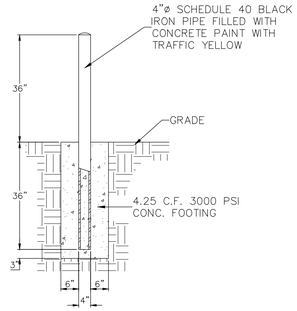


PIPE BOLLARD DETAIL

N.T.S.

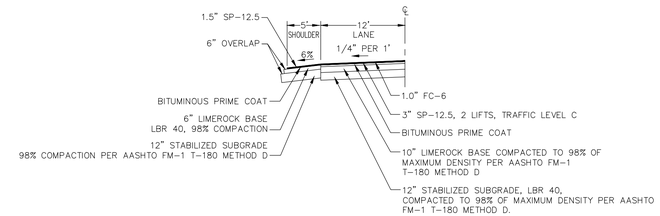
FTP – 25

1. TOP PORTION OF SIGN SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER
2. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND & BORDER

NOTE:
MARKINGS TO COMPLY WITH FDOT STANDARDS, INDEX #17355

HANDICAP SIGN DETAIL

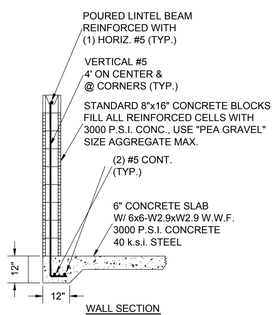
NTS



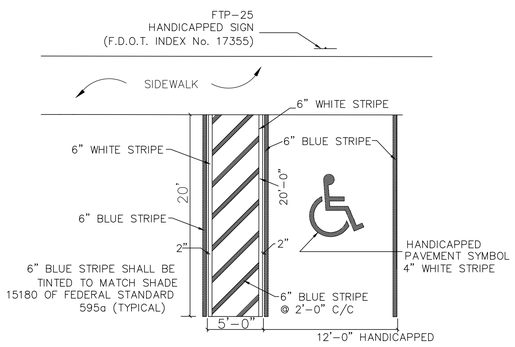
NOTES:
1. ALL DISTURBED AREAS WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION'S (FDOT) RIGHT-OF-WAY (ROW) SHALL BE REGRADED & SODDED WITH ARGENTINE BAHIA AND WATERED UNTIL SELF SUSTAINING.
2. ALL CONSTRUCTION WITHIN FDOT'S ROW SHALL BE IN ACCORDANCE WITH THE LATEST DESIGN STANDARDS, STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION AND THE UTILITY ACCOMMODATION MANUAL.

FDOT TYPICAL DRIVEWAY SECTION

N.T.S.



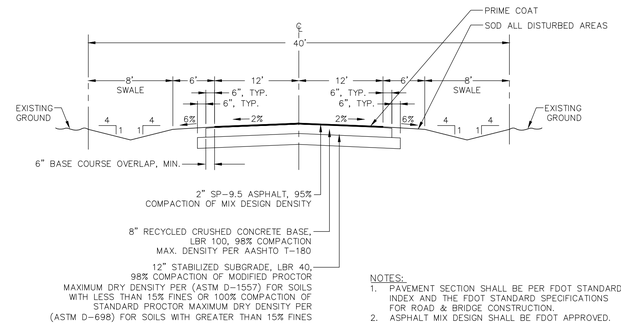
WALL SECTION



HANDICAP STRIPING DETAIL

N.T.S.

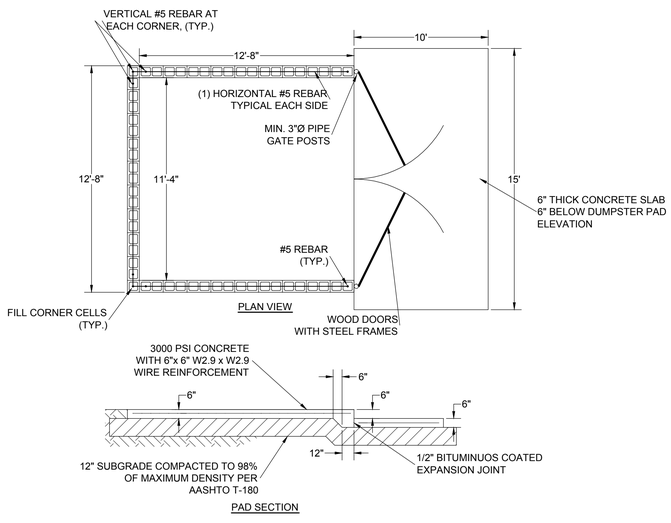
NOTES: 1. ALL H/C ACCESS & PARKING REQUIREMENTS MUST COMPLY WITH FBC CH.11
2. ALL STRIPING TO BE 6" WIDE THERMOPLASTIC PAINT.



NOTES:
1. PAVEMENT SECTION SHALL BE PER FDOT STANDARD INDEX AND THE FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.
2. ASPHALT MIX DESIGN SHALL BE FDOT APPROVED.

TYPICAL PAVEMENT SECTION OUTSIDE OF STATE RIGHT-OF-WAY

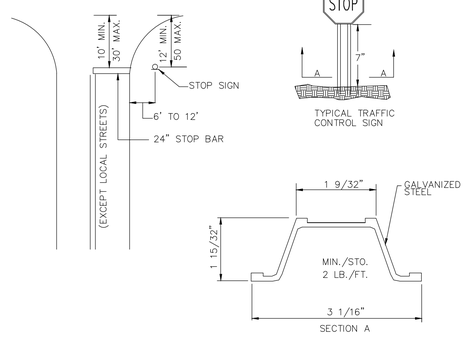
N.T.S.



