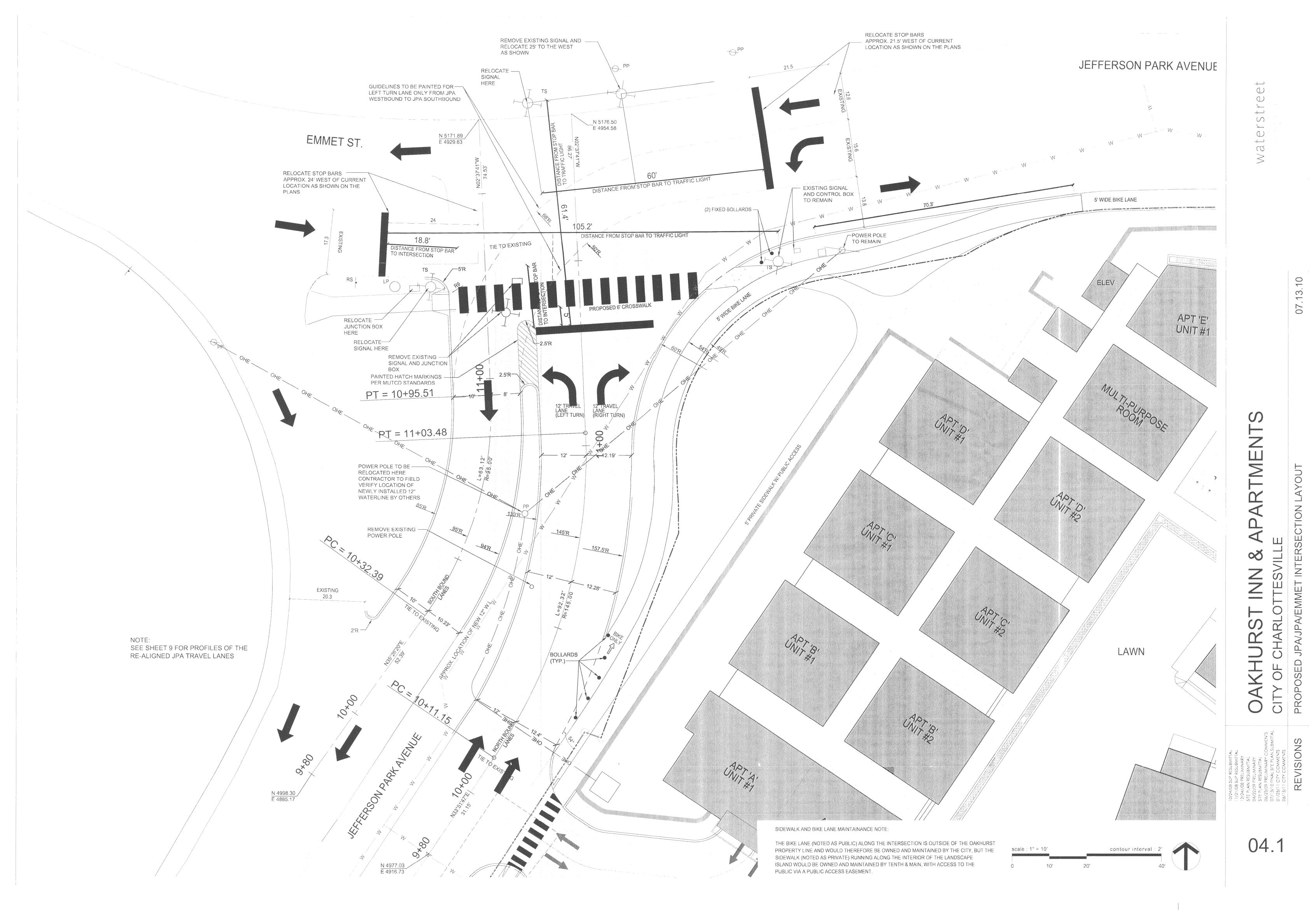


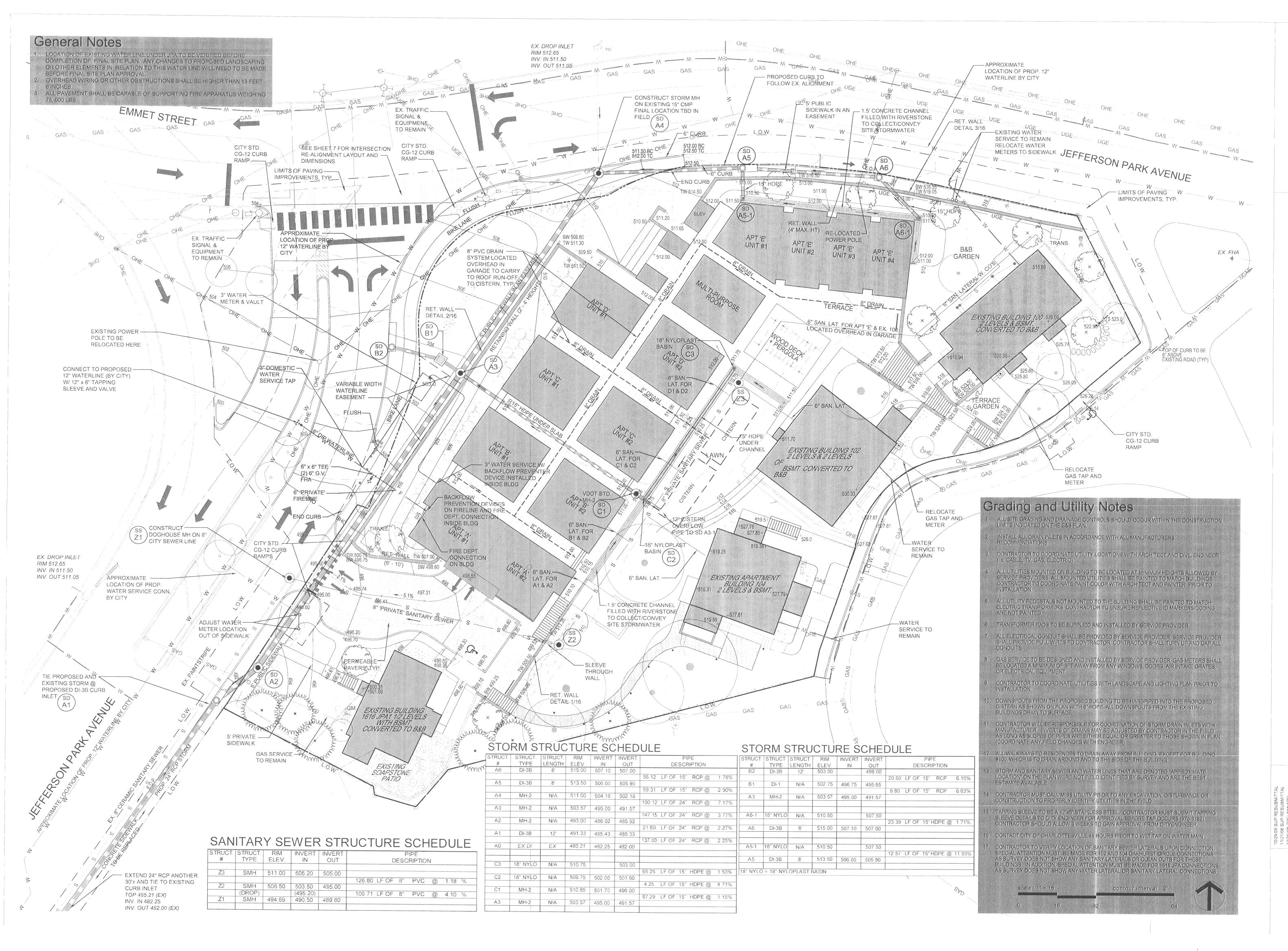
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General Landscape Notes

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- 1. CONTRACTOR TO USE EXTREME CARE AND CAUTION AS NOT TO DAMAGE ANY TREES SCHEDULED TO REMAIN OUTSIDE LIMITS 7. CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT AND TREE ARBORIST PRIOR TO OF CONSTRUCTION OR NOTED TO BE SAVED.
- 2. NO CONSTRUCTION EQUIPMENT OR STORAGE SHALL OCCUR WITHIN DRIP LINE OF EXISTING TREES. CONTRACTOR SHALL CONTACT OWNER OR LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS PRIOR TO MOBILIZATION. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY OWNER AND LA BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE
- 3. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE OWNER, LA AND TREE ARBORIST OF ANY
- 4. PRIOR TO MOBILIZATION CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY LA AND/OR TREE ARBORIST BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE PLACE ON-SITE.
- 5. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND/OR TREE ARBORIST 48-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIP LINE OF EXISTING TREES UNLESS APPROVED BY TREE ARBORIST OR LANDSCAPE ARCHITECT PRIOR TO WORK.
- 6. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIP LINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIP LINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH A SMALL BOBCAT/TRACT-HOE.

- COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIP LINES.
- 8. ALL PLANTS HAVING A QUANTITY GREATER THAN ONE(1) SHALL BE MATCHED AND SUPPLIED FROM THE SAME SOURCE (PER SPECIES).
- 9. CONTACT LANDSCAPE ARCHITECT AT THE TIME OF PLANT MATERIAL DELIVERY, BEFORE ANY SUBSTITUTIONS OR CHANGES, IF SCHEDULED TYPES ARE UNAVAILABLE, AND FOLLOWING INSTALLATION. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED 15 FIRE HYDRANTS, FIRE PUMP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF ORDERS.
- 10. LANDSCAPE ARCHITECT SHALL INSPECT AND APPROVE ALL PLANT MATERIAL AT TIME OF DELIVERY AS WELL AS AFTER INITIAL PLACEMENT PRIOR TO PLANTING. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS PRIOR TO DELIVERY.
- 11. PLANT LOCATIONS TO BE REEVALUATED AND REVISED, IF NECESSARY, AFTER FINISHED GRADING.
- 12. MULCH IN PLANTERS AND PLANTING BEDS TO BE CLEAN AND FREE FROM PEST AND DISEASES. MULCH SHALL BE APPLIED TO A 2-INCH DEPTH. MULCH RINGS 24-INCHES MIN. IN DIAMETER ARE TO BE PLACED AROUND ALL TREES NOT LOCATED
- 13 CONTRACTOR TO VERIFY ALL QUANTITIES BETWEEN PLAN AND PLANT LIST AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY PRIOR TO ORDERING.

14. STABILIZATION MAT MAY BE APPLIED TO ALL SLOPES EXCEEDING 3:1 (TO BE DETERMINED BY LA AND ENGINEER). TREE PLANTING AND MEADOW MIX SPREADING SHALL BE PERFORMED IN A MANNER THAT DOES NOT COMPROMISE THE INTEGRITY OF THE SLOPE OR MAT (IF USED). SLOPE PROTECTION MATTING SHALL BE AN APPROPRIATE NORTH AMERICAN GREEN PRODUCT. CONSULT LA AND ENGINEER

FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR AND UNOBSTRUCTED BY LANDSCAPING, PARKING OR OTHER OBJECTS. NO LANDSCAPING OF ANY TYPE SHALL BE PLANTED WITHIN A FIVE (5) FOOT RADIUS OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION. LÁNDSCAPING IN THE AREA OF FIRE DEPARTMENT CONNECTIONS SHALL BE OF THE TYPE THAT WILL NOT ENCROACH ON THE REQUIRED FIVE (5) FOOT RADIUS ON MATURITY OF THE LANDSCAPING

PRIOR TO ORDERING FOR TYPE AND QUANTITY.

Legend and Plant Schedule

DECIDUOUS CANOPY TREES (TYP.)

| CODE | SCIENTIFIC NAME | COMMON NAME | QTY. | SIZE | ROOT | PER/TREE | TOTAL |
|----------------|---|---|--------------|---------------------------------|-------------------|----------------------------|----------------------------|
| GB | Gingko biloba 'Princeton Sentry' | Princeton Sentry Ginkgo | 2 | 4" cal. | B&B | 14 SF | 14 SF |
| NS QC UP | Nyssa sylvatica Quercus coccinea Ulmus parvifolia 'Allee' | Blackgum Scarlet Oak Lacebark Elm | 1 4 12 | 2.5" cal. 4" cal. 4" cal. | B&B B&B B&B | 123 SF 370 SF 366 SF | 123 SF 1480 S 4392 S |
| DECID | UOUS UNDERSTORY TE | REES (TYP.) | | | | CANOPY C | OV/EDA |
| CODE | SCIENTIFIC NAME | COMMON NAME | QTY. | SIZE | ROOT | PER/TREE | |
| AA | Amelanchier arborea'Autumn Brilliance' | Downy Serviceberry | 1 | 5'-6' ht. | B&B | 130 SF | 130 SF |
| CC CF | Cercis canadensis | Eastern Redbud Flowering Dogwood | 4 5 | 5'-6' ht. 5'-6' ht. | B&B B&B | 124 SF 124 SF | 496 SF 630 SF |
| HJ | Hamamelis x intermedia 'Jelena' | Jelena Witch Haze | 1 | 5'-6' ht. | B&B | 113 SF | 113 SF |
| EVERG | GREEN TREES (TYP.) | | | | | | |
| CODE | SCIENTIFIC NAME | COMMON NAME | QTY. | SIZE | ROOT | CANOPY CO | |
| 10 | llex opaca | American Holly | 6 | 6'-8' ht. | B&B | 56 SF | 336 SF |

TOTAL CANOPY COVERAGE 7,714 SF

CANOPY COVERAGE

EXISTING TREES TO BE SAVED

| SCIENTIFIC NAME | COMMON NAME | CALIPER | CANOPY COVERAGE (SF) |
|-----------------------------------|-----------------|---------|----------------------|
| Carya glabra | Pignut Hickory | 15" | 91.5 |
| Gleditsia triacanthos var.inermis | Honey Locust | 30" | 636 |
| Gleditsia triacanthos var.inermis | Honey Locust | 30" | 636 |
| Juglans nigra | Black Walnut | 36" | 1809 |
| Juglans nigra | Black Walnut | 15" | 452 |
| Nyssa sylvatica | Black Gum | 24" | 184.5 |
| Tsuga canadensis | Eastern Hemlock | 18" | 907 |
| Quercus alba | White Oak | 30" | 364.5 |
| Quercus alba | White Oak | 24" | 364.5 |
| Quercus alba | White Oak | 36" | 364.5 |
| Quercus alba | White Oak | 30" | 364.5 |
| Quercus alba | White Oak | 36" | 364.5 |
| | | | |

EXISTING TREES TO BE SAVED THAT ARE LESS THAN 8" CALIPER

TOTAL CANOPY COVERAGE 6,539 SF

Street Tree Provisions

STREET TREES REQUIRED: 12 (486 L.F. OF FRONTAGE/40)*

STREET TREES PROPOSED:

* NOTE THAT THREE ADDITIONAL TREES ARE BEING PROVIDED WITHIN THE ROW ALONG THE JPA INTERSECTION BETWEEN THE ROADWAY AND THE SIDEWALK. THESE TREES ARE NOT BEING COUNTED AS PART OF THE STREET TREES PROVIDED AND ARE REQUESTED BY THE PLANNING COMMISSION.

Landscape Calculations

TOTAL SITE AREA 56,094 SF 1.29 ACRE

TOTAL CANOPY COVERAGE REQUIRED CANOPY COVERAGE PROPOSED EXISTING CANOPY PROTECTED (12 TREES)

5,576 SF (10%) 7,888 SF 6,539 SF 14,253 SF (26%) 27,154 SF (48%)

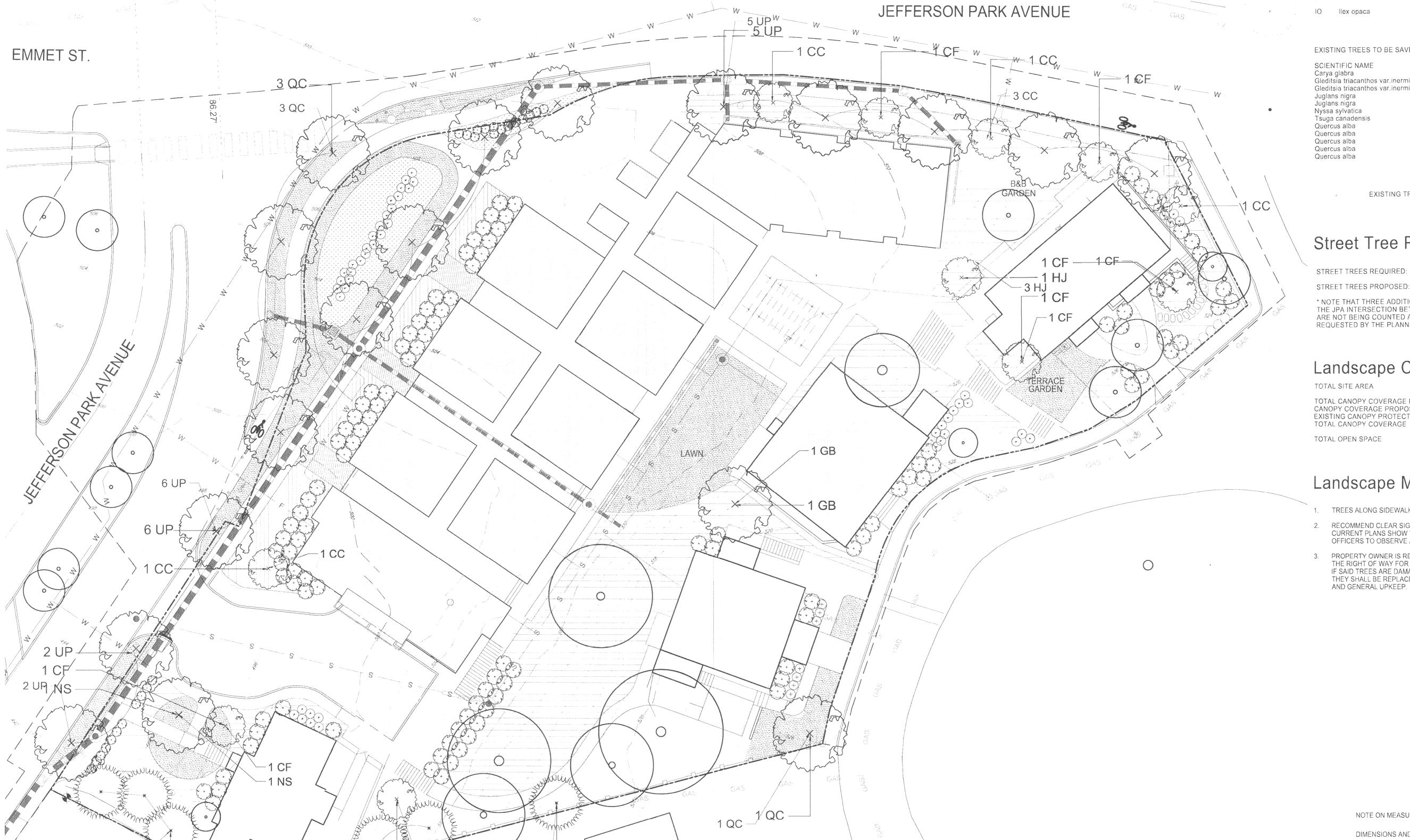
Landscape Maintenance Notes

- TREES ALONG SIDEWALK TO MAINTAIN CANOPY HEIGHT AT A MINIMUM OF 60" ABOVE GRADE
- 2. RECOMMEND CLEAR SIGHT LINES FROM STREET THRU THE DEVELOPMENT, CURRENT PLANS SHOW TREES THAT IF MATURE WOULD NOT ALLOW PATROL OFFICERS TO OBSERVE ACTIONS WITHIN THE AREA.
- 3. PROPERTY OWNER IS REPONSIBLE FOR MAINTAINING ALL PROPOSED TREES IN THE RIGHT OF WAY FOR A PERIOD OF TWO YEARS FROM THE DATE OF PLANTING. IF SAID TREES ARE DAMAGED OR LOST WITHIN THE FIRST TWO YEARS AFTER PLANTING, THEY SHALL BE REPLACED AT OWNER'S EXPENSE. MAINTENANCE INCLUDES WATERING AND GENERAL UPKEEP.

NOTE ON MEASURING WITH SCALE

DIMENSIONS AND LENGTHS NOT TO BE DETERMINED BY USE OF SCALE, TO BE DETERMINED ONLY AS STATED ON PLANS. CONTACT ENGINEER OR LANDSCAPE ARCHITECT IF THERE ANY QUESTIONS REGARDING DIMENSIONS OR IF FURTHER DIMENSIONING IS REQUIRED.

contour interval:



110

David Viburnum

24"-30"ht. b+b

1. CONTRACTOR TO USE EXTREME CARE AND CAUTION AS NOT TO DAMAGE ANY TREES SCHEDULED TO REMAIN OUTSIDE LIMITS 7. CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT AND TREE ARBORIST PRIOR TO OF CONSTRUCTION OR NOTED TO BE SAVED.

2. NO CONSTRUCTION EQUIPMENT OR STORAGE SHALL OCCUR WITHIN DRIP LINE OF EXISTING TREES. CONTRACTOR SHALL CONTACT OWNER OR LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS PRIOR TO MOBILIZATION. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY OWNER AND LA BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE

General Landscape Notes

EMMET ST

3. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE OWNER, LA AND TREE ARBORIST OF ANY

4. PRIOR TO MOBILIZATION CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY LA AND/OR TREE ARBORIST BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE PLACE ON-SITE.

5. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND/OR TREE ARBORIST 48-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIP LINE OF EXISTING TREES UNLESS APPROVED BY TREE ARBORIST OR LANDSCAPE ARCHITECT PRIOR TO WORK.

6. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIP LINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIP LINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH A SMALL BOBCAT/TRACT-HOE.

3 RP

18 FG-

COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIP LINES.

8. ALL PLANTS HAVING A QUANTITY GREATER THAN ONE(1) SHALL BE MATCHED AND SUPPLIED FROM THE SAME SOURCE (PER SPECIES).

9. CONTACT LANDSCAPE ARCHITECT AT THE TIME OF PLANT MATERIAL DELIVERY, BEFORE ANY SUBSTITUTIONS OR CHANGES, IF SCHEDULED TYPES ARE UNAVAILABLE, AND FOLLOWING INSTALLATION. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED 15 FIRE HYDRANTS, FIRE PUMP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF ORDERS.

10. LANDSCAPE ARCHITECT SHALL INSPECT AND APPROVE ALL PLANT MATERIAL AT TIME OF DELIVERY AS WELL AS AFTER INITIAL PLACEMENT PRIOR TO PLANTING. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS PRIOR TO DELIVERY.

11. PLANT LOCATIONS TO BE REEVALUATED AND REVISED, IF NECESSARY, AFTER FINISHED GRADING.

12. MULCH IN PLANTERS AND PLANTING BEDS TO BE CLEAN AND FREE FROM PEST AND DISEASES. MULCH SHALL BE APPLIED TO A 2-INCH DEPTH. MULCH RINGS 24-INCHES MIN. IN DIAMETER ARE TO BE PLACED AROUND ALL TREES NOT LOCATED

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Landscape Calculations

DIMENSIONS AND LENGTHS NOT TO BE DETERMINED BY USE OF

CONTACT ENGINEER OR LANDSCAPE ARCHITECT IF THERE ANY

SCALE, TO BE DETERMINED ONLY AS STATED ON PLANS.

QUESTIONS REGARDING DIMENSIONS OR IF FURTHER

TOTAL CANOPY COVERAGE REQUIRED CANOPY COVERAGE PROPOSED

TOTAL CANOPY COVERAGE

NOTE ON MEASURING WITH SCALE

DIMENSIONING IS REQUIRED.

EXISTING CANOPY PROTECTED (12 TREES)

56,094 SF 1.29 ACRE

5,576 SF (10%)

14,669 SF (26%)

27,154 SF (48%)

8,130 SF `

6,539 SF

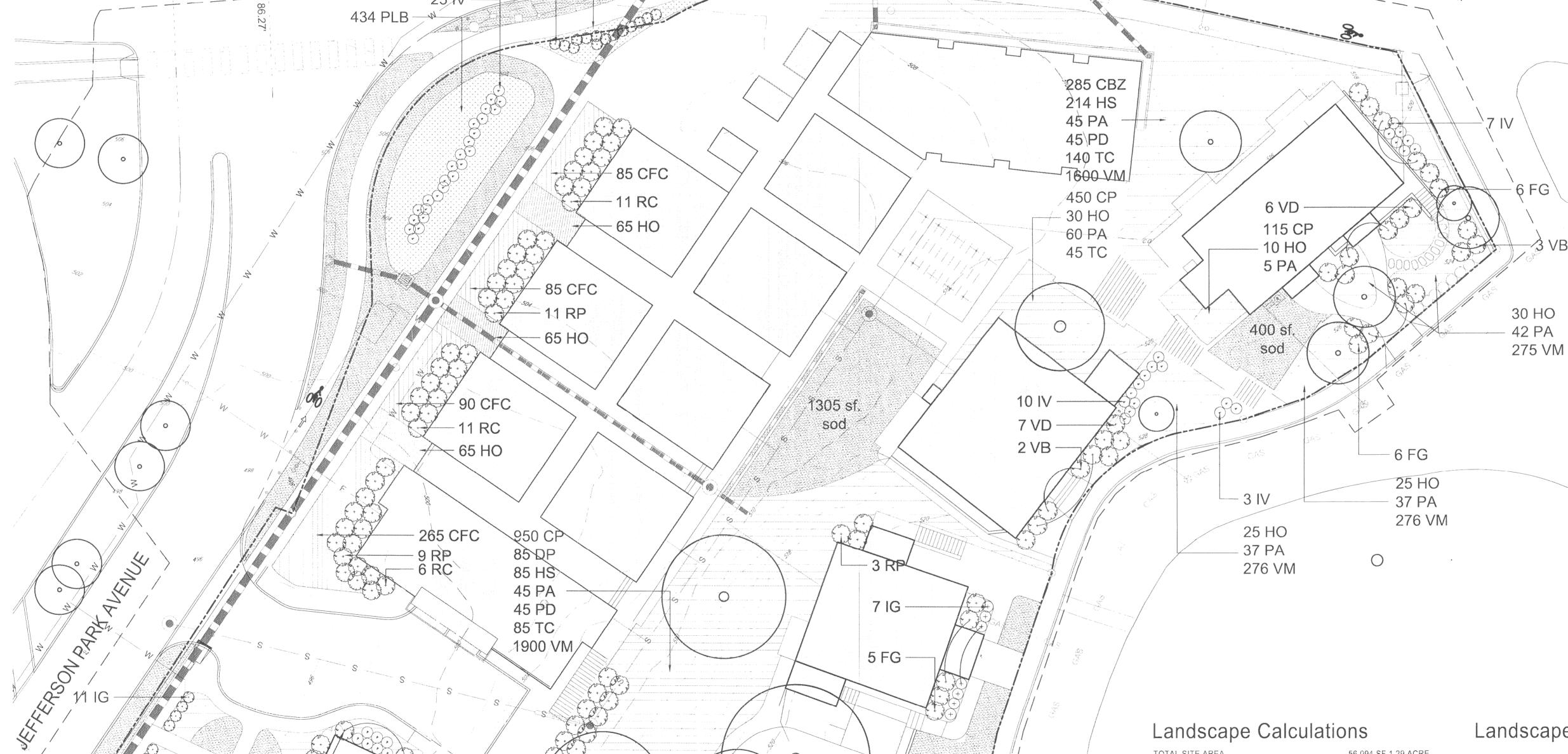
TOTAL SITE AREA

TOTAL OPEN SPACE

GROUNDCOVER (SPACED 2' O.C.)

Viburnum davidii

| CODE | SCIENTIFIC NAME | COMMON NAME | QTY. | SIZE | ROOT | SPACING seed | |
|---|--|---|---|--|----------------------|---|--|
| FB | Fescue Blend Turf Grass | | 2,908 S 2,060 S | | seed sod | sod | |
| CFC CBZ CP DP HO HS PA PD PLB | Carex comans 'Frosted Curls' Carex flacca 'Blue Zinger' Carex pennsylvanica Dennstaedtia punctilobula Hellebore orientalis Heuchera 'Mocha' Polystichum acrostichoides Phlox divaricata Pennisetum alopecuroides 'Little Bunny' Tiarella cordifolia Vinca minor 'Bowles' | New Zealand Hair Sedge Blue Zinger Sedge Pennsylvania Sedge Hayscented Fern Lenten Rose Mocha Coral Bells Christmas Fern Blue Woodland Phlox Little Bunny Fountain Grass Heartleaf Foamflower Bowles Littleleaf Periwinkle | 525 285 1515 85 315 299 271 90 479 270 4327 | 5" 5" 1 gal. 1 gal. 1 gal. 1 gal. 3 gal. 1 gal. 4" | plug plug plug | 18" 18" 16" 24" 18" 24" 24" 24" 18" 18" | |



1. TREES ALONG SIDEWALK TO MAINTAIN CANOPY HEIGHT AT A MINIMUM OF 60" ABOVE GRADE.

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OFFICERS TO OBSERVE ACTIONS WITHIN THE AREA.



CHARLOTTESVILLE CITY OF

07.13.10

ATIONS

STORMWATER RUNOFF

REVISIONS

EMMET STREET DRAINAGE DIVIDE, TYP. JEFFERSON PARK AVENUE -DRAINAGE DIVIDE, TYP. DRAINAGE -White the state of SUB AREA - DRAINAGEA DIVIDE ---- DRAINAGEA DIVIDE **BOUNDARY LINE** PRE-REDEVELOPMENT CONDITIONS POST-REDEVELOPMENT CONDITIONS DIVIDE, TYP. JPA STORM SYSTEM

Stormwater Narrative:

EMMET STREET

DRAINAGE — DIVIDE, TYP.

AND SON STATE OF STAT

THE PRE-DEVELOPMENT DRAINAGE AREA FOR THE OAKHURST INN & APARTMENTS SITE IS CURRENTLY APPROXIMATELY 1.15 ACRES. THERE ARE 4 EXISTING APARTMENT BUILDINGS (100, 102 AND 104 OAKHURST CIRCLE AND 1616 JPA) AND A PARKING LOT IN POOR CONDITION TO SERVE THEM. THE PROPOSED SITE PLAN WOULD KEEP THESE 4 EXISTING APARTMENT BUILDINGS, CONVERTING 3 INTO BED AND BREAKFASTS AND BUILD A NEW APARTMENT BUILDING OVER THE EXISTING PARKING LOT. THE PROPOSED PARKING WOULD BE PROVIDED UNDER THE NEW APARTMENT BUILDING. THE POST-DEVELOPMENT DRAINAGE AREA IS SLIGHTLY LARGER THAN THE PRE AT 1.25 ACRES. AS A RESULT, THE AMOUNT OF IMPERVIOUS AREA UNDER THE POST-REDEVELOPMENT CONDITION IS ONLY SLIGHTLY MORE THAN UNDER THE EXISTING CONDITIONS AND THE 2 AND 10 YEAR STORMS W/O DETENTION ARE ONLY INCREASED SLIGHTLY BY 0.12 CFS AND 0.43 CFS, RESPECTIVELY. SEE TABLE TO THE RIGHT FOR A SUMMARY.

WHILE A SIGNIFICANT AMOUNT OF DETENTION IS NOT REQUIRED FOR THIS PROJECT, IT IS VERY UNIQUE AND PROGRESSIVE IN THAT TWO 15,000 GALLON UNDERGROUND CISTERNS ARE BEING PROPOSED TO CAPTURE ALL OF THE DIRECT RUNOFF FROM ALL OF THE BUILDING ROOFTOPS, EXCEPT FOR 1616 JPA AND 100 & 102 OAKHURST CIRCLE IN ORDER FOR INTERNAL RE-USE. THE ROOFTOP RUNOFF WILL BE ROUTED DIRECTLY FROM THE NEW APARTMENT ROOFTOPS TO THE CISTERNS UNDERGROUND, AND EXCLUDE ANY SURFACE RUNOFF. SURFACE RUNOFF AND RUNOFF FROM THE EXISTING BUILDINGS WILL BE COLLECTED AND PIPED TO A JPA STORM SYSTEM AND THE CISTERNS WILL HAVE AN EMERGENCY OVERFLOW THAT TIES INTO THE SITE STORM PIPING TO TAKE THE STORMWATER OFF-SITE. THE WATER CAPTURED FROM THE CISTERN WILL BE ROUTED THROUGH NON-POTABLE WATER LINES INTO THE BUILDING FOR RE-USE TO FLUSH TOILETS. THE WATER CAN ALSO BE USED FOR OUTDOOR IRRIGATION AS WELL. IN ADDITION TO THE CISTERNS BEING INSTALLED, APPROXIMATELY 2150 SF OF PERMEABLE INTERLOCKING CONCRETE PAVERS (PICP) WILL BE INSTALLED IN FRONT OF THE 1616 JPA BUILDING AND LEADING TO THE BASEMENT PARKING. WITH A SUBSTANTIAL GRAVEL BASE BELOW THE PAVERS, THIS SURFACE WILL ACT TO HOLD RAINFALL, ACTING AS A PERVIOUS SURFACE.

THIS METHOD OF STORMWATER MANAGEMENT IS KNOWN AS THE RUNOFF REDUCTION METHOD AND IS GAINING SUPPORT IN VIRGINIA. CURRENTLY, THE DEPARTMENT OF CONSERVATION AND RECREATION (DCR) IS REVIEWING THE RUNOFF REDUCTION METHOD (UNDER PUBLIC COMMENTING PERIOD), ORIGINALLY PROPOSED BY THE CENTER FOR WATERSHED PROTECTION AS A VIABLE MEANS TO ACHIEVE BOTH WATER QUANTITY AND WATER QUALITY REQUIREMENTS.

FOR THE OAKHURST SITE, IT IS ESTIMATED THAT THE TOTAL AMOUNT OF RAINWATER THAT CAN BE HARVESTED PER MONTH WILL BE APPROXIMATELY 33,962 GALLONS, ASSUMING 45", OR RAINFALL PER YEAR OR 3.75" PER MONTH, AND 14,529 SF OF ROOFTOP CAPTURED. THE SUPPLY WILL SERVE ONLY THE NEW APARTMENT BUILDINGS. THE NON-POTABLE DEMAND FOR THESE 68 BDMS IS ESTIMATED TO BE 16,320 GALLONS/MO DURING THE SUMMER, BASED ON IRRIGATION ESTIMATES AND 5 TOILET FLUSHES OF 1.6 GALLONS PER DAY PER PERSON.

THEREFORE, RE-USING THE RAINWATER WOULD REDUCE THE DEMAND ON THE CITY'S WATER SUPPLY BY APPROXIMATELY 22,120 GALLONS PER MONTH DURING 5 SUMMER/FALL MONTHS OR 224,840 GALLONS PER YEAR.

THE RESULTS OF THE CISTERN ROUTING RUNOFF ARE PROVIDED IN THE TABLES ON THIS SHEET TO THE RIGHT. THE MAXIMUM WATER ELEVATION RESULTING FROM THE 100 YEAR STORM IS APPROXIMATELY 9.54 FT WITHIN THE CISTERN. THE POST-REDEVELOPMENT RUNOFF, SUBSEQUENTLY WOULD ALSO BE LESS THAN THE PRE-REDEVELOPMENT 2, 10 YEAR RUNOFFS. PLEASE SEE TABLE SUMMARY TO THE RIGHT. THROUGH RUNOFF REDUCTION AND RE-USE, WATER QUALITY IS ALSO ADDRESSED, SINCE 14,529 SF OF BUILDING ROOFTOP IMPERVIOUS AREA IS CAPTURED AND WITHDRAWN FROM THE STORMWATER RUNOFF LEAVING THE SITE. PLEASE SEE STORMWATER CALCULATIONS NARRATIVE AND ASSOCIATED CALCULATIONS INCLUDED WITH THIS SUBMITTAL PACKAGE. THE EXPLANATION OF HOW BOTH WATER QUANTITY, INCLUDING RUNOFF AND ROUTING RESULTS AND WATER QUALITY CALCULATIONS WORK ARE INCLUDED. IF YOU HAVE ANY QUESTIONS IN REGARDS TO HOW THIS SYSTEM WORKS, PLEASE CONTACT ALAN FRANKLIN OF WATER STREET STUDIO AT (434) 295-8177

A MAINTENANCE AGREEMENT INCLUDING BMP OWNERSHIP, HYDROLOGIC UNIT CODE, NEARBY WATERBODY, DESCRIPTION OF REQUIRED MAINTENANCE AND OWNER'S SIGNATURE AGREEING TO MAINTAIN FACILITY WILL BE PROVIDED PRIOR TO FINAL SITE PLAN APPROVAL.

DIVIDE, TYP.

1. POST-DEVELOPMENT DRAINAGE AREA IS LARGER THAN PRE-DEVELOPMENT DRAINAGE AREA AND WAS DELINEATED BASED ON THE TOTAL RUNOFF THAT WOULD REACH THE RECEIVING STORM SEWER MANHOLE TO THE SOUTHWEST OF 1616 JPA.

- 2. DESIGN OF THE CISTERN SYSTEM TO HARVEST ROOFTOP RAINWATER HAS BEEN DEVELOPED IN CONSULTATION WITH RAINWATER MANAGEMENT SOLUTIONS (RMS).
- 3. THE CISTERN WILL ONLY HARVEST RAINWATER FROM ROOFTOPS AND DIRECT THIS WATER DIRECTLY FROM ROOFTOPS TO THE UNDERGROUND CISTERN. NO SURFACE WATER WILL BE DIRECTED TO THE CISTERN AS THIS WATER HAS THE POTENTIAL TO BECOME CONTAMINATED FROM ANIMALS OR HUMANS.
- 4. SEE SHEET 17 FOR RAINWATER HARVESTING SYSTEM DETAILS
- 5. SEE SWM NARRATIVE FOR SECTION OF CISTERN

BOUNDARY LINE

Permeable Interlocking Concrete Paver Maintenance Checklist/Schedule

Recommended Action Frequency 1 to 2 times annually Vacuum surface with regenerative vacuum/sweeper apparatus | adjust per sediment loading Inspect after major storm. No standing water. Check underdrain outfalls for free flow of water. Annually Check any observation wells Inspect vegetation around pavement perimeter for cover & soil stability Annually Repair and replant as needed Repair runts or deformations in pavement exceeding $lac{1}{2}$ in -Annually Repair pavers more than $\frac{1}{4}$ in, above/below adjacent units Annually Replace broken units Annually Replenish aggregate in joints Annually

SUMMARY OF RUNOFF DISCHARGES UNDER PRE AND POST REDEVELOPMENT CONDITIONS

| STAGE OF DEVELOPMENT | IMPERVIOUS AREA (ACRES) | DRAINAGE AREA (ACRES) | CN | Q2 (CFS) | Q10 (CFS) | Q100 (CFS) | |
|---------------------------------------|----------------------------|--------------------------|----|-------------|--------------|---------------|--|
| PRE-REDEVELOPMENT | 0.67 | 1.15 | 86 | 5.29 | 8.87 | 13.32 | |
| POST-REDEVELOPMENT (WITHOUT CISTERNS) | 0.69 | 1.25 | 84 | 5.41 | 9.30 | 14.15 | |
| POST-REDEVELOPMENT (WITH CISTERNS) | 0.69 | 1.25 | 84 | 5.17 | 8.83 | 13.46 | |
| NOTE: | | | | | | | |

- 1. SEE STORMWATER MANAGEMENT CALCULATIONS NARRATIVE FOR A BREAKDOWN OF THE DIFFERENT ON VALUES USED TO REPRESENT THE SITE CONDITIONS.
- 2. POST-REDEVELOPMENT RATES WITH CISTERNS ARE TOTAL PEAK RATES FROM SITE.

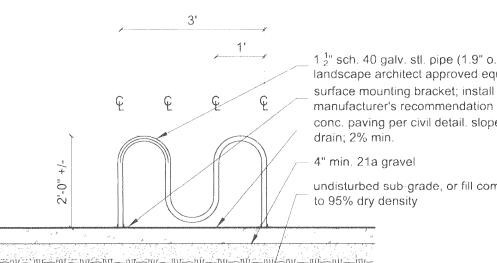
TOTAL DISCHARGE UNDER POST-REDEVELOPMENT CONDITIONS WITH TWO 15,000 GALLON CISTERNS

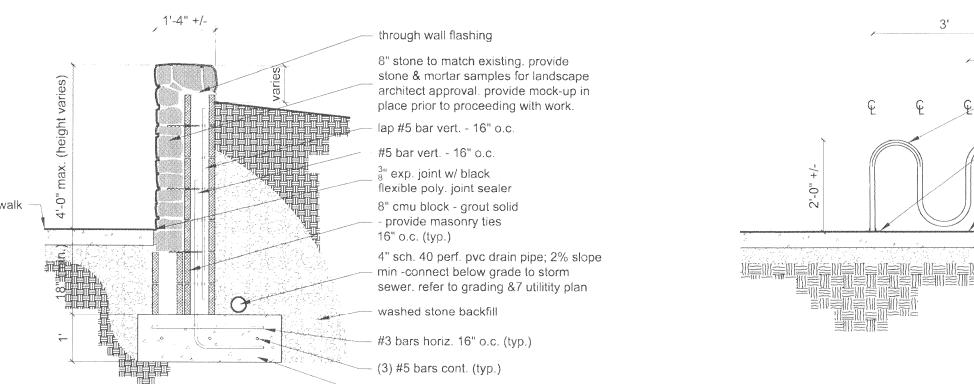
| | RTION SITE | DRAINAGE AREA (ACRES) | DISCHARGE Q2 (CFS) | DISCHARGE Q10 (CFS) | DISCHARGE Q100 (CFS) |
|-----|----------------------|--------------------------|--------------------------|---------------------------|----------------------------|
| | NCONTROLLED UNOFF | 0.92 | 3.35 | 6.15 | 9.73 |
| *** | ROUTED RUNOFF | 0.33 | 1.84 | 2.74 | 3.85 |
| *** | TOTAL RUNOFF | 1.25 | 5.17 | 8.83 | 13.46 |

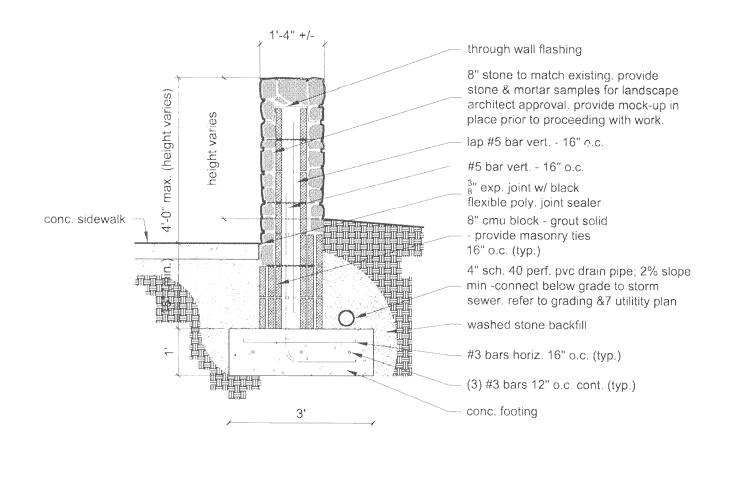
* UNCONTROLLED RUNOFF REFERS TO PORTION OF SITE THAT IS NOT CAPTURED BY CISTERNS