WITH PERIMETER WALLS

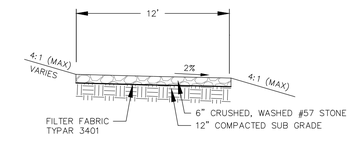
DUMPSTER ENCLOSURE DETAIL

N.T.S.



SIGN DETAIL

N.T.S.



TYPICAL SERVICE DRIVE SECTION

NTS

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100 • Ocala, FL 34471
Office: (352) 387-4540 • Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #2675

REVISIONS

DATE	

CITRUS REPOSITORY AT LACROSSE
ALACHUA COUNTY, FLORIDA

PAVING DETAILS

DATE 3-11-2015
DRAWN BY HB
CHKD. BY RRP
JOB NO. 12-7021
REF. NO.

100% PLANS FOR BID NOT FOR CONSTRUCTION

SIGNATURE:

ROBERT R. PALMER, P.E. # 42026
DATE:

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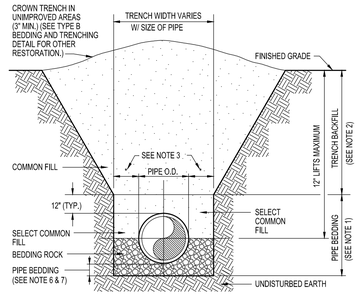
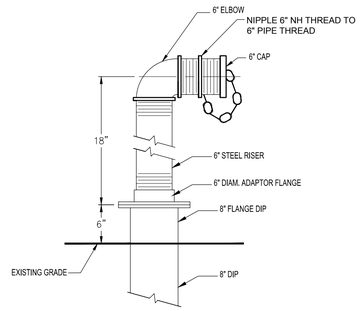
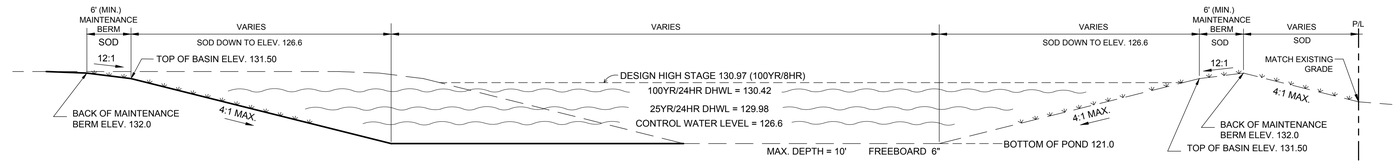


NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% under roadways) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
4. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
6. WHEN REQUIRED BY THE ENGINEER, GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
7. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION. WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PIPE BEDDING AND TRENCHING DETAIL
N.T.S.

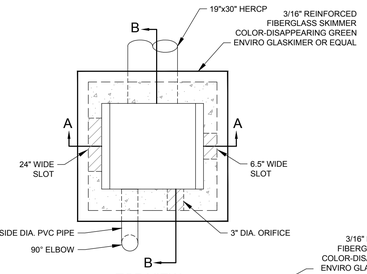


DRY HYDRANT ASSEMBLY
N.T.S.

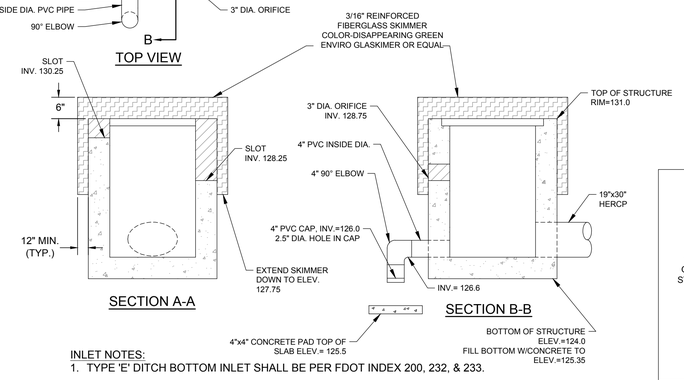


WET DETENTION POND EXPANSION TYPICAL SECTION 1-1
N.T.S.

NOTES:
1. BERM MAY BE CONSTRUCTED OF ON-SITE (SP-SM) AND (SM) SOILS. ONSITE (SM) SOILS SHALL CONTAIN LESS THAN 30% FINES PASSING THE NO. 200 SIEVE WITH A PLASTICITY INDEX LESS THAN 10 AND A LIQUID LIMIT LESS THAN 40. FILL SHOULD BE PLACED IN MAXIMUM 12" LOOSE LIFTS THAT ARE COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. IF LIGHTER WALK-BEHIND COMPACTION EQUIPMENT IS USED, THIS MAY REQUIRE LIFTS OF 4" OR LESS TO ACHIEVE THE REQUIRED DEGREE OF COMPACTION.
2. ARCHER SAND & SIMILAR SOILS SHALL NOT BE USED FOR BERM CONSTRUCTION. MATERIALS CONTAINING GREATER THAN 30% FINES ARE NOT SUITABLE FOR STRUCTURAL FILL. ALL STRUCTURAL FILL & BACKFILL SHALL BE CLEAN, SUITABLE MATERIAL. SEE GEOTECHNICAL SITE EXPLORATION FOR ADDITIONAL SPECIFICATIONS.
3. CONTRACTOR SHALL REVIEW AND BECOME KNOWLEDGEABLE OF THE GEOTECHNICAL SITE EXPLORATION PREPARED BY GSE ENGINEERING, INC. (PROJECT NO. 11248) PRIOR TO CONSTRUCTION.