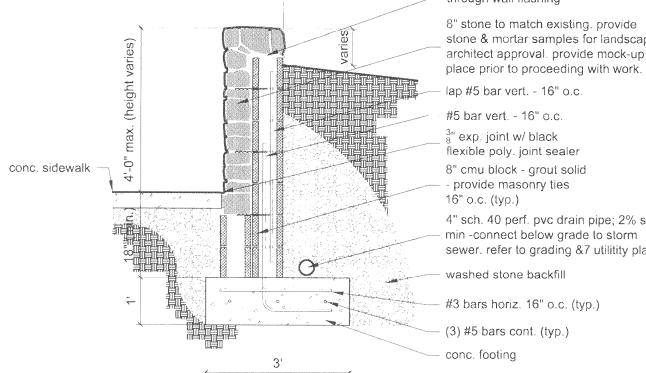
ROUTED RUNOFF INDICATES RELEASE FROM UNDERGROUND CISTERNS

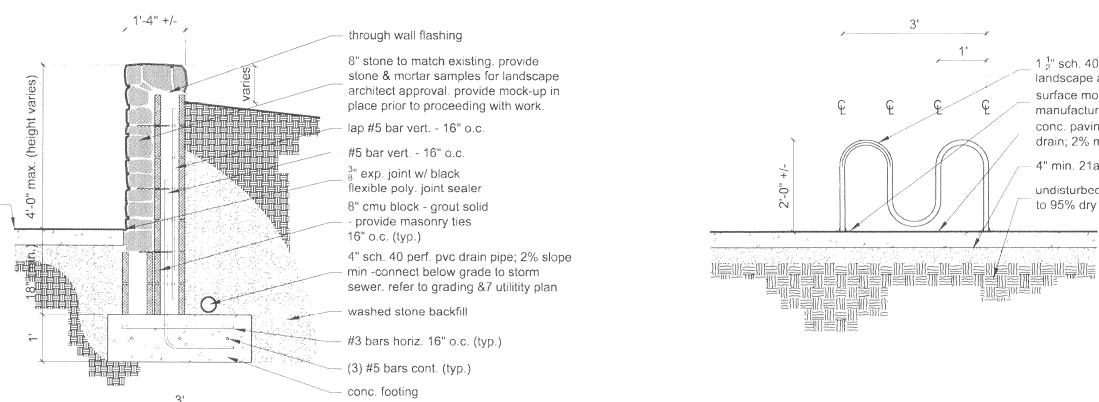
* ** FROM HYDROCAD REPORT

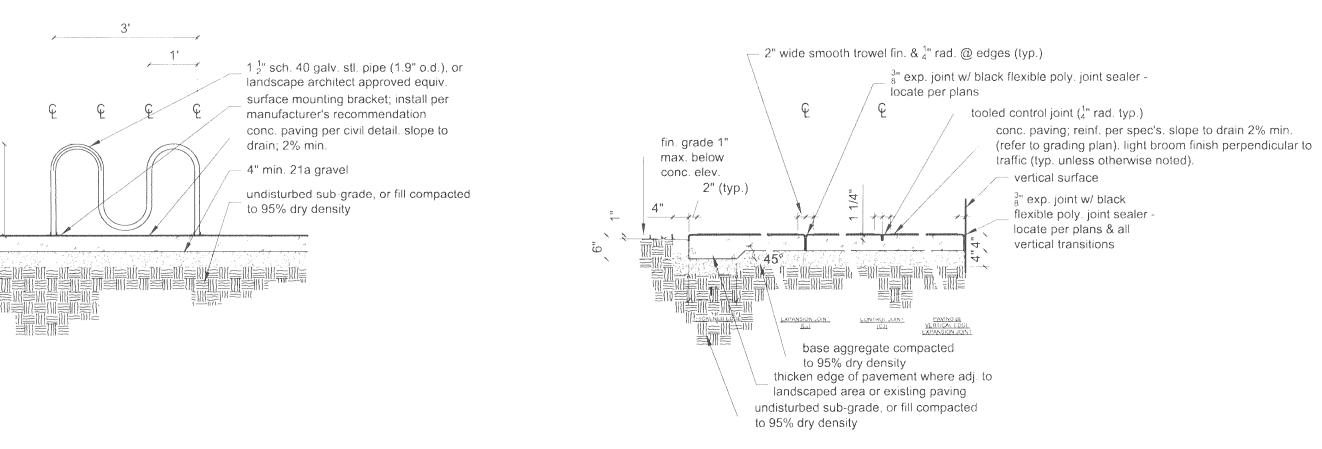


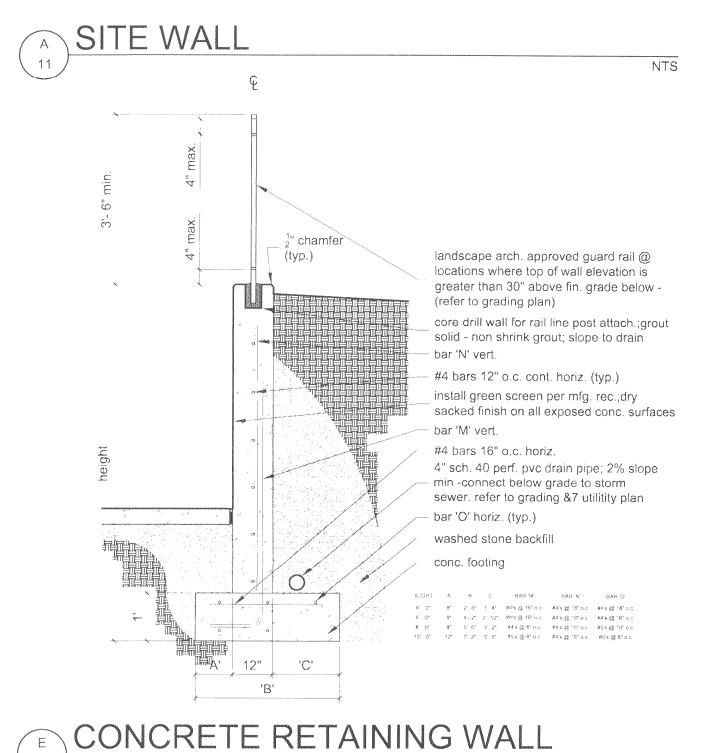


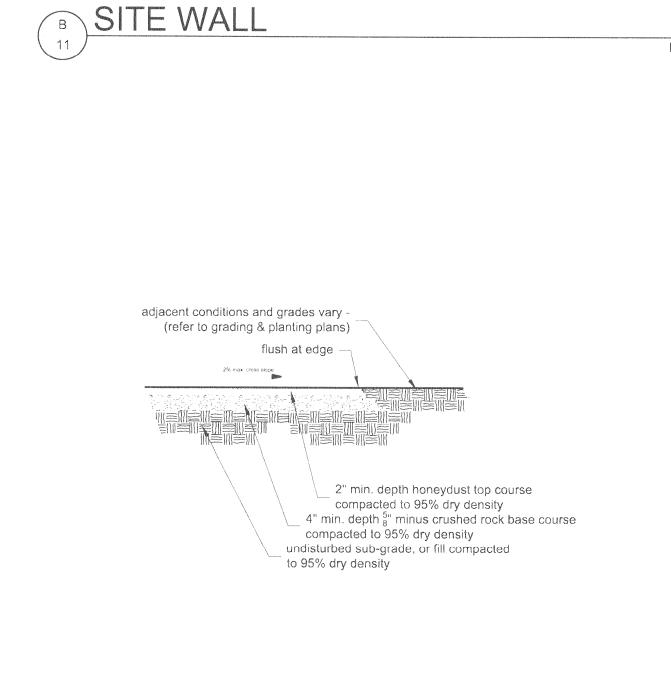


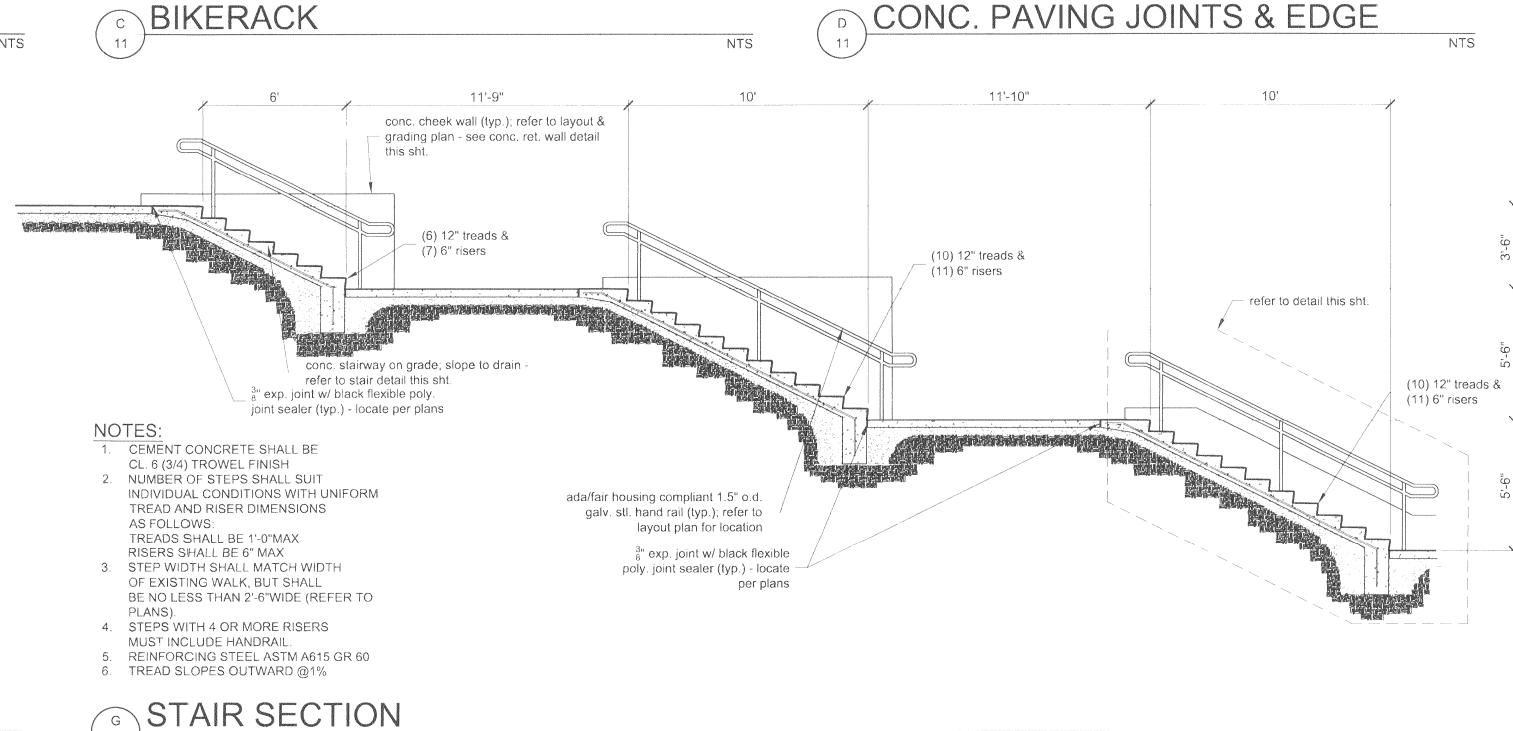


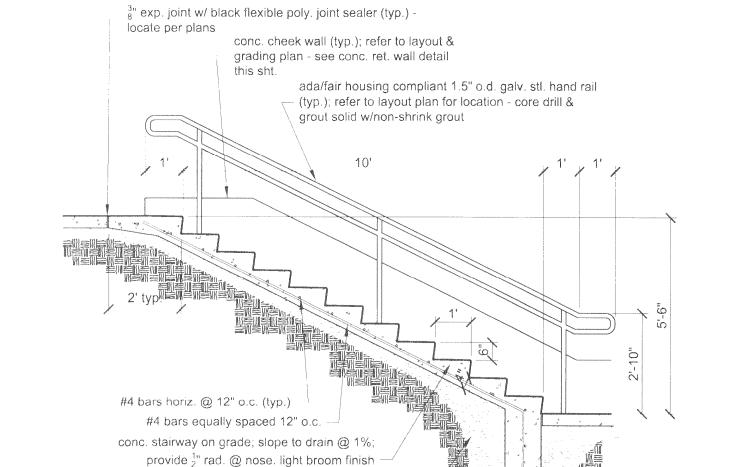












perpendicular to traffic

undisturbed sub-grade, or fill compacted

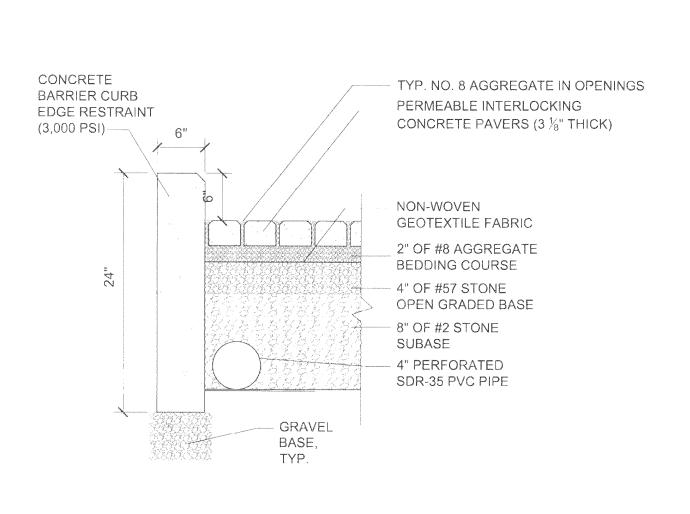
compacted to 95% dry density

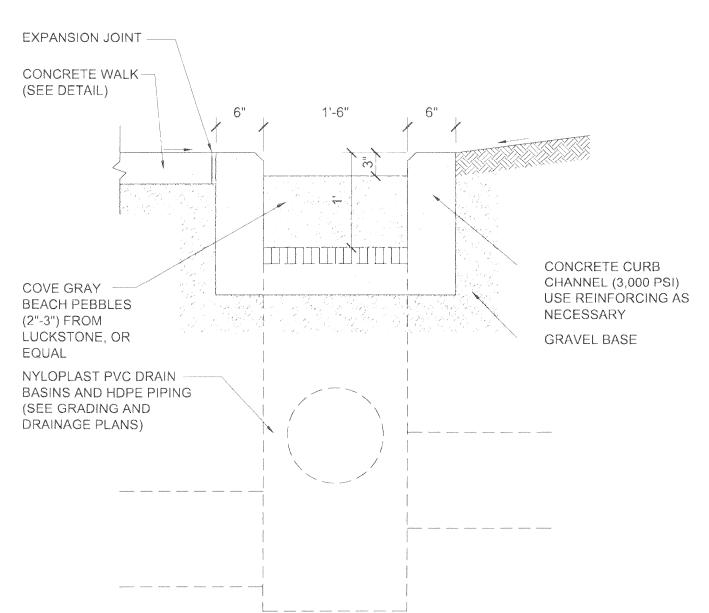
to 95% dry density

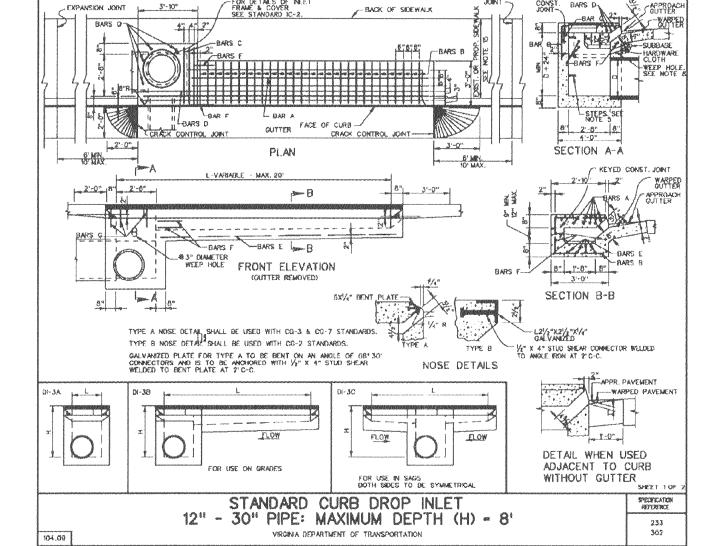
6" min. depth 8" minus crushed rock base course

SITE STAIR DETAIL

11 GENERAL NOTES







PERMEABLE PAVERS

WOODLAND PATH

STONE LINED CONCRETE CHANNEL

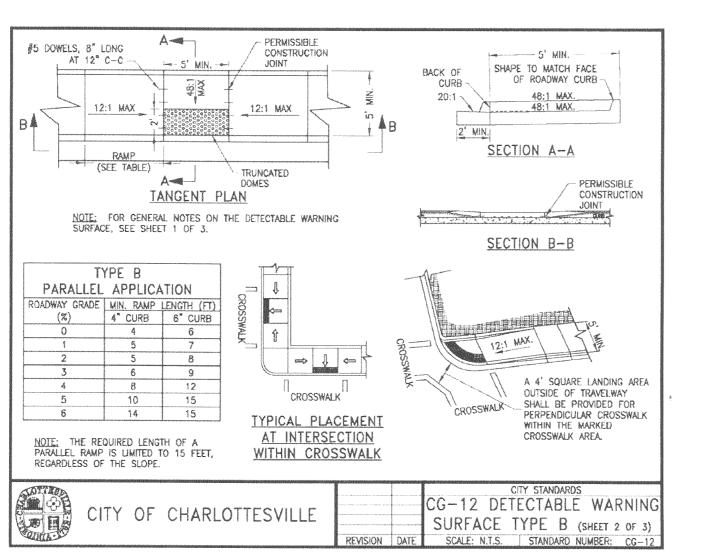
VDOT STD. DI-3A,3B,3C

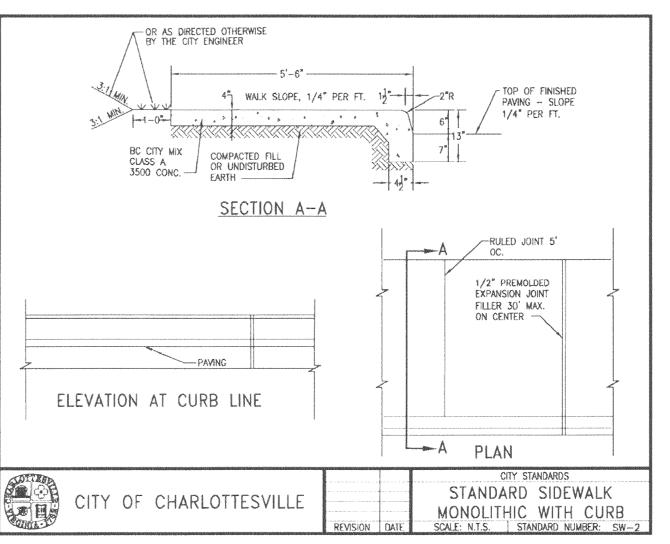
NTS

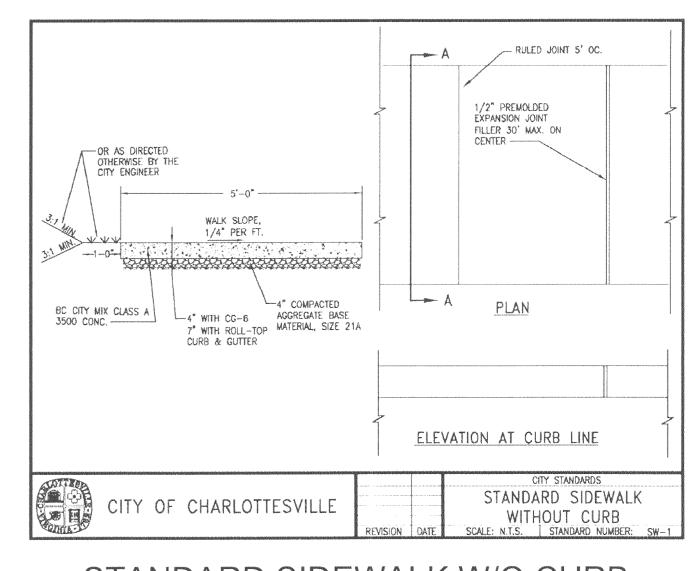
GENERAL NOTES:

1. DETECTABLE WARNING TO BE PRE-FORMED PLASTIC INSERT WITH SLIP RESISTANT SURFACE COVERING THE FULL WIDTH OF THE RAMP FLOOR BY 2 FOOT IN LENGTH IN THE DIRECTION OF TRAVEL. THE DETECTABLE WARNING SHALL BE PROVIDED BY PARALLEL TRUNCATED DOMES, TRUNCATED DOMES TO BE STAMPED IN TOP SURFACE. THE COLOR OF THE DETECTABLE WARNING SECTION SHALL BE YELLOW. SLOPING SIDES OF CURB RAMP MAY BE POURED MONOLITHICALLY WITH RAMP FLOOR OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED AT * , 2" HIGHER THAN IF RAMP FLOOR IS PRECAST, HOLES MUST BE PARALLEL & PERPENDICULAR CURB EDGE OF PAVEMENT AT * * SAME AS TOP OF PROVIDED FOR DOWEL BARS SO THAT ADJOINING FLARED SIDES CAN BE CAST IN PLACE AFTER PLACEMENT OF PRECAST RAMP FLOOR. PRECAST CONCRETE SHALL BE CLASS A-4. REQUIRED BARS ARE TO BE NO. 5 X 8" PLACED 1" CENTER TO CENTER ALONG BOTH SIDES OF THE VAR. WIDTH RAMP FLOOR, MID-DEPTH OF RAMP FLOOR. SIDEWALK OR MINIMUM CONCRETE COVER 1 1/2°. SPACE

VAR. 4' MIN. TRUNCATED DOME RAMPS MAY BE PLACED ON RADIAL OR TANGENTIAL DETAIL SECTIONS PROVIDED THAT THE CURB OPENING IS 1.6"-2.4" PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB. TREATMENT WHERE TYPICAL CONCRETE SIDEWALK IS 4" THICK. WHEN WIDTH OF SIDEWALK OR SIDEWALK SPACE THE RAMP IS PLACED IN THE CURB RETURN RADIUS 0.65" MIN. IT SHALL BE 7" THICK. VARIABLE 4' MIN. IS LESS THAN 7'-4" PAY LIMITS WHEN CURB RAMPS ARE USED IN CONJUNCTION <u>CG-12</u> DETECTABLE WARNING WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH. CURB RAMP DETAIL CITY STANDARDS
CG-12 DETECTABLE WARNING
SURFACE GENERAL NOTES CITY OF CHARLOTTESVILLE SCALE: N.T.S. | STANDARD NUMBER: CG-1