TOP VIEW



SECTION A-A

SECTION B-B

INLET NOTES:
1. TYPE 'E' DITCH BOTTOM INLET SHALL BE PER FDOT INDEX 200, 232, & 233.

OUTLET STRUCTURE TYPE 'E' W/ SKIMMER DETAIL
N.T.S.

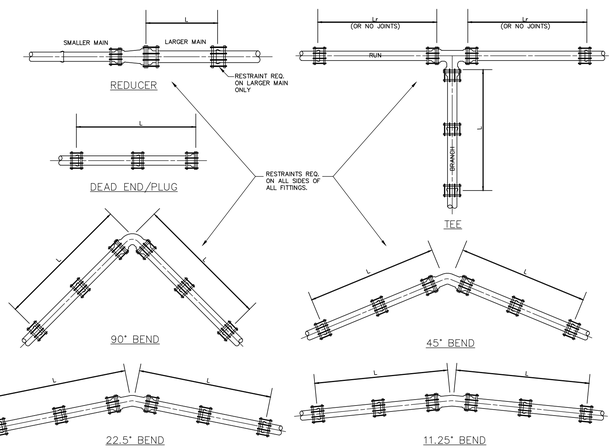
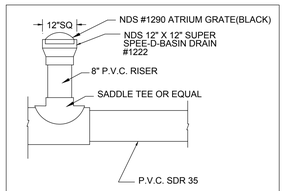


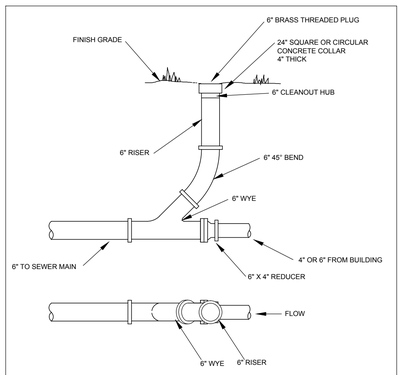
TABLE OF THRUST RESTRAINT LENGTHS																							
PIPE SIZE (inches)	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		DEAD END & PLUG		TEES						REDUCER			
	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	RUN + BRANCH	Lr	P.V.C. (L)	DUCTILE IRON (L)	PIPE SIZES	P.V.C. (L)	DUCTILE IRON (L)	PIPE SIZES	P.V.C. (L)	DUCTILE IRON (L)
4	15'	13'	6'	5'	3'	3'	2'	1'	46'	30'	6"x6"	8'	16'	10'	8"x6"	36'	23'	8"x6"	36'	23'
6	21'	18'	9'	7'	4'	4'	2'	2'	65'	42'	8"x6"	8'	1'	1'	12"x6"	87'	55'			
8	28'	23'	11'	10'	5'	5'	3'	2'	86'	54'	8"x8"	8'	35'	22'	12"x8"	64'	40'			
10	33'	28'	13'	11'	6'	5'	3'	3'	102'	65'	12"x6"	8'	1'	1'	12"x10"	59'	37'			
12	38'	32'	16'	13'	8'	6'	4'	3'	120'	76'	12"x8"	8'	7'	4'	14"x12"	35'	22'			
14	43'	36'	18'	15'	9'	7'	4'	4'	137'	86'	12"x12"	16'	16'	10'	16"x12"	65'	41'			
16	48'	40'	20'	17'	10'	8'	5'	4'	154'	97'	16"x12"	16'	1'	1'	16"x14"	35'	22'			

THRUST RESTRAINT DESIGN NOTES
1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBAA IRON SALES, INC.
2. DATA BASED ON MAX. WATER PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SM), THE PIPE BEDDED IN A TYPE 5 TRENCH w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. AT ALL FITTINGS & VALVES, RESTRAINT SHALL BE ACCOMPLISHED BY EBAA IRON SALES, SERIES 2000PV "MEGA-LUG" RETAINER GLANDS OR FORD, SERIES 1300 UNI-FLANGE.
4. AT ALL BELL & SPIGOT JOINTS, RESTRAINT SHALL BE ACCOMPLISHED BY EBAA IRON SALES, SERIES 1600/2800 RESTRAINT HARNESS OR FORD, SERIES 1390 UNI-FLANGE.
5. THRUST RESTRAINT REQUIREMENTS FOR ANY PIPE AND FITTING ARRANGEMENTS NOT COVERED BY THIS TABLE MUST BE PROVIDED BY GRANT & DZURO.

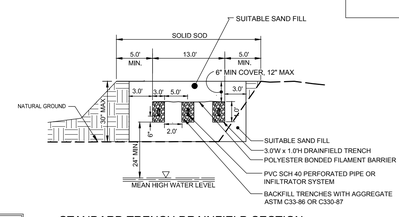
THRUST RESTRAINT DETAILS



YARD DRAIN DETAIL
N.T.S.



SANITARY SEWER SERVICE
COMMERCIAL CLEANOUT
N.T.S.



STANDARD TRENCH DRAINFIELD SECTION
N.T.S.

SEPTIC TANK AND DRAIN FIELD DATA

DAILY SEWAGE FLOW ESTIMATE:
PER F.A.C. 64E-6.008 TABLE I:
OFFICE BUILDING - 15 G.P.D. PER EMPLOYEE PER 8 HR. SHIFT :
18 EMPLOYEES x 15 G.P.D. PER EMPLOYEE = 270 G.P.D. OR
(3,333 S.F. OFFICE AREA / 100 S.F.) x 15 = 499.95 = 500 G.P.D.

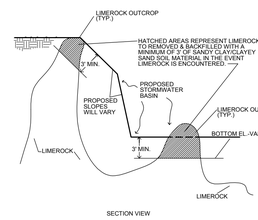
DRAIN FIELD SIZE:
PER F.A.C. 64E-6.009(d) TABLE III:
A 30" MOUND SYSTEM WAS REQUIRED FOR THE SECURITY RESIDENCE,
ASSUME THE SAME WILL BE REQUIRED FOR THIS SYSTEM.

MAX LOADING RATE = 0.80 G.P.D. / S.F.
TRENCH AREA REQUIRED = 500 G.P.D / 0.80 G.P.D. / S.F. = 625 S.F.
PER F.A.C. 64E-6.014, USE 3' WIDE TRENCHES.
TOTAL LENGTH REQUIRED = 625 S.F. / 3 L.F. = 208.33 L.F. OF TRENCH
USE 4 TRENCHES 3' WIDE x 52' LONG = 156 S.F. PER TRENCH = 624 S.F.
UNOBSTRUCTED AREA REQUIRED = 2 x DRAIN FIELD AREA = 2 x 624 S.F. = 1,248 S.F.
PROVIDE ADDITIONAL 3' ON ALL SIDES OF DRAIN FIELD = 24' x 58' = 1,392 S.F.

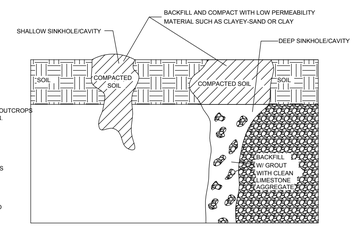
SEPTIC AND DOSING TANK SIZE:
PER F.A.C. 64E-6.008 TABLE II:
REQUIRED SEPTIC TANK SIZE = 1,200 GALLONS AND DOSING TANK SIZE = 600 GALLONS
USE (1) - 1,200 GALLON SEPTIC TANK AND (1) - 600 GALLON DOSING TANK

BASIN LIMEROCK OUTCROP CONSTRUCTION NOTES

1. IN THE EVENT THAT LIMEROCK OUTCROP IS ENCOUNTERED DURING CONSTRUCTION OF THE RETENTION BASINS THE FOLLOWING TREATMENT SHALL BE PREFORMED. THE LIMEROCK OUTCROP SHALL BE EXCAVATED TO AN ELEVATION OF THREE (3) FEET BELOW THE DESIGN BASIN BOTTOM. THE EXCAVATED AREA SHALL BE BACKFILLED TO THE DESIGN BASIN BOTTOM ELEVATION WITH CLAYEY-SAND/SANDY-CLAY (AASHITO SOIL GROUP-A2) SOILS. A MIXTURE OF THE BACKFILL MATERIAL SHALL BE PLACED IN SIX INCH LIFTS AND ROLLED WITH HEAVY LOADED RUBBER TIRED EQUIPMENT. BOTH SRWMD AND ALACHUA COUNTY PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED WHEN LIMEROCK OUTCROPS ARE ENCOUNTERED AND PRIOR TO COMMENCING REMEDIAL ACTION.
2. IN THE EVENT THAT ANY KARST FEATURES, SUCH AS SOLUTION CAVITIES, CHIMNEYS, OR SINKHOLES APPEAR IN THE RETENTION BASIN, THE FOLLOWING ACTIONS SHALL BE REQUIRED:
   A. THE CIVIL ENGINEER, THE SUWANNEE RIVER WATER MANAGEMENT DISTRICT, AND ALACHUA COUNTY PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED WHEN THE FEATURE IS ENCOUNTERED PRIOR TO REMEDIAL ACTION.
   B. A LICENSED GEOTECHNICAL ENGINEERING FIRM SHALL BE RETAINED TO EVALUATE THE SIGNIFICANCE OF THE FEATURE AND TO DETERMINE THE REMEDIAL ACTION NECESSARY.
   C. THE GEOTECHNICAL ENGINEERING FIRM SHALL BE REQUIRED TO MONITOR THE REMEDIAL WORK AND SEND A SUMMARY REPORT UPON REPAIR COMPLETION TO THE CIVIL ENGINEER, THE WATER MANAGEMENT DISTRICT, AND ALACHUA COUNTY PUBLIC WORKS DEPARTMENT.



LIMEROCK OUTCROP REMOVAL DETAIL
N.T.S.