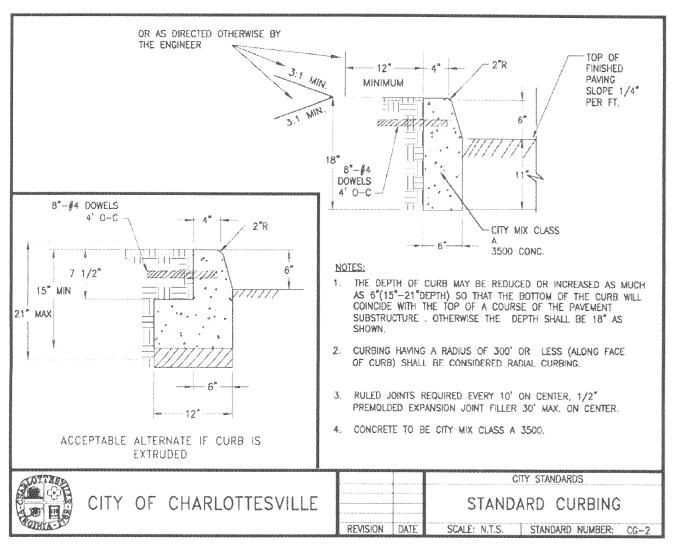
SECTION

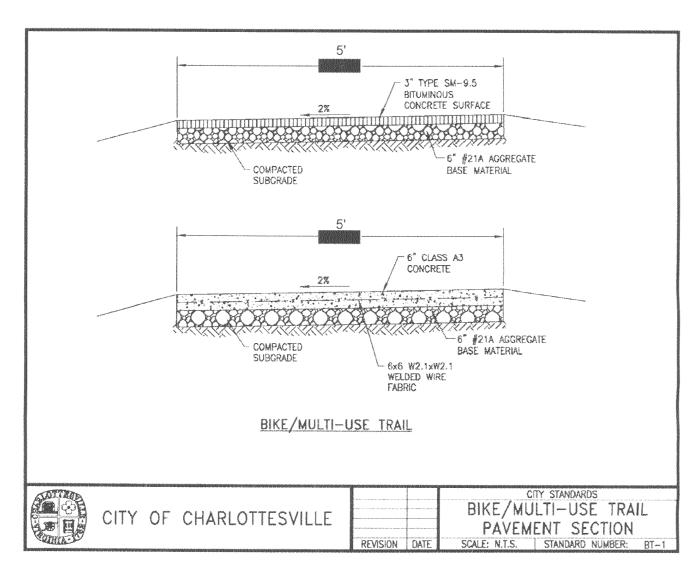


NTS

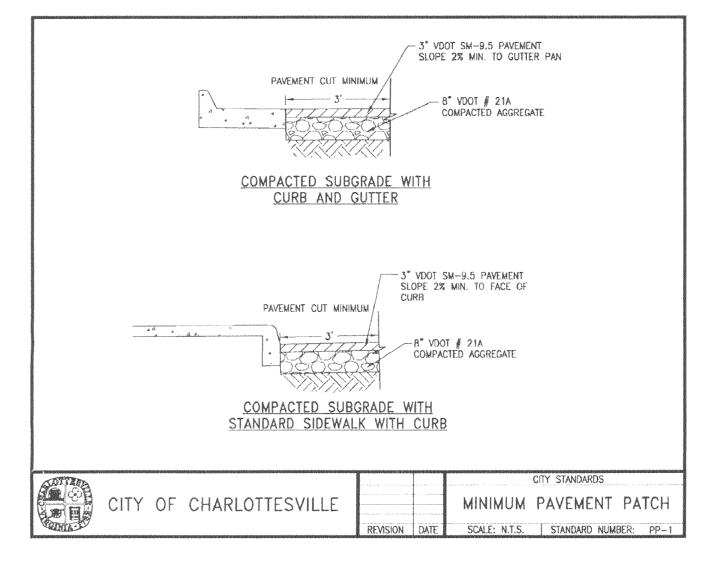
B STANDARD SIDEWALK W/ CURB PLAN, SECTION AND ELEVATION

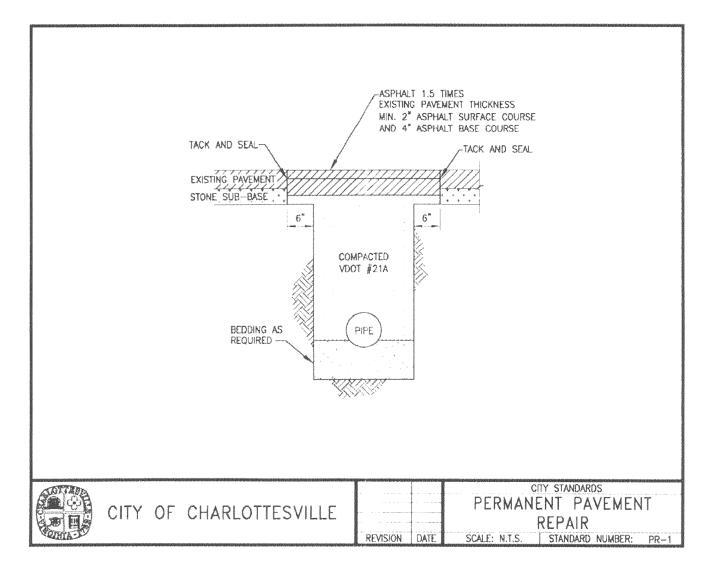
C STANDARD SIDEWALK W/O CURB PLAN, SECTION AND ELEVATION





NTS



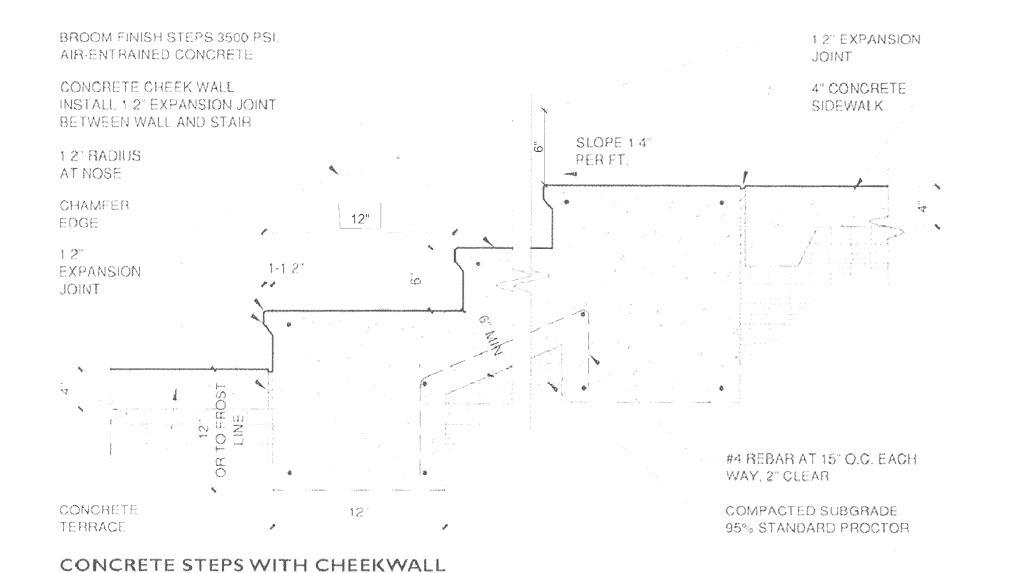


STANDARD CURBING









NOTES:1. EXPANSION JOINTS TO BE PLACED WHERE CONCRETE MEETS BUILDING AND ALL OTHER FIXED VERTICAL STRUCTURES.

NTS

3x ROOTBALL WIDTH, MIN. 16" MIN.- TREES 8" MIN.- SHRUBS WIDTH ROOTBA

GENERAL PLANTING PIT NOTES:

SURROUNDING GRADE

A) ADD MULCH ON TOP OF THE ROOTBALL AND PLANTING PIT, BEGINNING AT NO MORE THAN 1" DEPTH NEARTRUNK AND TAPERING TO A DEPTH OF 3" AT PLANTING PIT LIMITS, THEN TAPER TO PROPOSEDFINISHED GRADE. KEEP MULCH B) ROOT COLLAR SHALL BE EXPOSED AND FREE OF SOIL. SET TOP OF ROOTBALL SLIGHTLY ABOVE THE

C) CREATE A SLIGHT MOUND TO DIRECT WATER TO THE ROOTBALL. BACKFILL PIT TO LEVEL OF FINISH GRADE. EXCESS BACK FILL SHALL BE REMOVED OR, WHERE APPROVED BY THE LANDSCAPE ARCHITECT, SPREAD TO SURROUNDING AREA.

D) AFTER FINAL PLACEMENT, CUT AWAY WIRE BASKET TO A MIN. OF $\frac{1}{2}$ THE DEPTH OF THE ROOTBALL. CUT ANY REMAINING WIRE GRIDS AS INIDICATED, CUT AWAY AND REMOVE BURLAP, STRING, OR OTHER PACKAGING MATERIALS TO A MIN. OF $rac{1}{2}$ THE DEPTH OF THE ROOTBALL. SCARIFY CONTAINER GROWN PLANTS TO LOOSEN ROOTS. E) TAPER SIDES OF PIT. SCARIFY THOROUGHLY TO LOOSEN SOIL.

F) BACKFILL WITH ORIGNIAL SOIL FROM THE PIT EXCAVATION CULTIVATED TO CLUMPS NOT EXCEEDING 3" DIA. COMPACT BACKFILL LIGHTLY IN 6" LIFTS TO REMOVE VOIDS LARGER THAN 1". INCORPORATE 1" EVENLY DISTRIBUTED, APPROVED COMPOST INTO THE TOP 6" OF BACKFILL DURING THE FINAL LIFT. G) TAMP SOIL FIRMLY AT THE BASE OF THE ROOTBALL TO STABILIZE.

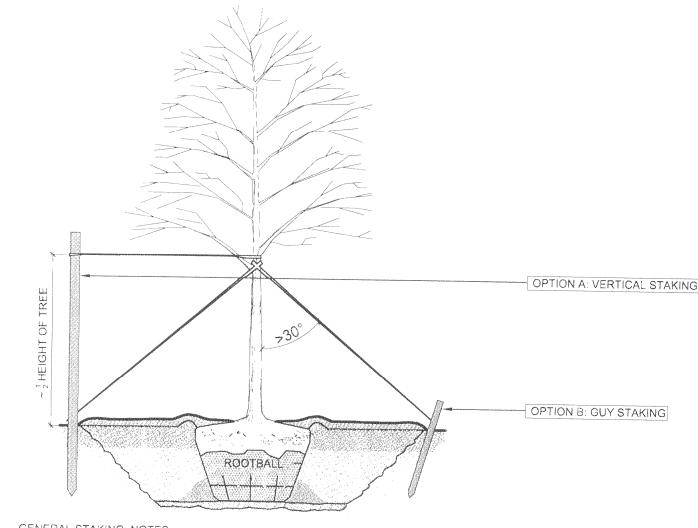
H) SET ROOTBALL ON UNDISTURBED SOIL. WHERE HARDPAN IS PRESENT, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING AND SCARIFY THE BOTTOM OF THE PLANTING PIT SUFFICIENT TO BREAK THROUGH AND LOOSEN ALL HARDPAN MATERIAL AS DIRECTED. IN ANY INSTANCE WHERE TREES ARE TO BE PLANTED ON DISTURBED SOILS, BACKFILL WITH CULTIVATED ORIGINAL SOIL OR APPROVED MATERIAL AS DIRECTED AND COMPACT TO A LEVEL SUFFICIENT TO SUPPORT THE WEIGHT OF THE ROOTBALL WHEN THE BACKFILL SOIL IS AT FIELD CAPACITY.

SUPPLEMENTAL TREE OR SHRUB PLANTING NOTES: 1) PRIOR TO PLANTING, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IF FIELD CONDITIONS AND/OR SOIL CHARACTERISTICS ARE NOT COMPATIBLE WITH THESE PLANTING CRITERIA OR WHERE CONDITIONS RAISE CONCERNS

REGARDING PLANT SURVIVABILITY OR WARRANTY. 2) THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY PLANT DAMAGE INCURRED DURING SHIPPING OR THE PLANTING PROCESS. 3) WATER THOROUGHLY IMMEDIATE AFTER PLANTING SUFFICIENT TO SETTLE PLANTING PIT BACKFILL.

4) PLANTING SHALL BE SUBJECT TO INSPECTION BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT 24 HOURS PRIOR TO INSTALLATION. PLANT INSTALLATIONS THAT DEVIATE FROM THESE CRITERIA SHALL BE REJECTED AND REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS PRIOR APPROVAL IS GRANTED BY THE LANDSCAPE ARCHITECT.

A INDIVIDUAL TREE/SHRUB PLANTING PIT



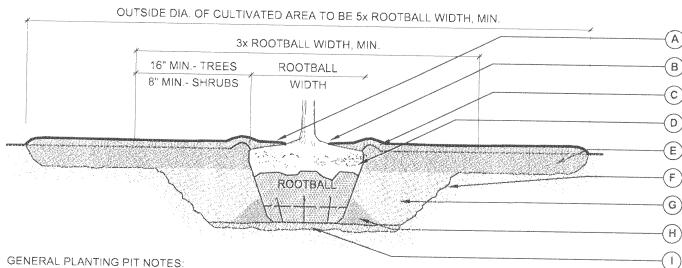
GENERAL STAKING NOTES:

1) TREES SHALL BE STAKED ONLY WHEN INDICATED BY SITE CONDITIONS AND/OR PLANT CHARACTERISTICS. THE THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF CONIDTIONS THAT NECESSITATE STAKING OR THAT COMPROMISE PLANT STABILITY, SURVIVABILITY, AND/OR CONTRACTOR'S WARRANTY. UPON APPROVAL OF THE LANDSCAPE ARCHITECT, NECESSARY STAKING SHALL BE INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CLIENT.

UPON APPROVAL OF THE LANDSCAPE ARCHITECT, STAKING SHALL BE INSTALLED AS FOLLOWS: OPTION A: VERTICAL STAKING-- VERTICAL OAK STAKES TO BE DRIVEN IN OUTSIDE THE LIMITS OF THE TREE PIT. (2) STAKES AND GUYS PER TREE. SET STAKES AT 180° AROUND TREE PIT. GUY WITH 'ARBORTIE' OR EQUIVALENT WOVEN STRAPPING DESIGN FOR TREE STAKING. ATTACH GUY MATERIAL IN A SLACK LOOP AT THE TRUNK AND PULL SLIGHTLY TAUT TO THE STAKE TO SECURE. OPTION B: GUY STAKING-- (3) 18" OAK STAKES AND GUYS PER TREE. SET STAKES AT AN ANGLE IN UNDISTURBED SOIL AT

120° AROUND THE TREE PIT. ATTACH ARBORTIE OR EQUIVALENT GUY MATERIAL IN A SLACK LOOP AT THE TRUNK AND PULL SLIGHTLY TAUT TO THE STAKE TO SECURE.

TREE STAKING



A) ADD MULCH ON TOP OF THE ROOTBALL AND PLANTING PIT, BEGINNING AT NO MORE THAN 1" DEPTH NEARTRUNK AND TAPERING TO A DEPTH OF 3" AT PLANTING PIT LIMITS, THEN TAPER TO PROPOSEDFINISHED GRADE. KEEP MULCH

CLEAR OF ROOT COLLAR. MULCH EXTENDS TO LIMIT OF CULTIVATED ZONE. B) ROOT COLLAR SHALL BE EXPOSED AND FREE OF SOIL. SET TOP OF ROOTBALL SLIGHTLY ABOVE THE SURROUNDING GRADE.

C) CREATE A SLIGHT MOUND TO DIRECT WATER TO THE ROOTBALL. BACKFILL PIT TO LEVEL OF FINISH GRADE. EXCESS BACK FILL SHALL BE REMOVED OR, WHERE APPROVED BY THE LANDSCAPE ARCHITECT, SPREAD TO SURROUNDING AREA

D) AFTER FINAL PLACEMENT, CUT AWAY WIRE BASKET TO A MIN. OF $\frac{1}{2}$ THE DEPTH OF THE ROOTBALL. CUT ANY REMAINING WIRE GRIDS AS INIDICATED. CUT AWAY AND REMOVE BURLAP, STRING, OR OTHER PACKAGING MATERIALS TO A MIN. OF $rac{1}{2}$ THE DEPTH OF THE ROOTBALL. SCARIFY CONTAINER GROWN PLANTS TO LOOSEN ROOTS. E) ROTOTILL PERIMETER OF PLANTING PIT TO 5X DIAMETER OF THE ROOTBALL AND 6" DEPTH. INCORPORATE 1" COMPOST.

F) TAPER SIDES OF PIT. SCARIFY THOROUGHLY TO LOOSEN SOIL. G) BACKFILL WITH ORIGNIAL SOIL FROM THE PIT EXCAVATION CULTIVATED TO CLUMPS NOT EXCEEDING 3" DIA. COMPACT BACKFILL LIGHTLY IN 6" LIFTS TO REMOVE VOIDS LARGER THAN 1". INCORPORATE 1" EVENLY DISTRIBUTED, APPROVED COMPOST INTO THE TOP 6" OF BACKFILL DURING THE FINAL LIFT.

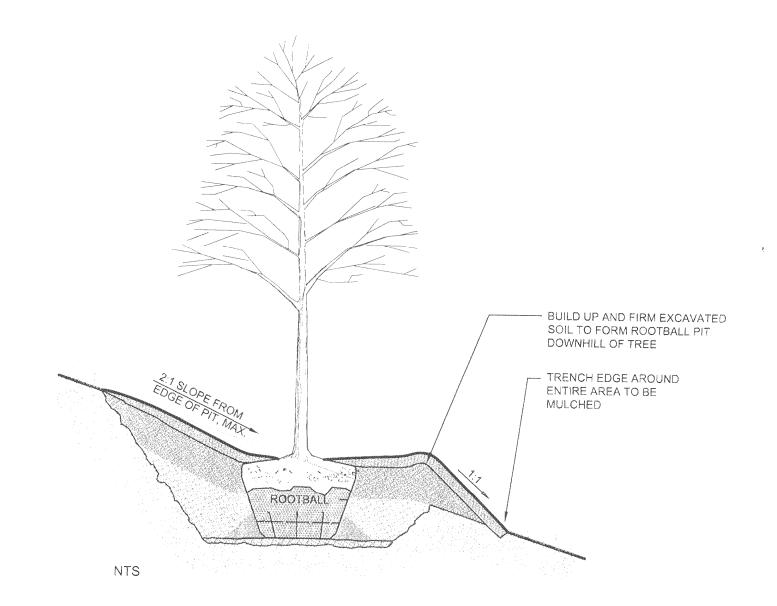
H) TAMP SOIL FIRMLY AT THE BASE OF THE ROOTBALL TO STABILIZE. I) SET ROOTBALL ON UNDISTURBED SOIL. WHERE HARDPAN IS PRESENT, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING AND SCARIFY THE BOTTOM OF THE PLANTING PIT SUFFICIENT TO BREAK THROUGH AND LOOSEN ALL HARDPAN MATERIAL AS DIRECTED. IN ANY INSTANCE WHERE TREES ARE TO BE PLANTED ON DISTURBED SOILS, BACKFILL WITH CULTIVATED ORIGINAL SOIL OR APPROVED MATERIAL AS DIRECTED AND COMPACT TO A LEVEL SUFFICIENT TO SUPPORT THE WEIGHT OF THE ROOTBALL WHEN THE BACKFILL SOIL IS AT FIELD CAPACITY.

SUPPLEMENTAL TREE OR SHRUB PLANTING NOTES: 1) PRIOR TO PLANTING, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IF FIELD CONDITIONS AND/OR SOIL CHARACTERISTICS ARE NOT COMPATIBLE WITH THESE PLANTING CRITERIA OR WHERE CONDITIONS RAISE CONCERNS

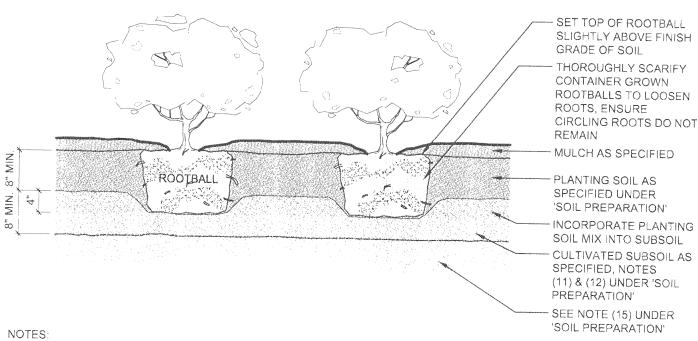
REGARDING PLANT SURVIVABILITY OR WARRANTY. 2) THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY PLANT DAMAGE INCURRED DURING SHIPPING OR THE PLANTING PROCESS.

3) WATER THOROUGHLY IMMEDIATE AFTER PLANTING SUFFICIENT TO SETTLE PLANTING PIT BACKFILL 4) PLANTING SHALL BE SUBJECT TO INSPECTION BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT 24 HOURS PRIOR TO INSTALLATION. PLANT INSTALLATIONS THAT DEVIATE FROM THESE CRITERIA SHALL BE REJECTED AND REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS PRIOR APPROVAL IS GRANTED BY THE LANDSCAPE ARCHITECT.

INDIVIDUAL TREE PLANTING PIT - 5X



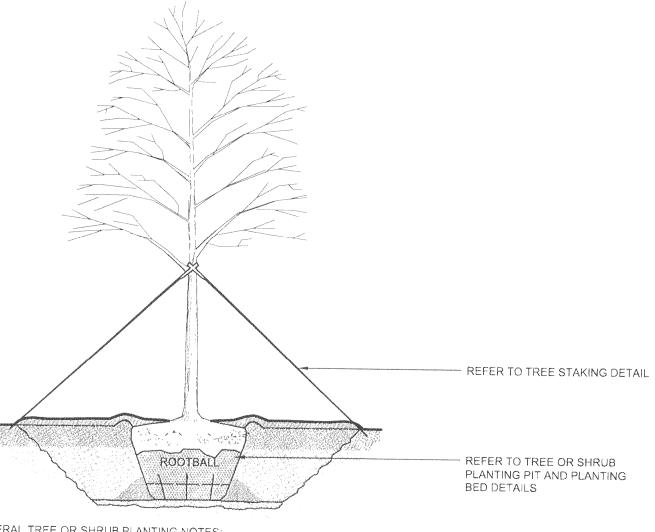
PLANTING ON A SLOPE



NTS

1) REFER TO NOTES UNDER 'INDIVIDUAL TREE OR SHRUB PLANTING PIT' AND 'TREE AND SHRUB PLANTING' DETAILS FOR GUIDELINES REGARDING PLANT QUALITY, HANDLING, INSTALLATION.