SECTION VIEW

NOTES

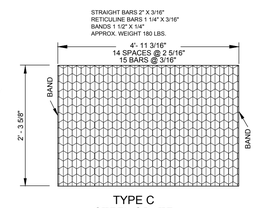
IN THE EVENT THAT ANY KARST FEATURES SUCH AS SINKHOLES, SOLUTION CAVITIES, CHIMNEYS, ETC. ARE DISCOVERED DURING ROUTINE INSPECTIONS OF THE STORMWATER BASINS, THE FOLLOWING REMEDIATION PROCEDURE SHALL BE PERFORMED:

SHALLOW REPAIR (SEE DETAIL):
IF THE COLLAPSE IS SHALLOW (<5' DEEP) AND THE VOIDS IN THE LIMESTONE ARE SMALL, THEN THE SINKHOLE CAN BE REPAIRED BY BACKFILLING WITH A LOWER-PERMEABILITY MATERIAL, SUCH AS CLAYEY-SAND OR CLAY. THE MATERIAL SHOULD BE COMPACTED AND THE REPAIR SHALL BE SLIGHTLY ABOVE THE ORIGINAL BOTTOM IN ORDER TO CREATE A SMALL MOUND TO ACCOUNT FOR SETTLING.

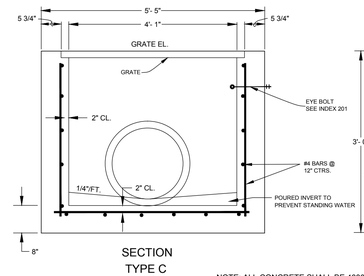
DEEP REPAIR (SEE DETAIL):
IF THE COLLAPSE IS DEEP, THEN THE REPAIR SHALL BE MORE PERMANENT. THE COLLAPSE SHALL BE EXCAVATED TO THE LIMESTONE BEDROCK THE VOID(S) IN THE BEDROCK SHALL BE PLUGGED WITH CLEAN GROUT. A LOW PERMEABILITY MATERIAL SHALL BE PLACED OVER THE CONCRETE PLUG. THE MATERIAL SHALL BE COMPACTED AND BROUGHT TO EXISTING BASIN BOTTOM.

NOTIFICATION:
THE SUWANNEE RIVER WATER MANAGEMENT DISTRICT (SRWMD) SHALL BE NOTIFIED OF ANY SINKHOLE DEVELOPMENT WITHIN 48 HOURS OF DISCOVERY AND THE PROPOSED METHOD BY WHICH THE SINKHOLE WILL BE REPAIRED SHALL BE SUBMITTED TO THE SRWMD FOR APPROVAL WITHIN 30 DAYS. THE SRWMD WILL THEN NOTIFY THE RESPONSIBLE PARTY AS TO THE ACCEPTANCE, DENIAL OR NEED FOR MODIFICATION OF THE REPAIR METHOD.

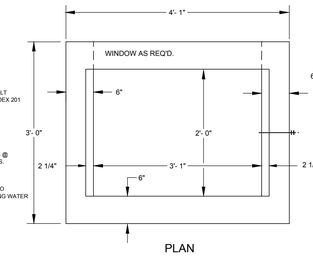
SHALLOW AND DEEP SINKHOLE/CAVITY MAINTENANCE REPAIR DETAIL
N.T.S.



TYPE C STEEL GRATE



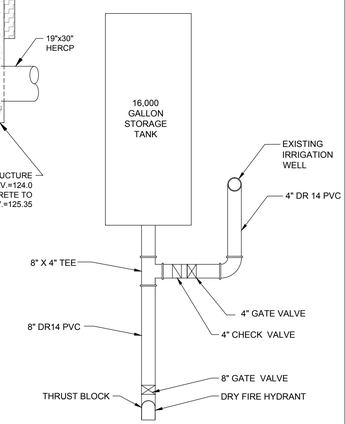
SECTION TYPE C



PLAN

NOTE: ALL CONCRETE SHALL BE 4000 P.S.I. @ 28 DAYS.

DITCH BOTTOM INLET TYPE C
F. D. O. T. STANDARD INDEX NO. 232 AND 201
N.T.S.



STORAGE TANK DETAIL
N.T.S.

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100 • Ocala, FL 34471
Office: (352) 387-4540 • Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #2675

REVISIONS

DATE	

CITRUS REPOSITORY AT LACROSSE
ALACHUA COUNTY, FLORIDA

GRADING AND DRAINAGE DETAILS

DATE 3-11-2015
DRAWN BY HB
CHKD. BY RRP
JOB NO. 12-7021
REF. NO.

100% PLANS FOR BID NOT FOR CONSTRUCTION

SIGNATURE:

ROBERT R. PALMER, P.E. # 42026
DATE:

SHT. 11 OF 11

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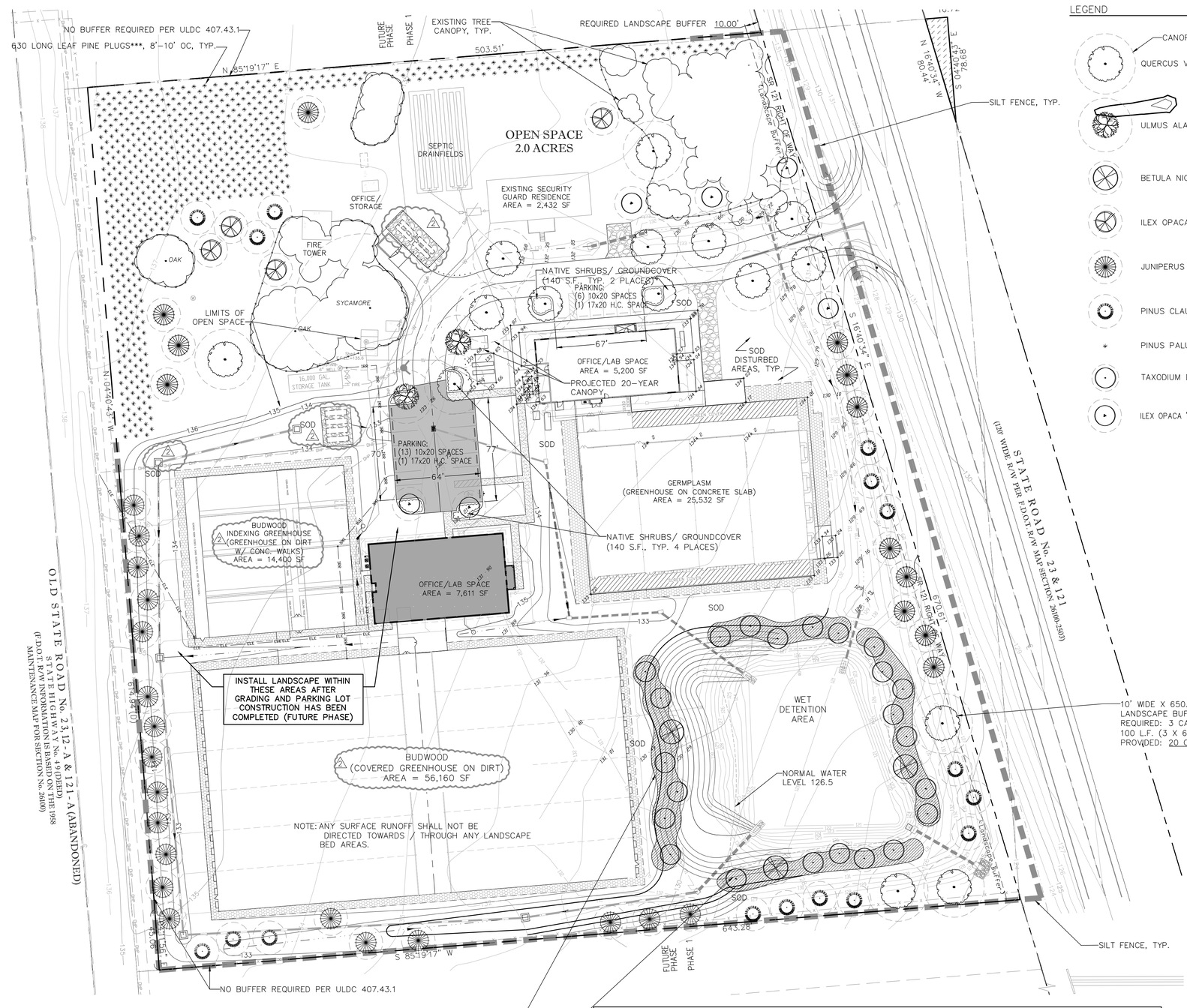

LEGEND

- CANOPY CREDIT DIAMETER, TYP.
- QUERCUS VIRGINIANA
- EXISTING TREE CANOPY AS TRACED FROM GOOGLE EARTH IMAGE (.49 ACRES, TOTAL)
- ULMUS ALATA
- BETULA NIGRA
- ILEX OPACA
- JUNIPERUS VIRGINIANA
- PINUS CLAUSA
- PINUS PALUSTRIS
- TAXODIUM DISTICHUM
- ILEX OPACA 'EAST PALATKA'

40 20 0 40 80
SCALE IN FEET
1" = 40'

GENERAL NOTES:

1. ALL LANDSCAPING AND TRANSPLANTING OF LANDSCAPE MATERIALS SHALL BE INSTALLED ACCORDING TO SOUND HORTICULTURAL PRINCIPLES. ALL INSTALLATIONS SHALL BE PERFORMED SPECIFIC TO TYPE, SOILS, ENVIRONMENTAL CONDITIONS AND INCLUDE ESTABLISHMENT THROUGH WATER MAINTENANCE TO ENSURE MAXIMUM SURVIVABILITY. (SEE IRRIGATION NOTES)
2. TREES IN TURF AREAS SHALL HAVE 6" (MIN.) TRUNK PROTECTOR.
3. TREE STAKES AND GUYS SHALL BE MAINTAINED DURING THE GUARANTEE PERIOD AND REMOVED AS SOON AS THE TREE IS ESTABLISHED.
4. NO REGULATED TREES SHALL BE REMOVED FROM THIS SITE.

IRRIGATION NOTES:

AN AUTOMATIC IRRIGATION SYSTEM SHALL BE PROVIDED FOR ALL PLANTED AREAS PER ALACHUA COUNTY UNIFIED LAND DEVELOPMENT CODE, SECTION 407.46(a):

1. "THE IRRIGATION SYSTEM SHALL BE DESIGNED BY A LANDSCAPE ARCHITECT OR CERTIFIED IRRIGATION DESIGNER AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND THE STANDARD PLUMBING CODE, 1994 EDITION, PROMULGATED BY THE SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL, INC."
2. "IRRIGATION SHALL PROMOTE WATER CONSERVATION BY SUCH METHODS AS DRIP IRRIGATION OR EFFICIENT SPRINKLER ZONING. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND LOCATED TO MINIMIZE THE WATERING OF IMPERVIOUS SURFACES."
3. "MOISTURE SENSOR OR RAIN GAUGE EQUIPMENT SHALL BE REQUIRED ON AUTOMATIC IRRIGATION SYSTEMS TO AVOID IRRIGATION DURING PERIODS OF SUFFICIENT RAINFALL."