GENERAL TREE OR SHRUB PLANTING NOTES: 1) SET PLANT PLUMB.

2) ALL PRUNING SHALL BE RESTRICTED TO THE REMOVAL OF DEAD OR BROKEN BRANCHES AND SHALL BE PERFORMED ONLY UNDER THE SUPERVISION OF THE LANDSCAPE ARCHITECT OR PROJECT ARBORIST. 3) ALL PLANTS SHALL CONFORM TO MINIMUM STANDARDS SET FORTH IN THE MOST CURRENT ADDITION OF THE AMERICAN

STANDARD FOR NURSERY STOCK. ADDITIONALLY, PLANTS SHALL BE IN GOOD, VIGOROUS GROWING CONDITION, FREE OF UNECCESSARY INJURY. ROOT COLLARS SHALL BE VISIBLE ABOVE THE SOIL LINE OF THE ROOTBALL. TREES SHALL NOT EXHIBIT CODOMINANT LEADERS, WITH THE EXCEPTION OF MULTI-STEM SPECIMENS AND CERTAIN DECURRENT SPECIES-- SUBJECT TO APPROVAL OF THE LANDSCAPE ARCHITECT. CONTAINER GROWN PLANTS SHALL NOT BE ROOT-BOUND. SUB-STANDARD PLANTS SHALL BE REJECTED. 4) WRAP TREES ONLY AS DIRECTED BY THE LANDSCAPE ARCHITECT.

5) FOR SMOOTH BARK SPECIES, MARK THE NORTH SIDE IN THE NURSERY AND ALIGN THAT SIDE TO NORTH IN THE FIELD. 6) ROOTBALLS WRAPPED IN SYNTHETIC BURLAP OR OTHER NON-BIODEGRADABLE MATERIAL SHALL BE REJECTED. 7) WHERE B&B PLANTS ARE SPECIFIED, CONTAINER GROWN PLANTS SHALL NOT BE SUBSTITUTED WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.

TREE/SHRUB PLANTING (TYP.)

GENERAL SOIL NOTES

1) TOPSOIL SHALL BE NATURALLY OCCURING, FERTILE, GRANULAR, FRIABLE LOAM, FREE OF STONES OR OTHER DEBRIS LARGER THAN 2" IN DIAMETER AND NOXIOUS WEEDS OR WEED SEEDS. PREFERENCE SHALL BE GIVEN TO SOILS NATIVE TO THE SITE. LOAM SOILS SHALL HAVE A CLAY CONTENT BETWEEN 15 AND 27% AND SHALL HAVE A TEXTURE OF LOAM, SANDY LOAM, OR SILT LOAM, ACCORDING TO THE USDA SOIL CLASSIFICATION SYSTEM. SOIL PH SHALL RANGE BETWEEN 6 AND 7. SUBMIT SOIL SAMPLE AND COMPLETE SOIL ANALYSIS REPORT TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

2) TOPSOIL SHALL BE INSTALLED IN FRIABLE CONDITION IN ALL LANDSCAPED AREAS TO A MINIMUM DEPTH OF 6". SOILS SHALL NOT BE WORKED WHEN WET. VERIFY REQUIRED TOPSOIL DEPTHS WITH THE LANDSCAPE ARCHITECT.

3) THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL TOPSOIL AND PLANTING SOIL MIX. MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. (REFER TO SPECIFICATION SECTION 31-3200 AND NOTE (1) ABOVE PLUS NOTE (4) TO UNDER THIS HEADING FOR TOPSOIL AND AMENDMENT REQUIREMENTS).

4) THE TYPICAL PLANTING SOIL MIX FOR ON-GRADE PLANTINGS IN CONTIGUOUS PLANTING BED (NOT INDIVIDUAL PLANTING HOLES) SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE INDICATED ON THE DRAWINGS:

80% TOPSOIL AS SPECIFIED IN NOTE (1)

20% FULLY COMPOSTED ORGANIC MATTER FREE OF VIABLE WEED SEED, HEAVY METALS, AND EXCESSIVE LEVELS OF NUTRIENTS OR SALTS

+ SLOW RELEASE COMMERCIAL FERTILIZER(S) AND MINERALS AS RECOMMENDED IN THE SOIL ANALYSIS REPORT 1 LB. ACUTAL NITROGEN IN SLOW RELEASE FORMULATION PER 1,000 SQUARE FEET LIME AS RECOMMENDED IN SOIL ANALYSIS REPORT

) IN AREAS SCHEDULED FOR LANDSCAPE INSTALLATION WHERE CLEARING AND GRUBBING HAS NOT BEEN COMPLETED. OR WHERE VEGETATION HAS REESTABLISHED, THE CONTRACTOR SHALL CLEAR AND GRUB ALL WEEDS, DEAD PLANT MATERIAL, STUMPS, AND ALL OTHER MATERIAL NOT NOTED TO BE SAVED.

6) VERIFY MATERIAL TO BE REMOVED WITH THE LANDSCAPE ARCHITECT PRIOR TO ANY CLEARING AND GRUBBING. SOIL PREPARATION- ALL PLANTING BEDS:

WHERE SOILS ARE SUFFICIENT TO MEET THE DEFINITION OF TOPSOIL ESTABLISHED IN NOTE (1)--

7) CREATE A V-DITCH BED EDGE TO A DEPTH OF 3" FOR ALL BEDS, UNLESS OTHERWISE NOTED.

8) ROTOTILL BED AREAS TO A MINIMUM DEPTH OF 8". REMOVE DEBRIS GREATER THAN 2" IN DIAMETER. DO NOT ROTOTILL WHEN SOILS ARE WET. DO NOT ROTOTILL WITHIN THE DRIP LINE OF ANY TREE.

9) SPREAD 2" FULLY COMPOSTED ORGANIC MATTER (AS DEFINED NOTE (4)) THOUGHOUT THE PLANTING BED. EVENLY APPLY SOIL AMENDMENTS AS INDICATED IN NOTE (4). INCORPORATE AMENDMENTS INTO TOP 6" OF SOIL BY ROTOTILLING AGAIN.

10) RAKE BED SMOOTH AT SPECIFIED GRADIENT(S), ASSURING POSITIVE DRAINAGE TO THE PERIMETER. AFTER PLANTING APPLY 2-3"AGED, DOUBLE-SHREDDED HARDWOOD MULCH FREE OF DYES, UNLESS OTHERWISE SPECIFIED.

WHERE SUBSOILS ARE PRESENT OR WHERE SOILS ARE NOT SUFFICIENT TO MEET THE DEFINITION OF TOPSOIL

11) WHERE SOILS TO BE PLANTED DO NOT MEET THE DEFINITION OF TOPSOIL OR ARE DETERMINED TO BE INADEQUATE FOR PLANT GROWTH BY THE LANDSCAPE ARCHITECT DUE TO CONSTRUCTION COMPACTION, HIGH CLAY CONTENT, OR POOR DRAINAGE, THE CONTRACTOR SHALL EXCAVATE AREAS TO BE PLANTED TO A MINIMUM DEPTH OF 8" BELOW FINISH GRADE OF SOIL. AFTER EXCAVATION, ROTOTILL REMAINING SOIL TO A MINIMUM DEPTH OF 8". RAKE SMOOTH AND SLOPE

12) ADD 3" SOIL MIX (AS SPECIFIED IN NOTE (4)) AND INCORPORATE INTO TOP 4" OF CULTIVATED EXISTING SOIL BY ROTOTILLING. LIGHTLY COMPACT SOIL. ADD ADDITIONAL SOIL MIX TO ACHIEVE FINISH GRADE. RAKE TO ACHIEVE SPECIFIED GRADIENT(S).

13) CREATE A V-DITCH BED EDGE TO A DEPTH OF 3"

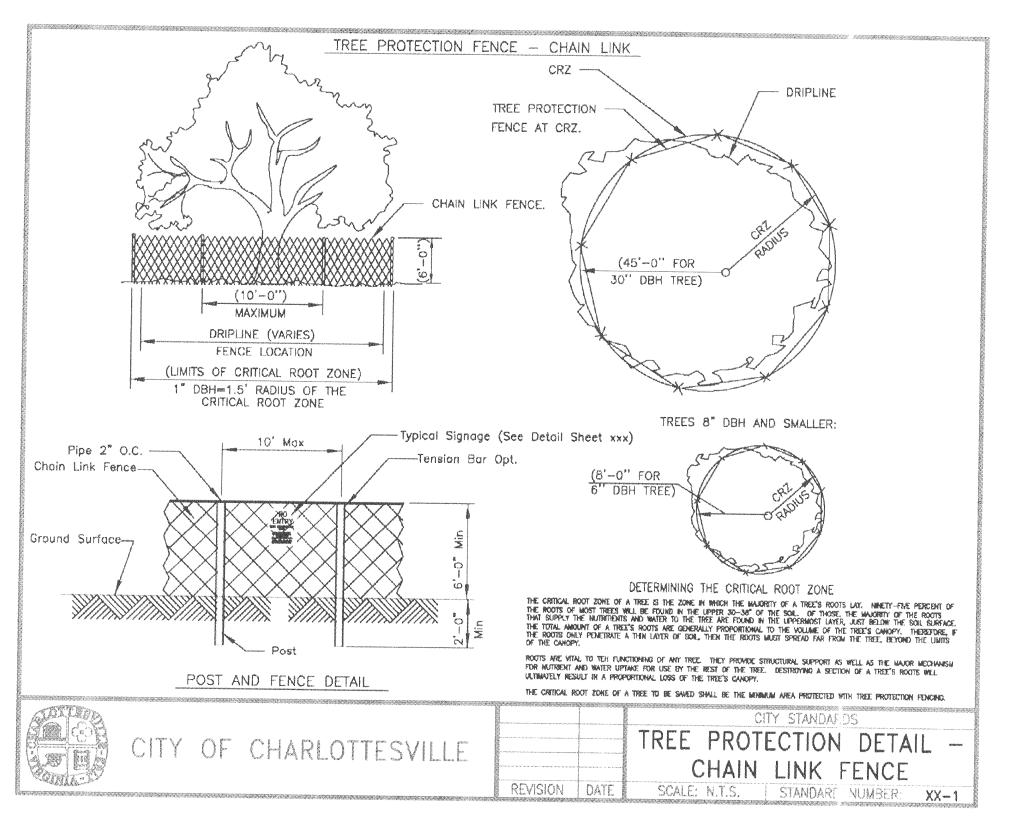
14) RAKE BED SMOOTH AT SPECIFIED GRADIENT(S), ASSURING POSITIVE DRAINAGE TO THE PERIMETER. AFTER PLANTING APPLY 2-3"AGED, DOUBLE-SHREDDED HARDWOOD MULCH FREE OF DYES, UNLESS OTHERWISE SPECIFIED.

REMEDIATION OF COMPACTED SUBSOILS:

TOWARD BED PERIMETER.

15) WHERE SUBSOILS ARE COMPACTED TO A LEVEL THAT WILL INHIBIT ROOT GROWTH OR INFILTRATION OF WATER THROUGH THE SOIL PROFILE, AS DETERMINED BY THE LANDSCAPE ARCHITECT AND DEFINED IN NOTE (16), THE CONTRACTOR SHALL FRACTURE THE SOILS WITH A RIPPER OR SIMILAR DEVICE TO A MINIMUM DEPTH OF 18", @ 24" O.C. BOTH WAYS. ALTERNATIVELY, SOILS MAY BE LOOSENED BY DIGGING AND TURNING WITH A BACKHOE TO A DEPTH OF 18". ADDITIONALLY, WHERE ACCESS IS LIMITED, SUBSOILING REMEDIATION MY BE ACCOMPLISHED BY AUGERING 6" DIA. HOLES TO A MINIMUM DEPTH OF 18" AT 18" O.C AND BACKFILLING WITH UNAMMENDED TOPSOIL. IF COMPACTED SOILS ARE FOUND TO RESULT FROM CONSTRUCTION ACTIVITIES, ALL SOIL REMEDIATION CONSULTATION AND OPERATIONS SHALL BE CONDUCTED AT THE NO ADDITIONAL EXPENSE TO THE CLIENT.

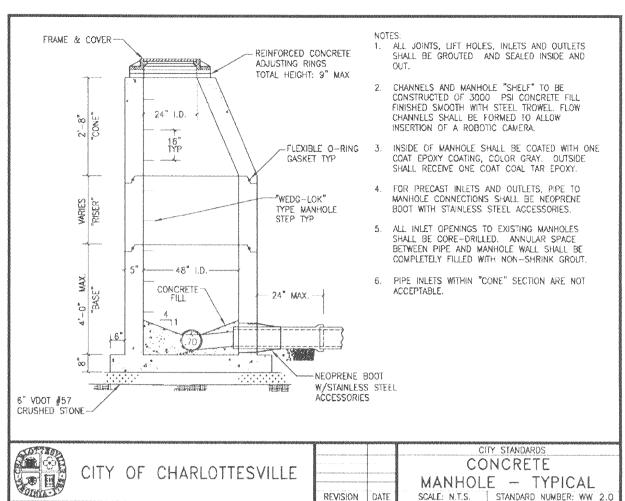
16) LEVELS OF COMPACTION SHALL BE DETERMINED BY FIELD INSPECTION, OR WHERE REQUIRED, BY A QUALIFIED SOILS CONSULTANT. ROOT LIMITING COMPACTION WILL BE DETERMINED BY MEASURING SOIL BULK DENSITY AND COMPARING TO SOIL BULK DENSITIES GENERALLY ACCEPTED TO BE ROOT LIMITING SPECIFIC TO THE SOIL'S TEXTURE AS REFERENCED IN TREES IN THE URBAN LANDSCAPE, TROWBRIDGE AND BASSUK, 2004.

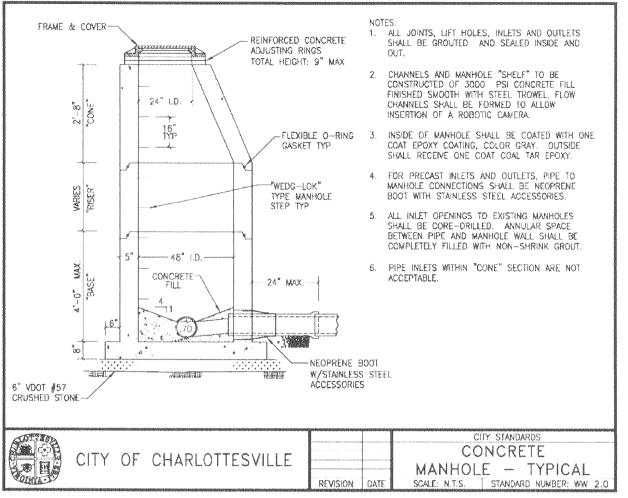


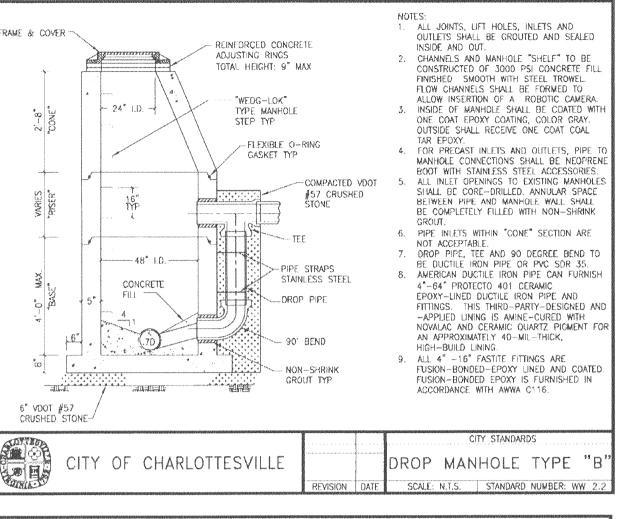
CITY STD. TREE PROTECTION

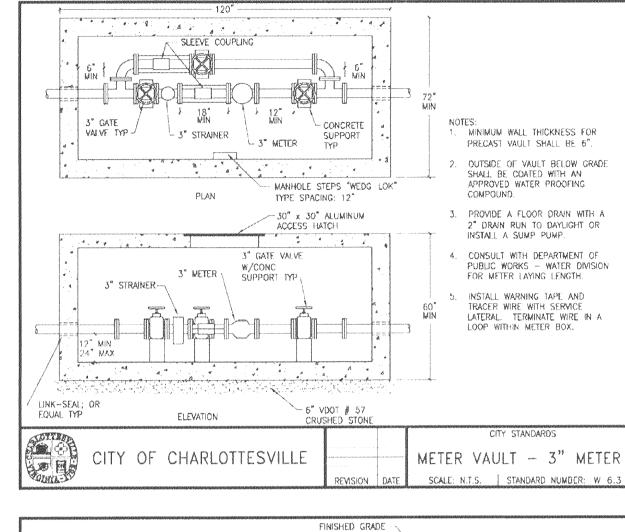


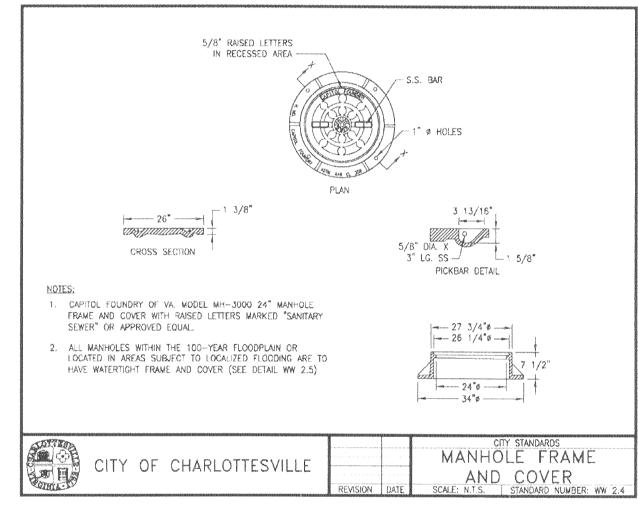












UNPAVED SURFACE PAVED SURFACE

DUCTILE IRON PIPE

CITY STANDARDS

PIPE TRENCHING AND

SCALE: N.T.S. | STANDARD NUMBER: WW 1.4

BEDDING - TYPICAL

----VDOT #

AS SPECIFIED -

UNDISTURBED EARTH ---

12" SELECT FILE

SEE NOTE

UNPAVED SURFACE PAVED SURFACE

PYC PIPE

LOAM AND SEED

12" SELECT FILL-

VDOT #57 CRUSHED STONE PLACED AGAINST UNDISTURBED—

SIDES AND BOTTOM OF TRENCH

UNDISTURBED EARTH

MAINTAIN VERTICAL TRENCH WALLS FROM BOTTOM OF

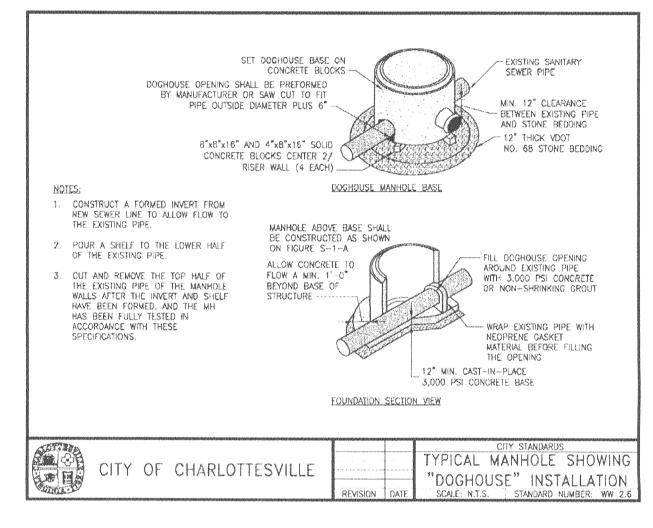
TRENCH TO 24" ABOVE CROWN OF PIPE. TRENCH

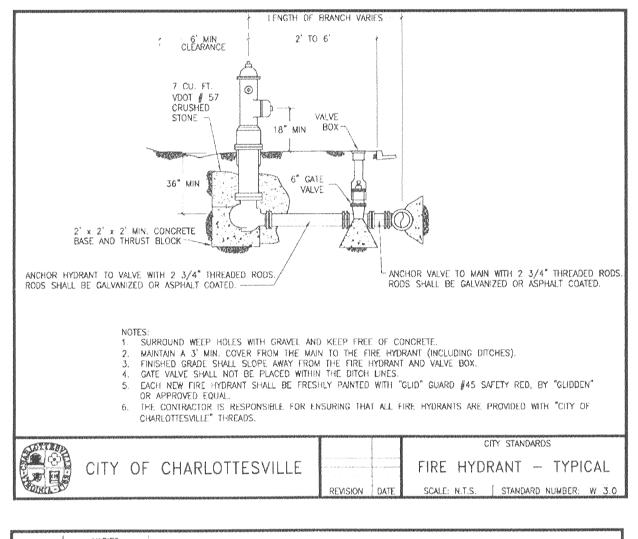
FOR EXCAVATIONS OVER 5 FT. DEEP, SLOPE TRENCH

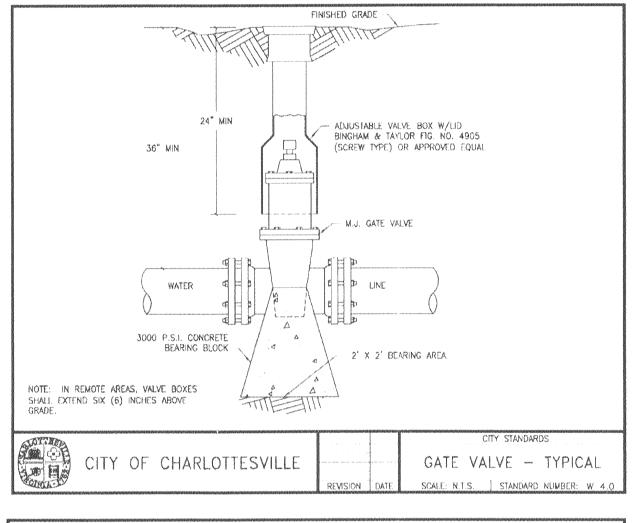
WALLS AS REQUIRED AND/OR PROVIDE OTHER SAFETY MEASURES IN ACCORDANCE WITH OSHA GUIDELINES.