PROPOSED TREES				Canopy Credit	20-year Projected Canopy Credit (in acres)	
Botanical Name	Common Name	Qty. (Phase 1)	Qty. (Future Phase)	(diameter)	per tree	total
Quercus virginiana	Live Oak	14	1	45'	0.0365	0.5477
Ulmus alata	Winged Elm	1	1	40'	0.0288	0.0577
Betula nigra**	River Birch	3		25'	0.0113	0.0338
Ilex opaca	American Holly	4		25'	0.0113	0.0565
Ilex opaca 'E. Palatka'	East Palatka Holly	4	2	20'	0.0072	0.0288
Juniperus virginiana	Southern Redcedar	12	19	25'	0.0113	0.3493
Pinus clausa	Sand Pine	13	3	25'	0.0113	0.1803
Pinus palustris***	Longleaf Pine	630		25'/10	0.0113	0.7099
Taxodium distichum	Bald Cypress	23		20'	0.0072	0.1659
						2.13acres

* MIN. SIZE FOR PROPOSED TREES: 15 GAL., 10' HT, 2" CAL.
** 3 TRUNKS EA., (2" COMBINED CAL.)
*** ALTERNATIVE COMPLIANCE FOR THE USE OF 10 LONGLEAF PINE PLUGS AS A SUBSTITUTION FOR EACH OF THE 63 PREVIOUSLY SPECIFIED LONGLEAF PINE TREES HAS BEEN APPROVED BY ALACHUA COUNTY ARBORIST.

NOTE:
ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", "PARTS 1 AND 2, BY DIVISION OF PLANT INDUSTRY, FLORIDA", DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO CURRENT AMERICAN ASSOCIATION OF NURSERYMEN 'STANDARDS FOR NURSERY STOCK', LATEST EDITION.

SITE AREA: 8.71 ACRES

ITEM	REQUIRED	PROVIDED
OPEN SPACE	20% OF SITE AREA: 8.71 X .20 = 1.74 ACRES COMPLIANCE WITH ULDC 407.55(b)2. – N/A COMPLIANCE WITH ULDC 407.56 – N/A * COMPLIANCE WITH ULDC 407.53 – N/A **	2.0 ACRES (HATCHED AREA)
CANOPY COVERAGE	30% OF SITE WITHIN 20 YEARS (8.71 X .30 = 2.61)	2.61 ACRES (2.13 PROPOSED, .49 EXISTING) SEE TABLE ABOVE FOR CALCULATIONS
	50% OF PAVED AREA WITHIN 20 YEARS 15,910 S.F. PAVED X .50 = 7,955 S.F. COVERAGE REQ'D.	6,999 S.F. PROJECTED CANOPY COVERAGE (BY PROPOSED TREES) 1,082 S.F. (BY EXISTING TREE) 8,081 S.F. TOTAL
DRAINAGE RETENTION AREA LANDSCAPING *	25% OF POND AREA (38,250 S.F. X .25 = 9,562.5 S.F.) CANOPY TREES SPACED TO AVERAGE NO MORE THAN 35' OC AROUND BASIN PERIMETER (PERIMETER= 685 L.F. 685/35 = 19.57 TREES MIN.)	9,569 S.F. NATIVE GRASSES AND 26 TREES (±26.5' OC ON AVG.)
STREET BUFFER	10' WIDE X LENGTH OF BNDY ADJACENT TO S.R. 121 (EXCLUDING WIDTH OF DRIVEWAY) 3 CANOPY TREES PER 100 L.F. (650.64/ 100) X 3 = 19.5 (20) REQUIRED	20 CANOPY TREES
PERIMETER BUFFER	NOT REQUIRED PER ULDC 407.43.1	
PARKING AREA LANDSCAPING	1 CANOPY TREE/ 140 S.F. PLANTED ISLAND AT THE ENDS OF EACH ROW OF PARKING SPACES	6 CANOPY TREES AND 840 S.F. OF PROPOSED SHRUBS

*DRAINAGE RETENTION AREA IS NOT DESIGNED AS OPEN SPACE
**NO WETLANDS, SURFACE WATERS, 100YR. FLOODPLAINS, LISTED SPECIES HABITATS, STRATEGIC ECOSYSTEMS, SIGNIFICANT GEOLOGICAL FEATURES, SIGNIFICANT HABITATS, STEEP SLOPES, RIDGES, OR SINKHOLES, ETC. ARE PRESENT ON THIS SITE. EXISTING NATURAL AREAS HAVE BEEN INCLUDED IN OPEN SPACE DESIGNATION.