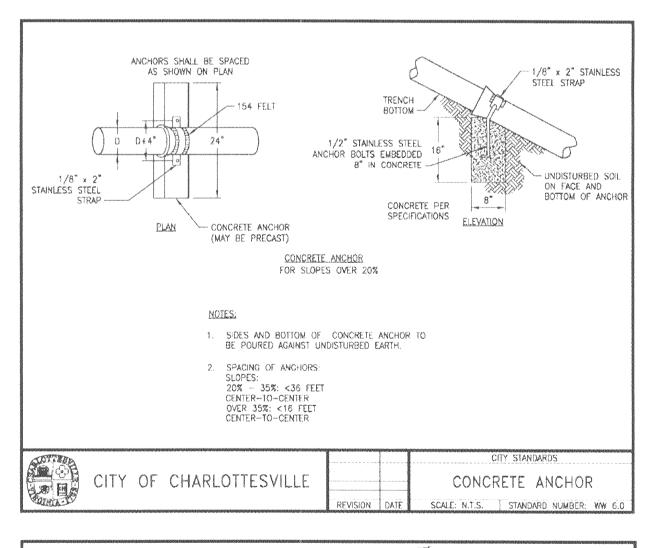
CITY OF CHARLOTTESVILLE

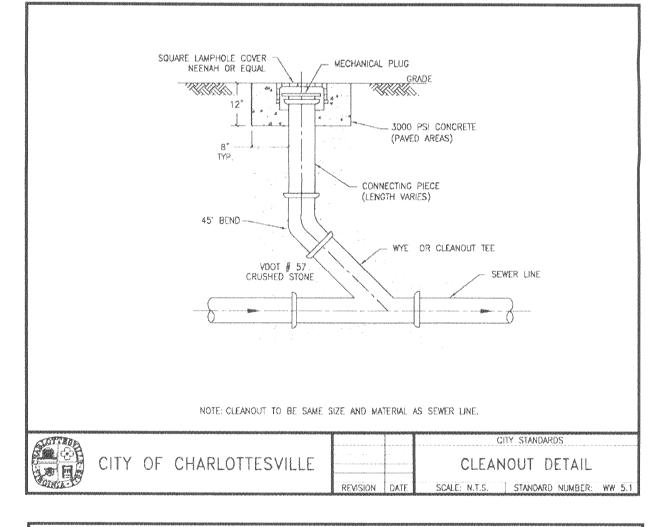
WIDTH IN THIS AREA: PIPE O.D. + 24".

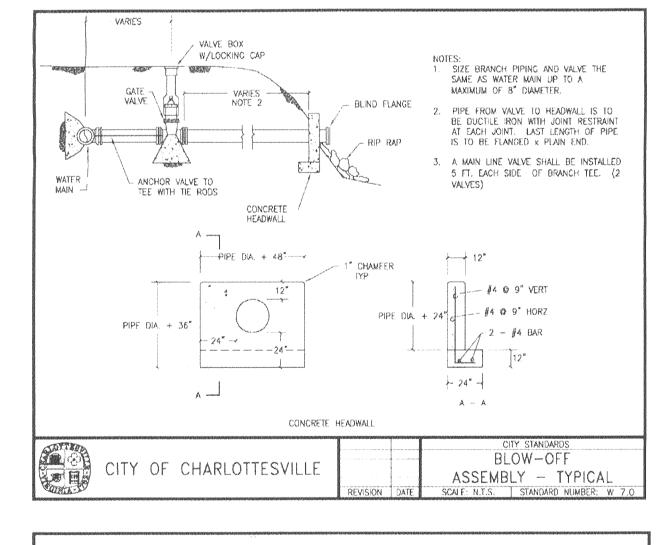


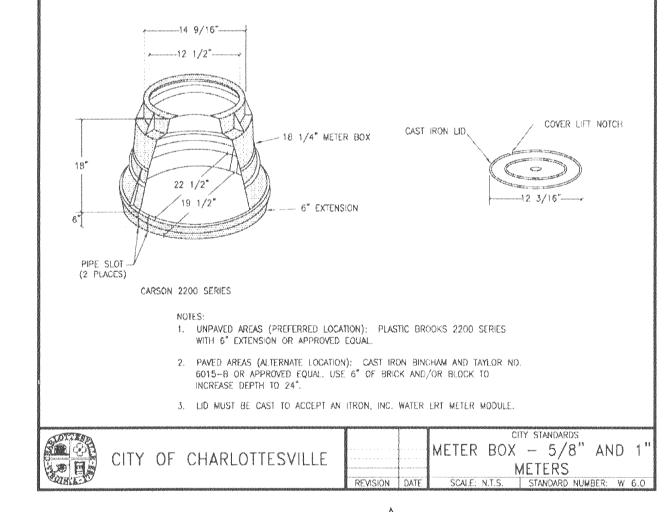


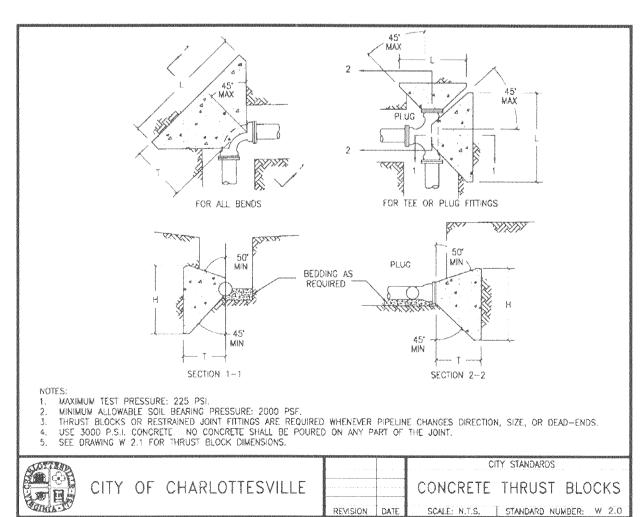


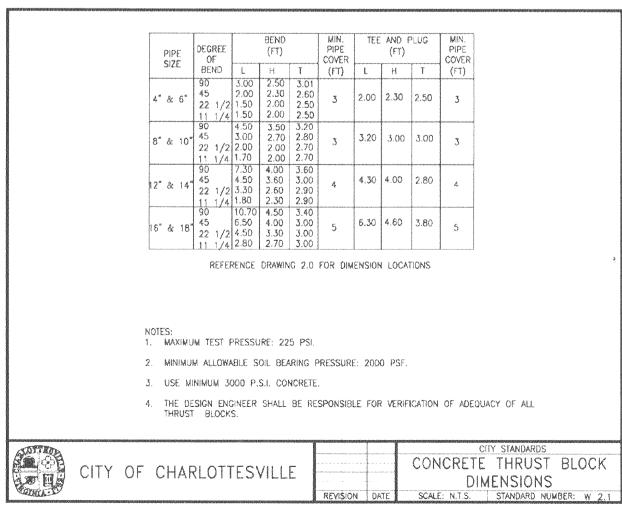


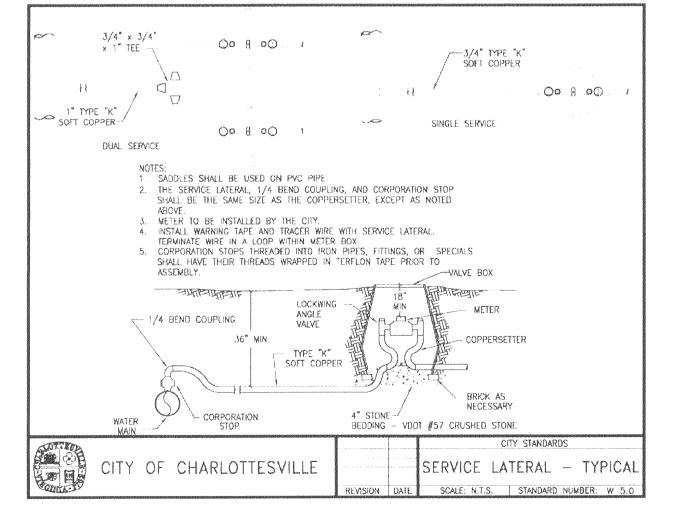


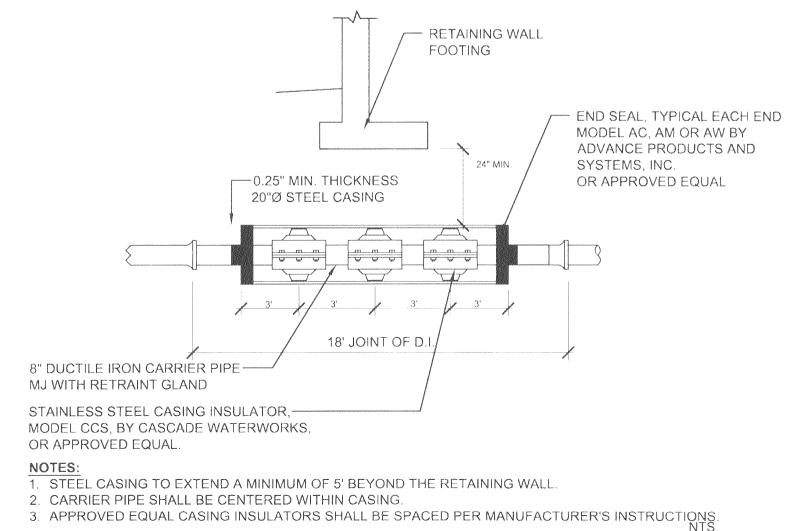














07.13.10

| Oł. | Α | 7 | LOUIS POULSEN 5743909434 | Satum Maxi Wall | 1/ 32 TRT | 90578001 ies | 2400 | 0.75 | 36 |
|------|------|----|-------------------------------------|--|--|--|----------|------|----|
| Н | 8 | 18 | LOUIS POULSEN Dock-clear/Asym | Dock clear-Asym | 1/18W/CF | 90334004 ies | 1000 | 0.75 | 18 |
| T | С | 3 | LOUIS POULSEN 5742907437 | Magazin Maxi | 1 / 32 TRT | 90678002 ies | 2400 | 0.75 | 36 |
| 1 4 | υ | 42 | HUNZA STEP LIGHT | Recessed Wall solid eyelid | | BAI 12415 Walden Gunnison IES | 400 | 0 95 | 50 |
| ſΉ | E | 1 | BK LIGHTING | SIGN LIGHT | 1-54T5HO | | | 0.75 | 62 |
| Ô | F | 13 | HUNZA PATH LIGHT | 10 WATT 12V COPPER WALKWAY LIGHT | 10 WATT 12V G4 I AMP | Path Lite 4 I acet Isa7422a NA IES | Absolute | 0 95 | 10 |
| O | G | 2 | URBAN ARCHAEOLOGY UA0252 M Ft | CEILING MOUNT | 1732 IRT | 90678002 ies | 2400 | 0 /5 | 36 |
| | ž š | 4 | HILITE REM | WALL MOUNT REM | 1-321R1 | 90642004 ies | 2400 | 0.75 | 35 |
| . '8 | 1 | 4 | URBAN ARCHAELOGY UAO253-W-EL | WALL MOUNT | 1/18W/CF | 90334004 ies | 1000 | 0 75 | 18 |
| | GAR1 | 2 | LITHONIA LP6FN / 607A (32TRT) | 6° OPEN DOWNLIGHT WITH BIEFUSE REFLECTOR | ONE 32 WATT TRIPLE TUBE COMPACT FLUORESCENT, VERTICAL BASE UP POSITION | 607A (321R1) ies | 2400 | 0 75 | 36 |
| | | | | | | | | | |
| | | | STATISTICS | | | | | | |

File Lumens LLF Watts

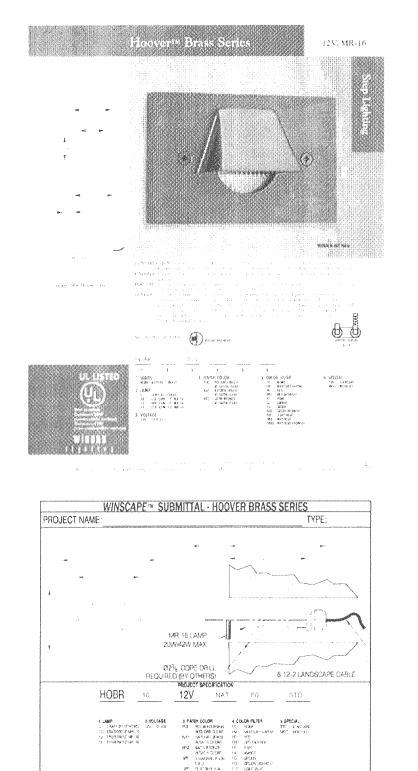
| Description | Symbol | Avq | Max | Min | Max/Min | Avg/Mi |
|--------------------------------|-----------|--------|--------|--------|---------|--------|
| 1616 JPA | + | 0.2 fc | 1.6 fc | 0 0 fc | N/A | N/A |
| AP1 E | × | 0.6 fc | 3.8 fc | 0.1 fc | 38.0 1 | 6 0, 1 |
| AP1 A | \$ | 0.6 tc | 2 0 fc | 0 0 fc | N/A | N/A |
| EXIST BLGG, 104 ENTRANCE | × | 0 9 fc | 1 1 fc | 0.5 fc | 221 | 181 |
| EXIST BLDG, 104 | × | 0 A fc | 1 0 fc | 0.3 fc | 331 | 271 |
| FXIST BLDG 104 | × | 2 3 fc | 2.6 tc | 1.8 fc | 141 | 131 |
| EXIST BLDG 104 | × | 2 3 fc | 2.6 fc | 1.8 fc | 1 4 1 | 131 |
| EXISTING BLDG 100 ENTRANCE | | 1 6 fc | 1.9 fc | 1 3 fc | 151 | 121 |
| EXISTING BLDG 104 STEPS | × | 1.2 fc | 4 0 fc | 0 0 fc | N/A | N/A |
| EXISTING BLDG 100 | С | 0.7 fc | 3 5 tc | 0 0 fc | NΙA | N/A |
| EXISTING BUILDING 100 ENTRANCE | 0 | 1.6 fc | 1.8 fc | 1 3 fc | 141 | 121 |
| X | (° | 2.1 fc | 2.8 fc | 1 5 fc | 191 | 141 |
| GARAGE ENTRANCE | + | 0.6 fc | 1.6 fc | 0.2 tc | 801 | 301 |
| | > | 2 0 fc | 4 9 fc | 0.1 fc | 49 0 1 | 20 0 1 |
| Many of \$ 1 Mag. | i. | 0.1 to | 0.6 tc | 0.0 fc | N/A | N / A |
| PROPERTY LINE | + | 0 0 tc | 0.5 % | 0 0 tc | N / A | N/A |
| 1927 × 1877 × 18 | ί. | 0.4 fc | 29fc | 0 0 fc | N/A | N/A |
| WALKS APTIO & D | (| 0.5 fc | 4 0 fc | 0 0 fc | N/A | N/A |
| | | 1 6 °c | 8 3 fc | 0 0 fc | N/A | N/A |

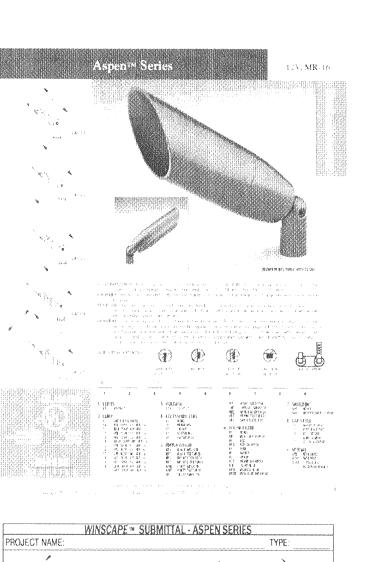
General Lighting Notes

LUMINAIRE SCHEDULE

Symbol Label Qty Catalog Number Description

- NO OUTDOOR LUMINAIRE SHALL BE MOUNTED OR PLACED AT A LOCATION THAT IS MORE THAN TWENTY (20) FEET IN HEIGHT
- 2. ALL OUTDOOR LUMINAIRES, REGARDLESS OF THE NUMBER OF LUMENS SHALL BE ARRANGED OR SHIELDED TO REFLECT LIGHT AWAY FROM ADJOINING LOW DENSITY RESIDENTIAL DISTRICTS.





| ******************************* | <u> WINSCAP</u> | <u>E™ SUBN</u> | MITTAL - AS | <u>PEN SERIE</u> | <u>S</u> | |
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| OJECT NAME: | | | ************************************** | | TYPE: | |
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| recovery or common entering and a common ent | e renos 25/4 - 124 - 1504 erd TO/C sin jerdan powe e l'especial (928 - 00 en reno ding sein person in 24 ternistament hus mere accessances aect or unal somerances aect or unal somerances. | id with 18ga SERI den sten Frishes D Kilmusike bestitor en 160 in siny dup i man proberty The n Allemper lesson | 1 (2010) been Later polydy coat fr of his eming and en Bye ensilen field seo ortomini mare be bus yn 170 (46) 185 boar | nistann hvis ikin är sischip englern avad stalt ng s engly by ill kommunister charent hagsandan y iki is omken av malles i vi | sich Budskry for michte insp stallty i Ans, scattlichnsten stallt estallt seen in einig et abbeetsen eil land bi- ift en us ing is dolch filler | alup to 3 ere Mountag must b wish a SCW erap |
| recommendation of the control of the | e renos 25/4 - 124 - 1504 erd TO/C sin jerdan powe e l'especial (928 - 00 en reno ding sein person in 24 ternistament hus mere accessances aect or unal somerances aect or unal somerances. | id with 18ga SERI den sten Frishes D Kilmusike bestitor en 160 in siny dup i man proberty The n Allemper lesson | 1 (2010) been Later polydy coat fr of his eming and en Bye ensilen field seo ortomini mare be bus yn 170 (46) 185 boar | nistann hvis ikin är sischip englern avad stalt ng s engly by ill kommunister charent hagsandan y iki is omken av malles i vi | act Burging for more inspired by the second installing to the second installing the second installing as a second in the second | alup to 3 ere Mountag must b wish a SCW erap |

COI QUI TIPLE TO STORY DSL Dock Wall/Ceiling DSL Saturn Maxi Wall \$0.48 \$0.456

\$ 0.00 m

PT = 10 + 95.51

Chairman Chairman

the strategy of the second

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PT = 11+03.48

SPECIFICATIONS:

OWSTRUCTION Book 5 causined reset from 90% 16 August Number and example on example to 1 August 10 A t t + t

15

12/24/08 SITE PLAN 04/22/09 F SITE PLAN 06/23/09 F 07/13/10 G 01/25/11 C

CHARLOTTE

CITY OF SITE LIGHTI

Date: 1/27/11 Scale: As Noted

Drawn By: JHH

DJM

Sheet Number:

NOTES:

1. CONC: 3000 PSI 9 28 DAYS

3. MAX SOIL BEARING PRESSURE = 2000 PSF (ASSUMED)

DET "B"

SEALANT

ROD

DET "B"

WALL CONTROL JOINT

I" BACKER

SEE DETAIL "B"

BARS AT JOINT

CUT ALTERNATE HORIZ.

4. PROVIDE WALL CONTROL JOINTS 9 20'-0" MAX

2. REINF: GRADE 60

DET "A"

16 GA. GALV. SHEET

TIES " EACH

EARTH FACE -

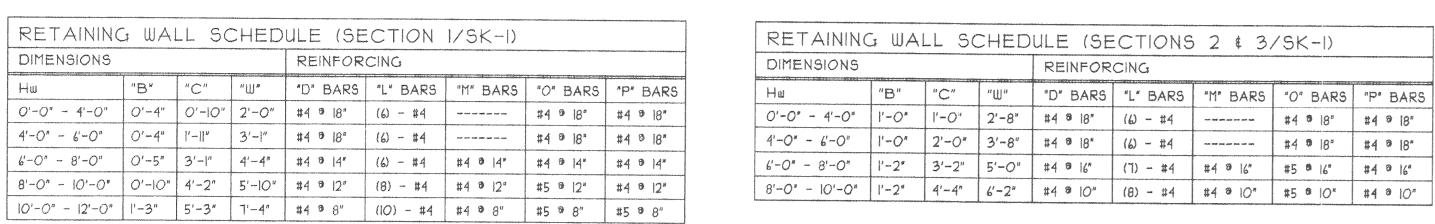
HORIZ. BAR.