PROPOSED SHRUBS, GRASSES & GROUNDCOVERS					
Botanical Name	Common Name	Qty. (Phase 1)	Qty. (Future Phase)	Size and Spacing	Proposed Location
Muhlenbergia capillaris	Muhly Grass	367		plug or 4" pot, 24"ht, 3'oc	STORMWATER RETENTION AREA
Spartina bakeri	Sand Cordgrass	278		plug or 4" pot, 24"ht, 4'oc	
Tripsacum dactyloides	Fakahatchee Grass	208		plug or 4" pot, 24"ht, 4'oc	
*Viburnum obovatum 'Mrs. Schillers Delight'	Dwarf Walters Viburnum	36	72	3 gal., 24"ht, 3'oc	PARKING AREAS
MULCH Pine Straw OR Pine Bark Nuggets 3" depth					

*OR OTHER NATIVE DROUGHT TOLERANT SHRUB/ GROUNDCOVER PER ULDC 407.44

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL
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Office: (352) 307-1947 • Fax: (352) 307-2420
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE		
02-21-13	ADD PHASING INFORMATION	MAL
04-04-13	SEPARATED PHASE 1 PLANT QUANTITIES	MAL
04-29-15	1 REDUCED NUMBER OF ABOVE-GROUND PROPANE TANKS TO 4	HB
06-08-15	2 PROPANE TANK LOCATION/GREENHOUSE S.F.	GSH

CITRUS REPOSITORY AT LACROSSE
ALACHUA COUNTY, FL

LANDSCAPE PLAN

DATE 06-08-15
DRAWN BY ML
CHKD. BY JDT
JOB NO. 12-7021

100% PLANS FOR BID NOT FOR CONSTRUCTION

SIGNATURE:

JAMES A. BAILEY, L.A. # 6666883
DATE:

SHT. L1 OF 2

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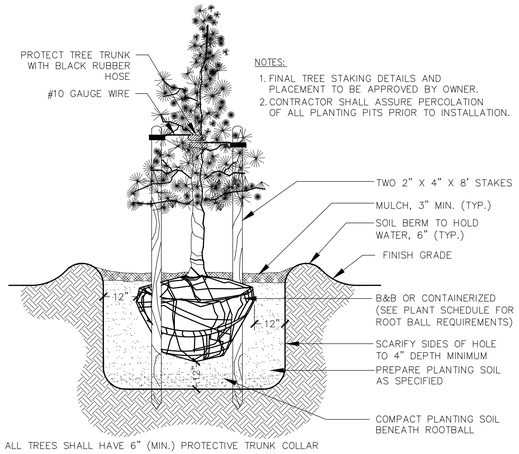
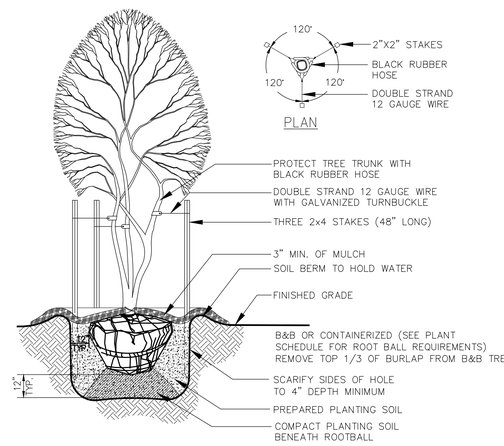


NOTES:
1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

ALL TREES SHALL HAVE 6" (MIN.) PROTECTIVE TRUNK COLLAR

PINE TREE PLANTING DETAIL

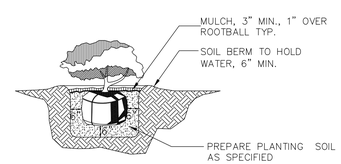
NOT TO SCALE



ALL TREES SHALL HAVE 6" (MIN.) PROTECTIVE TRUNK COLLAR

MULTI-STEM TREE PLANTING DETAIL

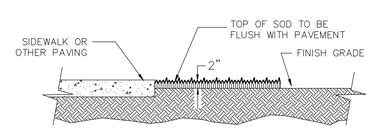
NOT TO SCALE



NOTE:
CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION

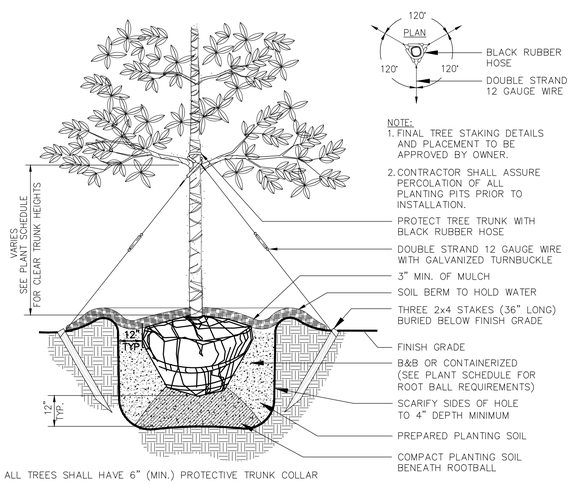
SHRUB INSTALLATION DETAIL

NOT TO SCALE



SOD PLACEMENT ADJACENT TO PAVEMENT

NOT TO SCALE



NOTE:
1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

ALL TREES SHALL HAVE 6" (MIN.) PROTECTIVE TRUNK COLLAR

LARGE TREE PLANTING DETAIL

NOT TO SCALE

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REVISIONS

DATE		
2-21-2013	NO CHANGES THIS SHEET	MAL

CITRUS REPOSITORY AT LACROSSE
ALACHUA COUNTY, FL

LANDSCAPE DETAILS AND SPECIFICATIONS

DATE 2-21-2013
DRAWN BY ML
CHKD. BY JDT
JOB NO. 12-7021

100% PLANS FOR BID NOT FOR CONSTRUCTION

SHT. L2 OF 2

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