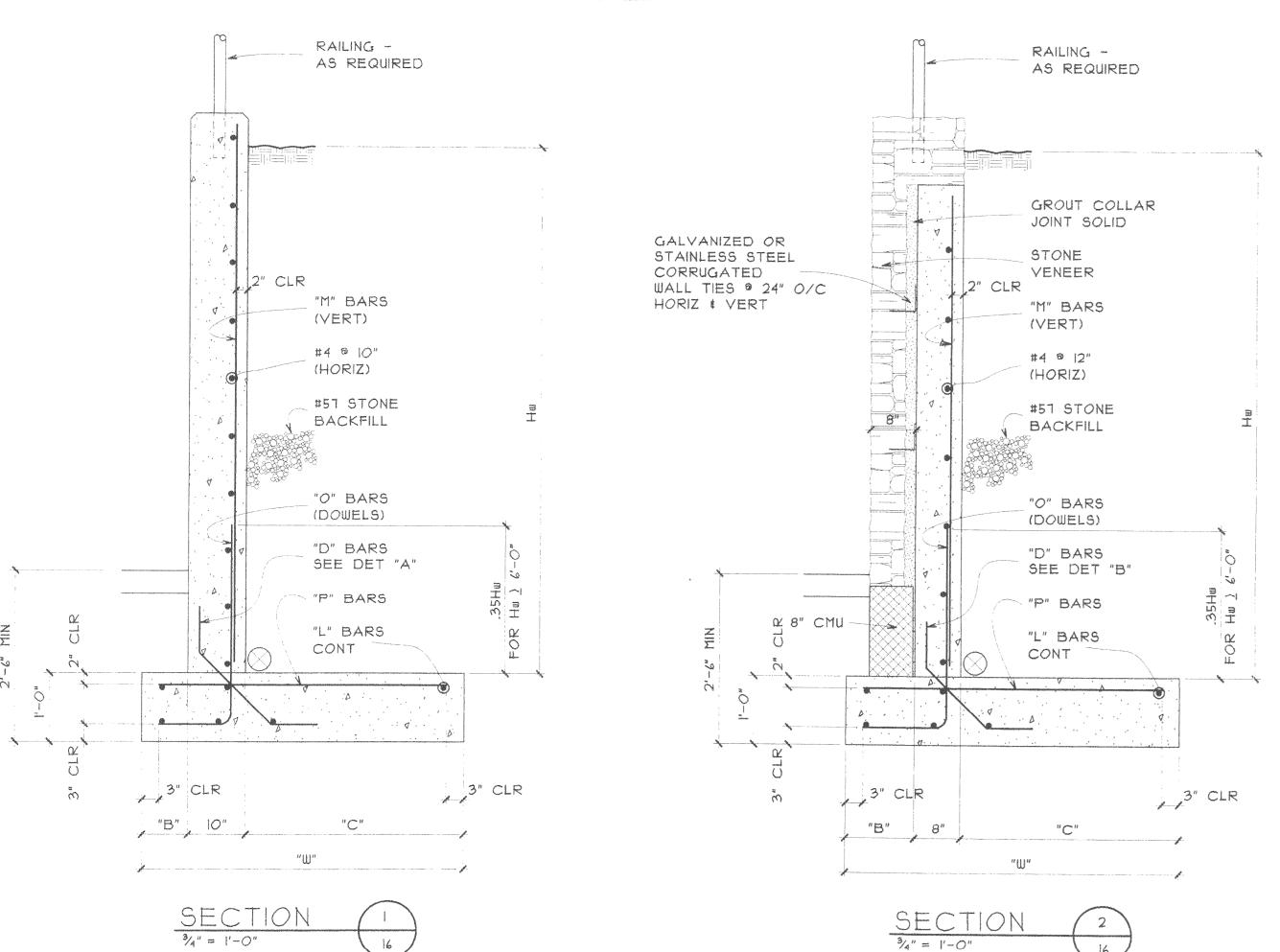
STL. COATED TO PREVENT BOND. WIRE

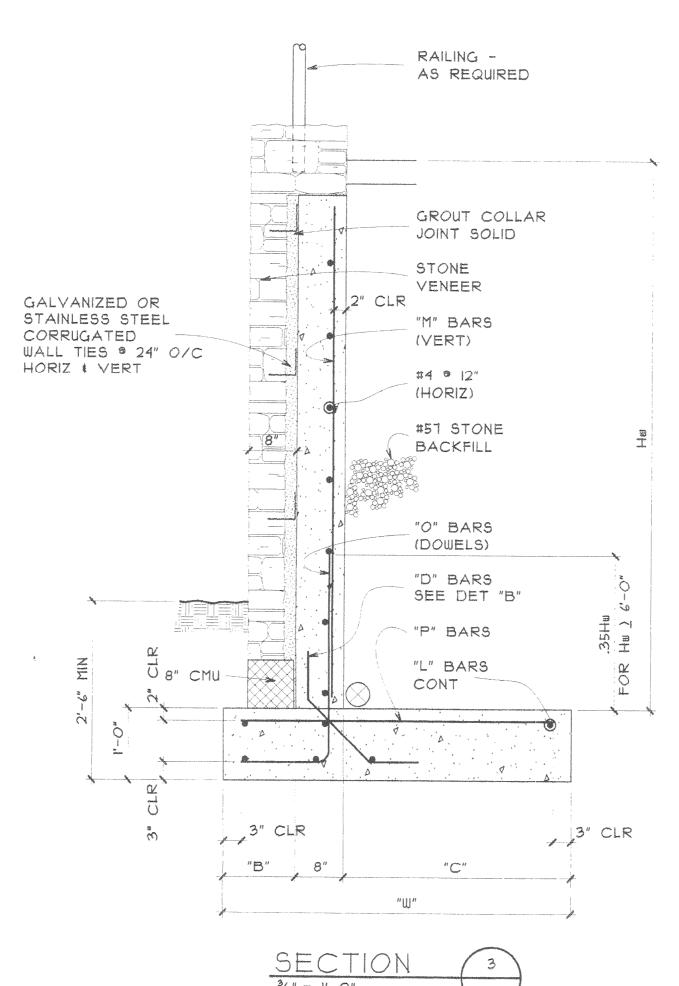
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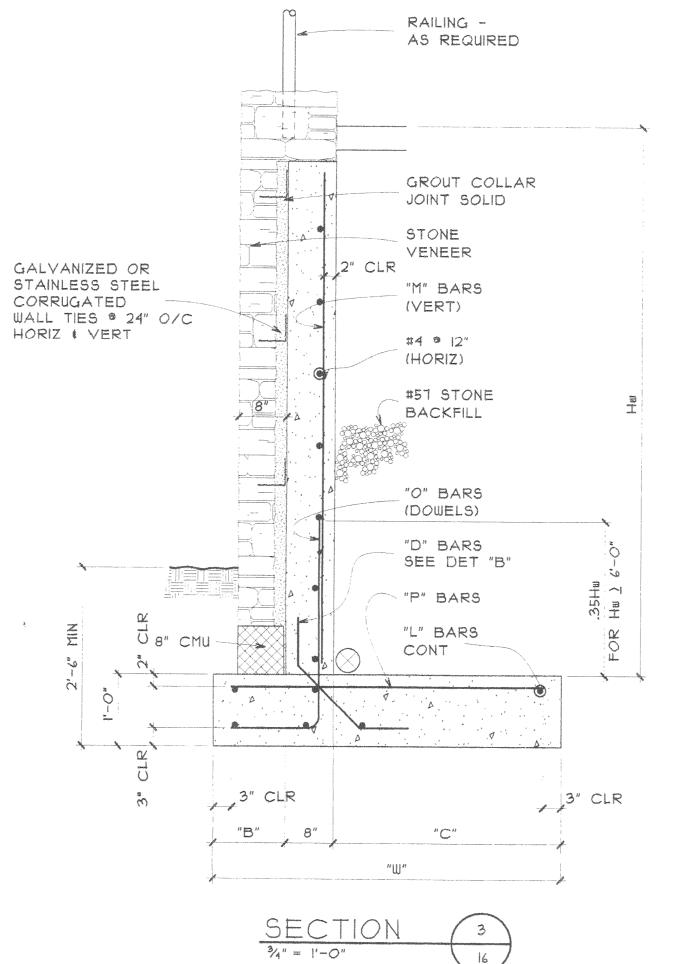
Site Wall Sections

16









FLOW DIRECTION

PRESSURE TANK

FIRST FLUSH FILTER

FLOW CALMING DEVICE

SEDIMENT FILTER

DISINFECTION UNIT

BOOSTER PUMP

SUBMERSIBLE PUMP

SOLENOID VALVE

PRESSURE SWITCH

LSLL

PRESSURE INDICATOR (GAUGE)

BI-LEVEL SENSOR INDICATOR

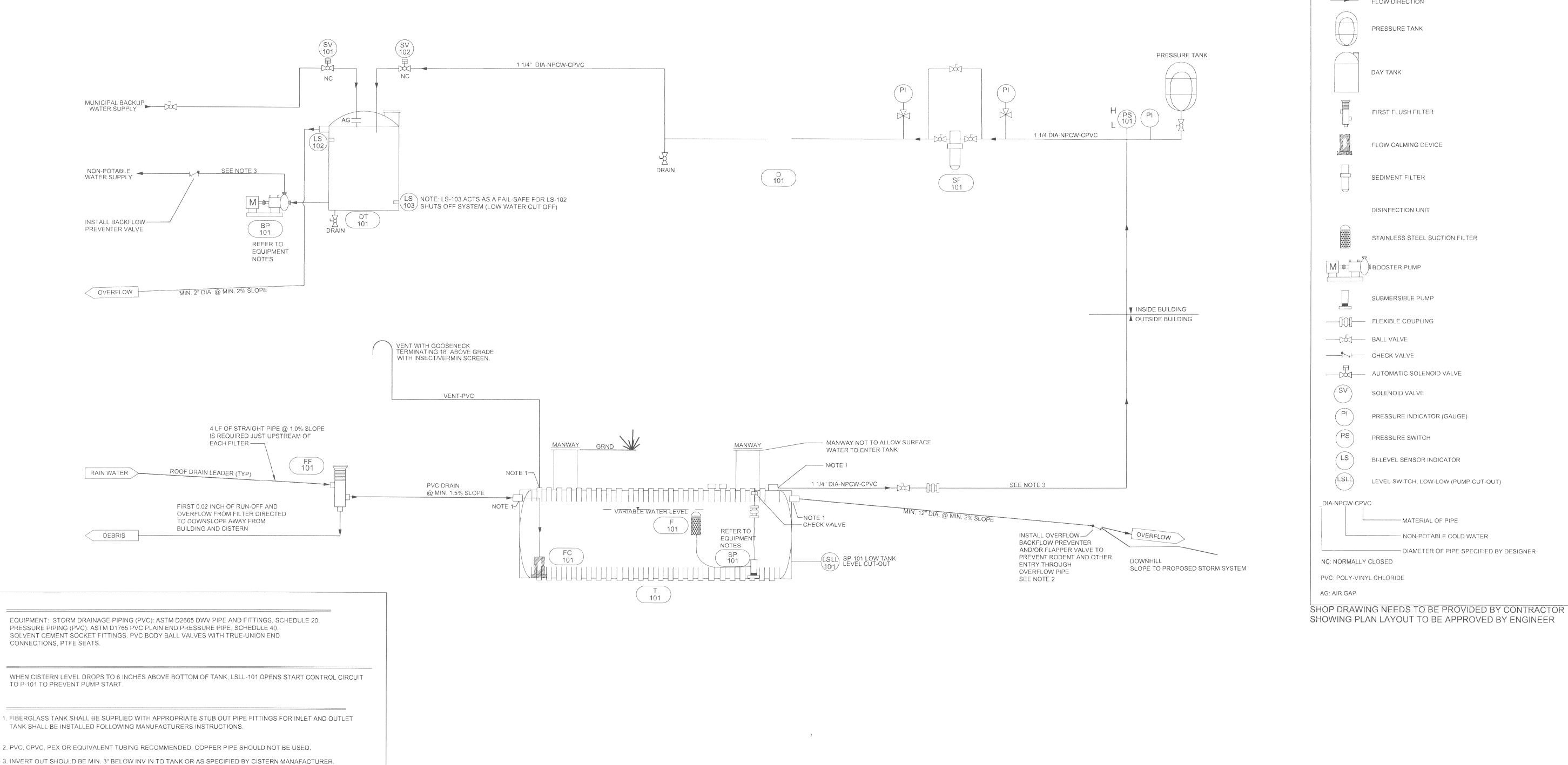
LEVEL SWITCH, LOW-LOW (PUMP CUT-OUT)

MATERIAL OF PIPE

NON-POTABLE COLD WATER

DIAMETER OF PIPE SPECIFIED BY DESIGNER

STAINLESS STEEL SUCTION FILTER



| ITEM NO. | FF-101 | T-101 | FC-101 | H-101 | SP-101 | P1-101 | SF-101 | D-101 | DI-101 | BP 101 | |
|----------|------------------------------|---------------------------------|-----------------------------|---------------------------|---|--------------------|---------------------------------|---------------------------|-------------------------|--|--------------------------------|
| TITLE | FIRST FLUSH VORTEX FILTER | RAIN WATER STORAGE TANK | SMOOTHING INLET | FLOATING FILTER | SUBMERSIBLE PUMP | PRESSURE TANK | SEDIMENT FILTER | DISINFECTION | DAY TANK | BOOSTER PUMP | BACKFLOW PREVENTER VALVE |
| | QUANTITY 4 | QUANTITY 2 | QUANTITY 5 | QUANTITY 1 | QUANTITY | 22 GALLON CAPACITY | _1_ QUANTITY | 1 QUANTITY | _1_ QUANTITY | ITT GOULDS | 1 QUANTITY |
| NOTION | JAY R. SMITH RH9520-06 | 15,000 CAPACITY GALLONS/EACH | JAY R. SMITH RH953OSI-04 | JAY R. SMITH RH9532C-2 | GOULDS 1SC SUBMERSIBLE PUMP WITH CUSTOM | | HOUSING: ROSEDALE MODEL 6 | AQUA TREATMENT SYSTEMS | 500 CAPACITY GALLONS | PUMP SIZING SUBJECT TO APPROVAL BY PLUMBING DESIGNER | 12" |
| ESCE | 6" INLET | MATERIAL FIBERGLASS | 4" INLET | 2" CONNECTION | BASEPLATE AND NOZZLE BY RMS | | 30" DEPTH | IND-50 WITH OPTIONAL | | FOLLOWING FINAL DESIGN OF THE | PVC BACKWATER VALVE |
| Ω | 280 MICRON | | STAINLESS STEEL | 1200 MICRON FILTER | 1/2 HP 3450 RPM 50 FT (TDH) 32 GPM | | FILTER: 4 ½" DIA 5 MICRON | INTENSITY MONITOR | | BUILDING | V / N V L |

ALL SYSTEM COMPONENTS MUST BE MAINTAINED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND

7. GUTTERS AND ROOF DRAINS TO BE SIZED APPROPRIATELY IN ORDER TO CONVEY RAINWATER TO TANK.

6. LS-102 CONTROLS BOTH SV-101 AND SV-102. SV-102 LINE REFILLS DAY TANK WITH RAINWATER, IF RAINWATER IS UNAVAILABLE AND TANK LEVEL CONTINUES TO DROP, SV-101 MUNICIPAL BACKUP

4. OVERFLOW PIPE TO BE EQUAL TO OR GREATER THAN ROOF DRAIN PIPE FEEDING RAINWATER TO TANK. 5. A PLAN DOCUMENT SHOULD BE PROVIDED IN CONJUNCTION WITH THIS SHEET IN ORDER TO SPECIFY AND ENSURE FEASIBILITY OF CISTERN LOCATION AS IT RELATES TO MINIMUM UTILITY, SEPTIC AND OTHER SEPARATION AND SETBACK DISTANCES AS SPECIFED BY LOCAL AND STATE REGULATIONS, MINIMUM

MAINTENANCE RECOMMENDATIONS. 1. THE SEDIMENT FILTER WILL REQUIRE REPLACING ON AVERAGE EVERY 6 MONTHS, DEPENDING ON QUALITY OF WATER AND FLOW. FILTERS SHOULD BE REPLACED WHEN THE PRESSURE DROP ACROSS THE FILTER IS 10 PSI OR GREATER.

2. THE UV LIGHT WILL REQUIRE REPLACING EVERY 12 MONTHS.

LINE IS ACTIVATED AT A LOWER LEVEL TO BEGIN FILLING TANK.

PIPE SLOPES, INVERTS AND DAYLIGHTING, ETC.

INSPECT STAINLESS STEEL FILTER INSERTS FOR THE VORTEX FILTERS EVERY SIX MONTHS. IF NEEDED, REMOVE FILTER INSERTS WITH INCLUDED HANDLE AND WASH WITH A GARDEN HOSE.

4. THE STAINLESS STEEL FILTER INSERTS FOR THE VORTEX FILTERS WILL NEVER NEED REPLACING, IF MAINTAINED AS DIRECTED.

5. THE STORAGE TANK WILL NOT NEED ROUTINE MAINTENCE.

A RAINWATER HARVESTING SYSTEM DIAGRAM AND SPECIFICATIONS

GENERAL EROSION & SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION (1992) AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.

2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND NARRATIVE SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS(INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

10. ALL FILL MATERIAL SHALL BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA.

11. ALL WASTE MATERIALS SHALL BE TAKEN TO AN APPROVED WASTE AREA. EARTH FILL SHALL BE INERT MATERIALS ONLY, FREE OF ROOTS, STUMPS, WOOD, RUBBISH, AND OTHER

12. BORROW, FILL OR WASTE ACTIVITY SHALL BE CONDUCTED IN A SAFE MANNER THAN MAINTAINS LATERAL SUPPORT, OR ORDER TO MINIMIZE ANY HAZARD TO PERSONS, PHYSICAL DAMAGE TO ADJACENT LAND AND IMPROVEMENTS, AND DAMAGE TO ANY PUBLIC STREET BECAUSE OF SLIDES, SINKING, OR COLLAPSE.

13. TEMPORARY STABILIZATION SHALL BE TEMPORARY SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/ACRE, AND IN THE MONTHS OF SEPTEMBER TO FEBRUARY TO CONSIST OF A 50/50 MIX OF ANNUAL RYEGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVED BY THE CITY OF CHARLOTTESVILLE E & S INSPECTOR.

14. PERMANENT STABILIZATION SHALL BE LIME AND FERTILIZER, PERMANENT SEEDING, AND MULCH. AGRICULTURAL GRADE LIMESTONE SHALL BE APPLIED AT 90LBS/1000SF, INCORPORATED INTO THE TOP 4-6 INCHES OF SOIL. FERTILIZER SHALL BE APPLIED AT 1000LBS/ACRE AND CONSIST OF A 10-20-10 NUTRIENT MIX. PERMANENT SEEDING SHALL BE APPLIED AT 180LBS/ACRE AND CONSIST OF 95% KENTUCKY 31 OR TALL FESCUE AND 0-5% PERENNIAL RYEGRASS OR TURF TYPE TALL FESCUE. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVED BY THE CITY OF CHARLOTTESVILLE E & S INSPECTOR.

15. MAINTENANCE: ALL MEASURES ARE TO BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. ANY DAMAGE OR CLOGGING TO STRUCTURAL MEASURES IS TO BE REPAIR IMMEDIATELY. SILT TRAPS ARE TO BE CLEANED WHEN 50% OF THE WET STORAGE VOLUME IS FILLED WITH SEDIMENT. ALL SEEDED AREAS ARE TO BE RESEEDED WHEN NECESSARY TO ACHIEVE A GOOD STAND OF GRASS. SILT FENCE AND DIVERSION DIKES WHICH ARE COLLECTING SEDIMENT TO HALF THEIR HEIGHT MUST BE CLEANED AND REPAIRED IMMEDIATELY.

16. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE REMOVED WITHIN 30 DAYS OF FINAL SITE STABILIZATION, WHEN MEASURES ARE NO LONGER NEEDED. SUBJECT TO APPROVAL BY THE CITY OF CHARLOTTESVILLE E & S INSPECTOR.

E&SC MEASURES

SAF SAFETY FENCE: E&SC STD. 3.01 (CE) CONSTRUCTION ENTRANCE: E&SC STD. 3.02 SILT FENCE: SF-SF-SF-SE-SC STD. 3.05 INLET PROTECTION: E&SC STD. 3.07 (DD) DIVERSION DIKE E&SC STD. 3.09 RWD RIGHT-OF-WAY DIVERSIO E&SC STD, 3.11 (ST) TEMPORARY SEDIMENT TRAP E&SC STD. 3.13 (TO) TOPSOILING: E&SC STD. 3.30 TEMPORARY SEEDING E&SC STD. 3.31 PERMANENT SEEDING: E&SC STD. 3.32 MULCHING: E&SC STD. 3.35 (B/M) SOIL STABILIZATION BLANKETS MATTING E&SC STD, 3.36 TREE PRESERVATION AND PROTECTION E&SC STD. 3.38 (DC) DUST CONTROL E&SC STD. 3.39

CONSTRUCTION SEQUENCE

ESTABLISH CONSTRUCTION ENTRANCE AT LOCATION SHOWN ON PLANS 2. INSTALL TREE PROTECTION AS SHOWN ON PLANS

3. INSTALL SILT FENCE AS SHOWN ON PLANS

4. INSTALL ORANGE SAFETY FENCING AROUND PERIMETER OF PROPERTY

5. INSTALL J.P.A. INTERSECTION IMPROVEMENTS

6. PERFORM ALL DEMOLITION ACTIVITIES 7. INSTALL STORM DRAIN IMPROVEMENTS AS SHOWN ON ESC STAGE A PLAN 8. INSTALL SEDIMENT TRAP AND DIVERSION DIKE #1

9. REMOVE TOPSOIL IN AREAS OF PROPOSED GRADING AND STOCKPILE FOR RE-USE NEAR STAGING AREAS 10. BEGIN MASS GRADING OF BUILDING PAD AND PARKING AREAS AS SHOWN ON STAGE A E&SC PLAN.

INSTALL SHEETING AND SHORING AS REQUIRED TO OBTAIN SUBGRADE ELEVATION WHILE PROTECTING EXISTING STRUCTURES AND TREES TO BE SAVED.

11. ESTABLISH LAYDOWN AND CONSTRUCTION STAGING AREAS AS SHOWN ON PLAN. INSTALL GRAVEL SURFACE IF NECESSARY

12. INSTALL ALL REQUIRED UTILITIES THAT WILL PASS UNDER BUILDING PAD.

13. INSTALL WATER LINE IMPROVEMENTS. 14. ESTABLISH ALL FINAL GRADE ELEVATIONS WITH THE EXCEPTION OF APARTMENT 'A' AND STABLIZE WITH GRAVEL BASE OR VEGETATION.

15. D NOT BEGIN CONSTRUCTION OF APARTMENT 'A' BUILDING UNTIL SITE IS STABILIZED.

16. ONCE STAGE A SITE IS STABILIZED, PROCEED WITH THE STAGE B E&SC PLAN

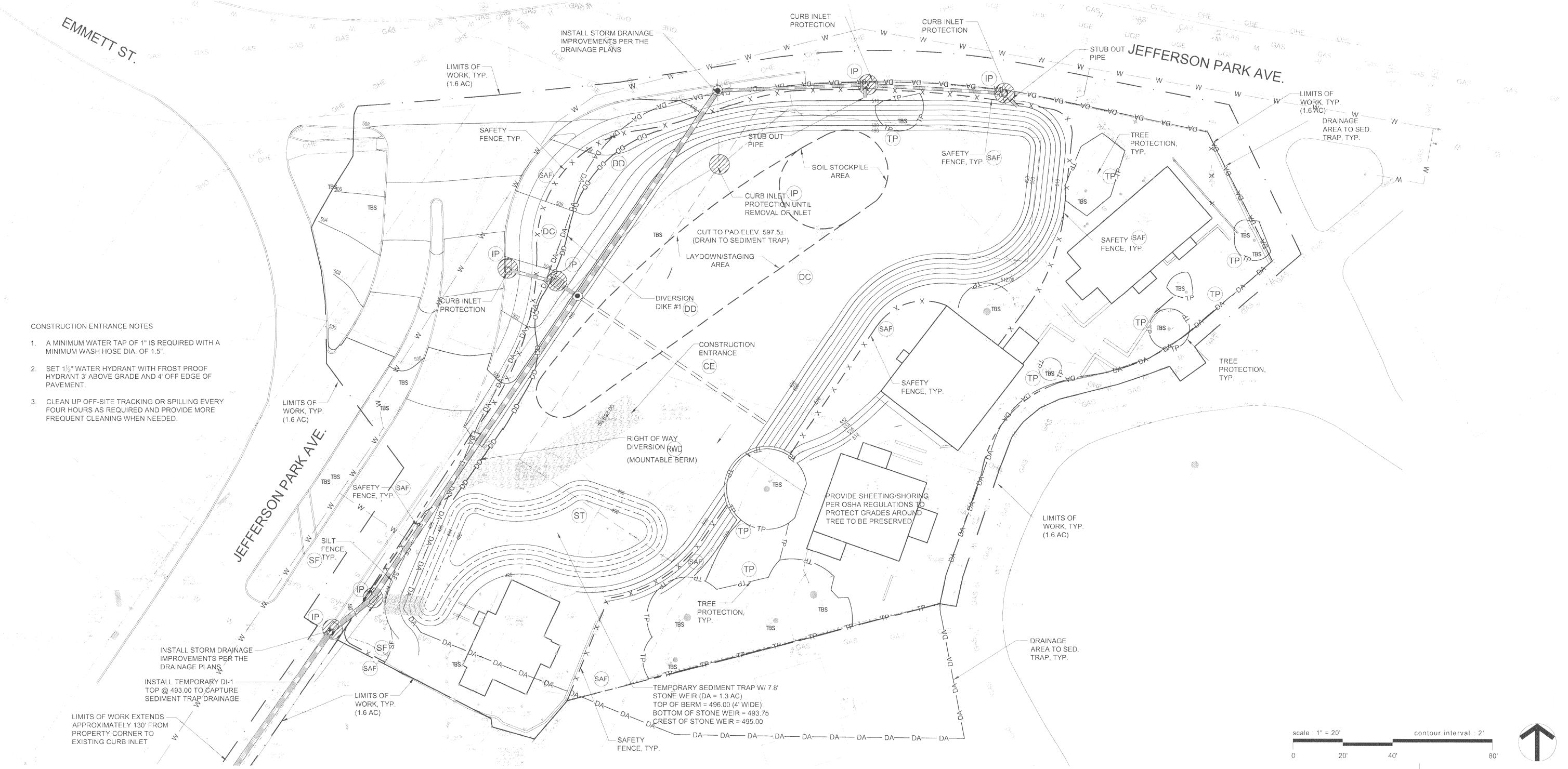
17. REMOVE SEDIMENT TRAP AND PROCEED WITH CONSTRUCTIN OF APARTMENT 'A'. 18. INSTALL INLET PROTECTION AND TEMPORARY VEGETATION UNTIL PERMANENT

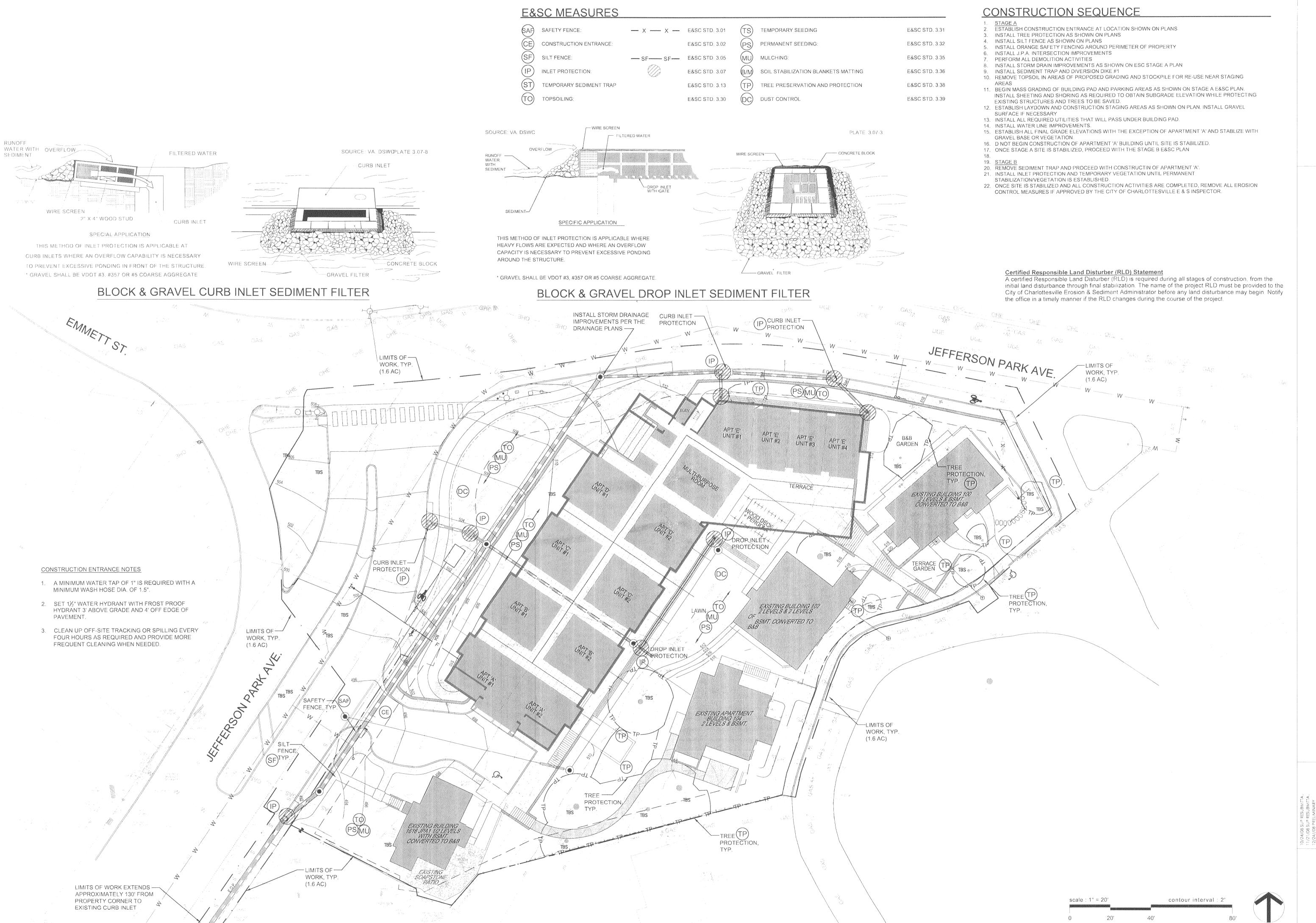
STABILIZATION/VEGETATION IS ESTABLISHED. 19. ONCE SITE IS STABILIZED AND ALL CONSTRUCTION ACTIVITIES ARE COMPLETED, REMOVE ALL EROSION CONTROL MEASURES IF APPROVED BY THE CITY OF CHARLOTTESVILLE E & S INSPECTOR.

Certified Responsible Land Disturber (RLD) Statement

VICINITY MAP

A certified Responsible Land Disturber (RLD) is required during all stages of construction, from the initial land disturbance through final stabilization. The name of the project RLD must be provided to the City of Charlottesville Erosion & Sediment Administrator before any land disturbance may begin. Notify the office in a timely manner if the RLD changes during the course of the project.





erstree

07.13.10

N & APARTMENTS

MITAL

INDARY COMMENTS

SITE PLAN SUBMITAL

OMMENTS

OMMENTS

OMMENTS

11/21/08 SUP RESUBMITA.
12/24//08 PRELIMINARY
SITE PLAN RESUBMITAL
04/22/09 PRELIMINARY
SITE PLAN RESUBMITAL
06/23/09 PRELIMINARY
COMME
07 /13 /10 = INAL SITE PLAN SUBM
10/18/10 CITY COMMEN'S
06/15/11 CITY COMMEN'S

18.1

19

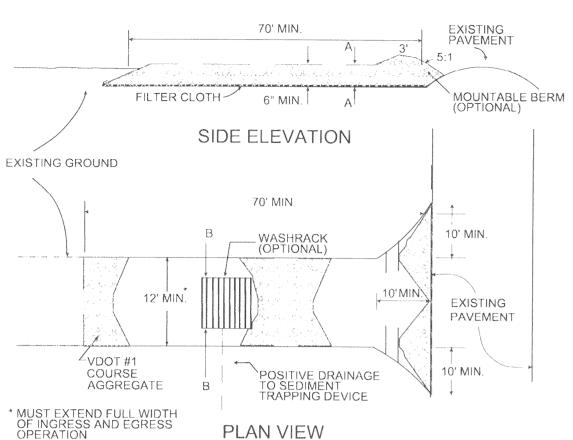
A MINIMUM WATER TAP OF 1"
 IS REQUIRED WITH A
 MINIMUM WASH HOSE DIA. OF
 1.6"

2. SET 1½" WATER HYDRANT WITH FROST PROOF HYDRANT 3' ABOVE GRADE AND 4' OFF EDGE OF PAVEMENT.

NOTES:

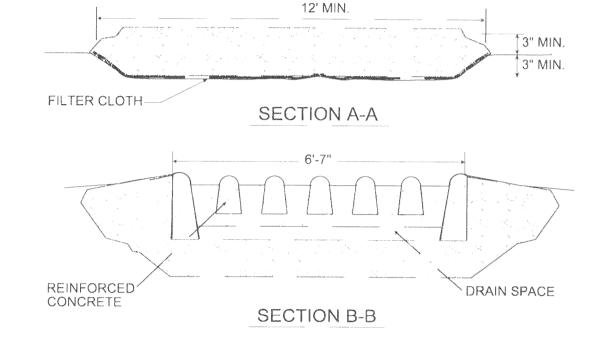
3. CLEAN UP OFF-SITE
TRACKING OR SPILLING
EVERY FOUR HOURS AS
REQUIRED AND PROVIDE
MORE FREQUENT CLEANING
WHEN NEEDED.

EXISTING GROUND



SOURCE: ADAPTED from

1983 Maryland Standards for Soil erosion and Sediment Control, and Va. DSWC



STONE CONSTRUCTION ENTRANCE

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS

QUICK REFERENCE FOR ALL REGIONS

RATE
PLANTING DATES

SPECIES

(LBS/ACRE)

SEPT. 1- FEB. 15

50/50 MIX OF ANNUAL
RYEGRASS & CEREAL
WINTER RYE

50-100

FEB. 16 - APR. 30

ANNUAL RYEGRASS

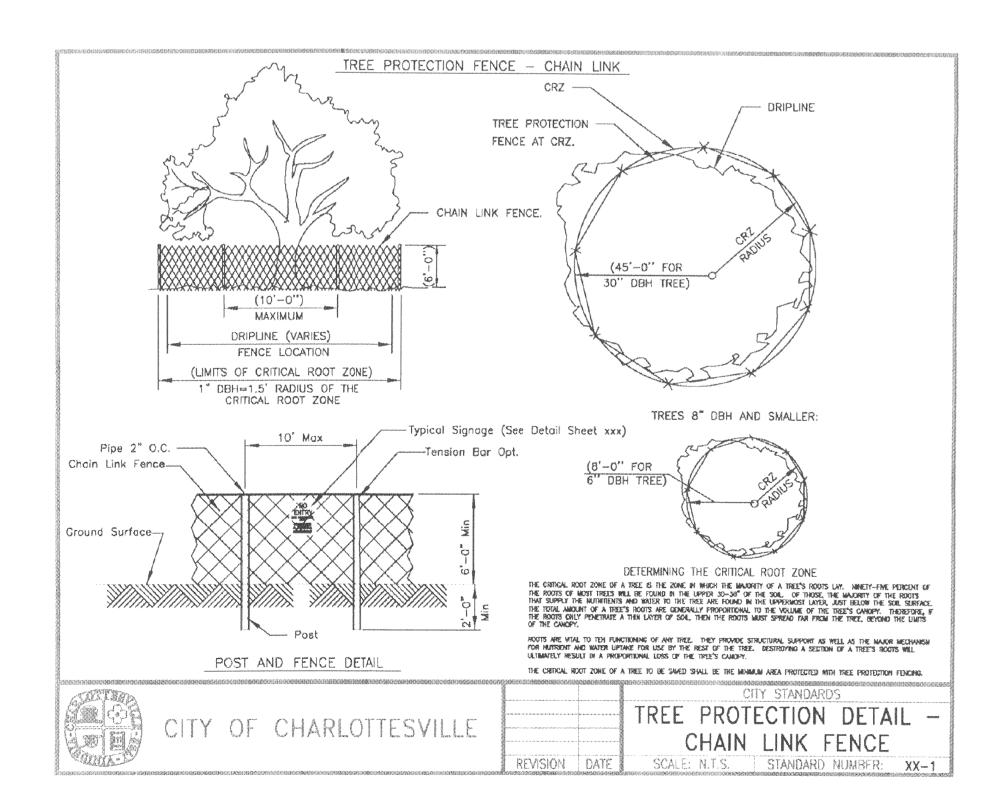
60-100

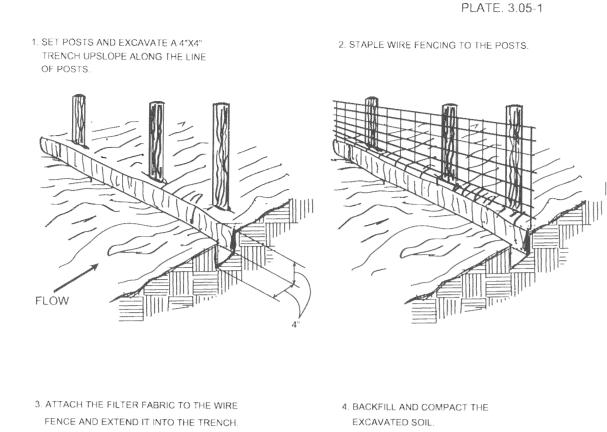
MAY 1 - AUG. 31

GERMAN MILLET

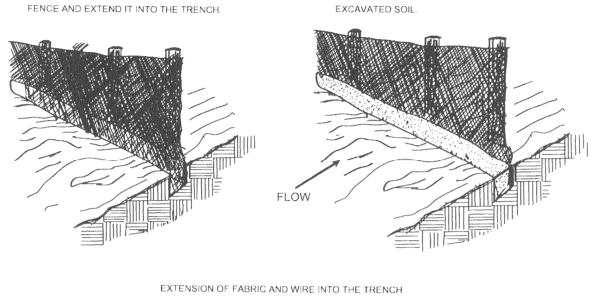
50

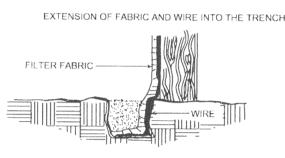
TEMPORARY SEEDING





SOURCE: Adapted from <u>Installation of Straw and Fabric Filter Barriers for Sediment Control</u>, Sherwood & Wyant





CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)

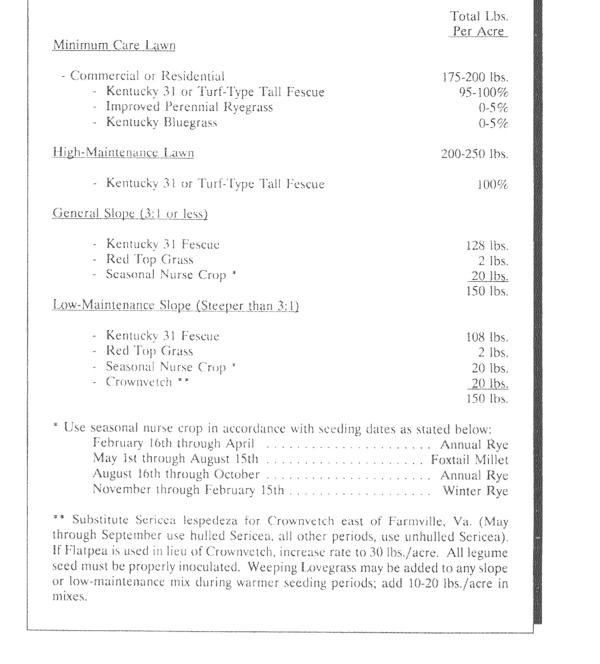


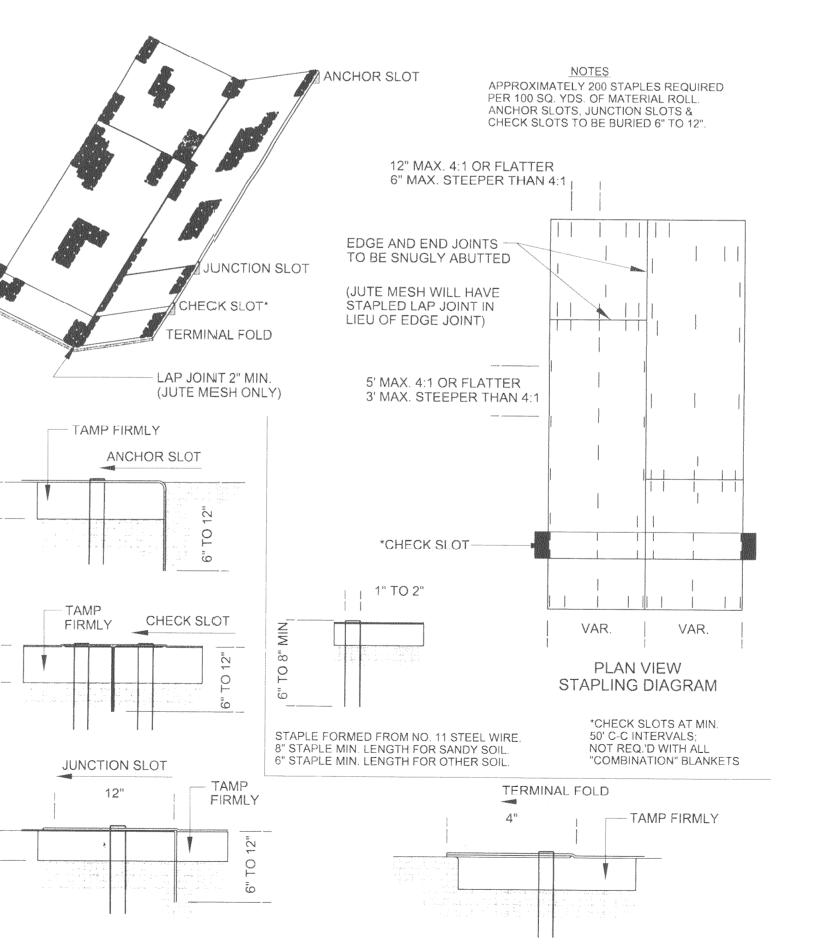
TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

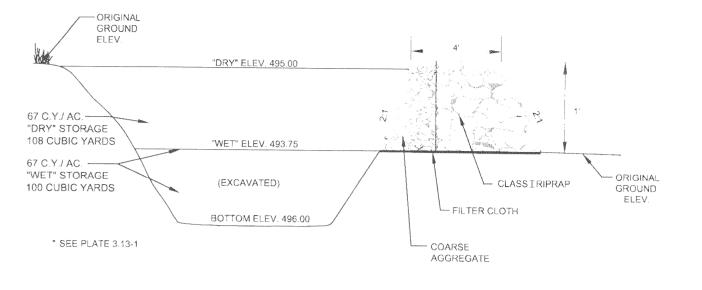
3.32

III - 303

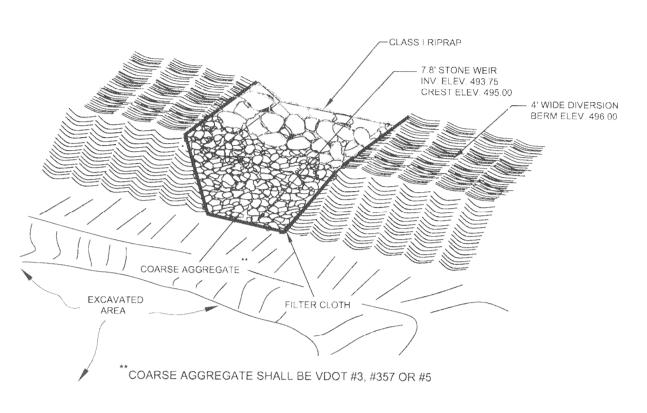
PERMANENT SEEDING



SOIL STABILIZATION BLANKET
TYPICAL TREATMENT - 1 INSTALLATION CRITERIA



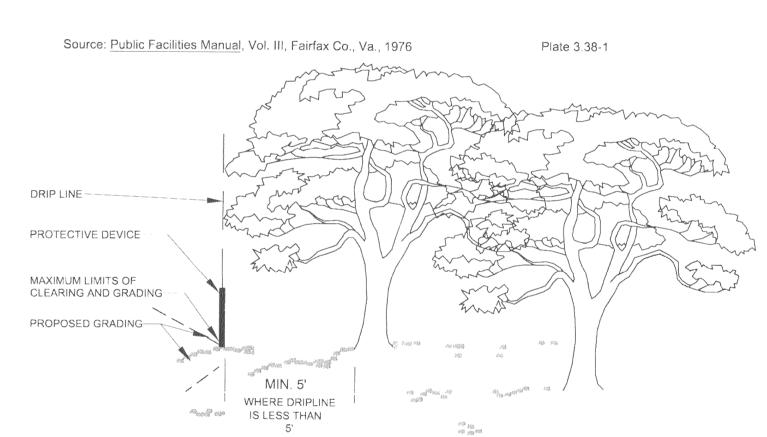
CROSS SECTION OF OUTLET



OUTLET (PERSPECTIVE VIEW)

SOURCE: VA. DSWC PLATE. 3.13-2

TEMPORARY SEDIMENT TRAP



CONSTRUCTION OPERATIONS RELATIVE TO THE LOCATION OF PROTECTED TREES

