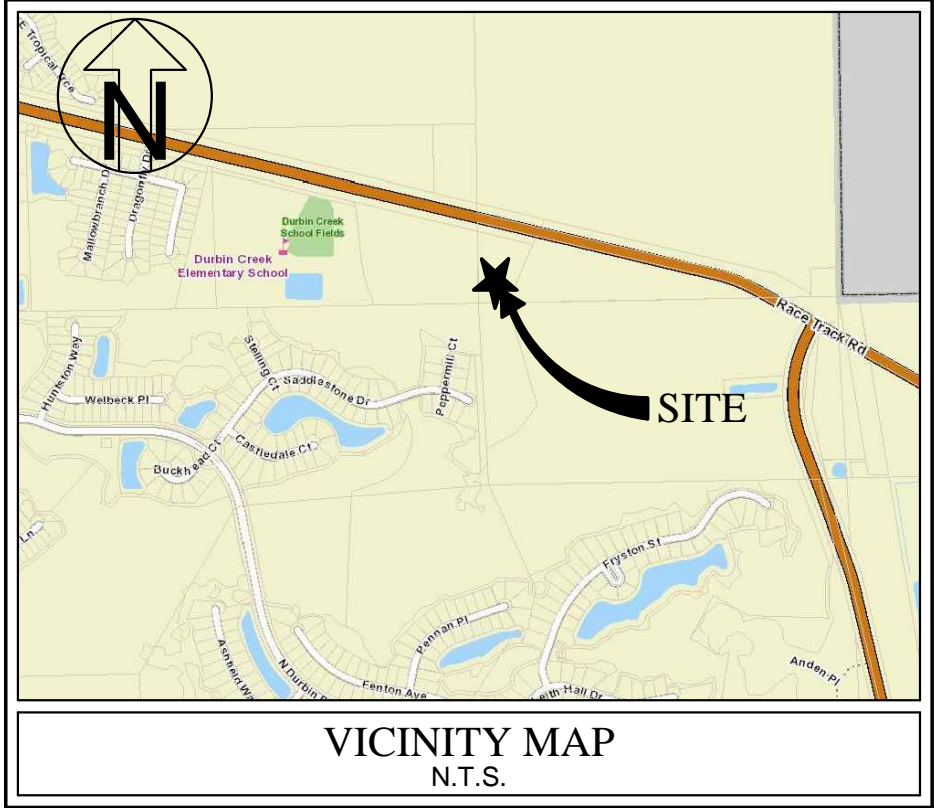


CONSTRUCTION PLANS FOR United Landscapes ST. JOHNS COUNTY, FLORIDA

GENERAL NOTES:

- A. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY, AS CONTRACTORS TO THE ENGINEER:
- BARTRAM TRAIL SURVEYING, INC.
1501 COUNTY ROAD 315 SUITE 106
GREEN COVE SPRINGS, FLORIDA 32043
CONTACT: RAYMOND PAUL SUTHERLAND, P.S.M.
PHONE: (904) 284-2224
- MATTHEWS DESIGN GROUP, INC AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES.
- B. ADDITIONAL PROJECT INFORMATION HAS BEEN PROVIDED BY THE FOLLOWING SUB-CONSULTANT AS CONTRACTOR TO THE OWNER:
- GEOTECHNICAL
ELLIS & ASSOCIATES, INC.
7064 DAVIS CREEK ROAD
JACKSONVILLE, FLORIDA 32256
CONTACT: JOEY BROUSSARD, P.E.
PHONE: (904) 880-0960
- THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER OF ANY DISCREPANCIES BETWEEN THE SURVEY AND FIELD VERIFICATION OF INFORMATION ABOVE OR BELOW GROUND THAT MAY BE CRITICAL TO THE DESIGN OF THIS PROJECT. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION OF THIS PROJECT.
- C. **WARRANTY / DISCLAIMER:**
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER IS INVOLVED WITH THE PHYSICAL CONSTRUCTION ON AN ONGOING BASIS AT THE SITE.
- D. **SAFETY NOTICE TO CONTRACTOR:**
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON OR NEAR THE CONSTRUCTION SITE.
- E. **CONSTRUCTION TESTING:**
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, TESTING, LABORATORY ANALYSES, REPORTS, COSTS, ETC., CONCERNING SOILS AND PAVEMENT RELATED DESIGN REQUIREMENTS AND SPECIFICATIONS AS SET FORTH IN THESE PLANS.
- F. **AS-BUILT SURVEY NOTE:**
UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS REQUIRED TO PROVIDE OWNER / ENGINEER WITH A SIGNED AND SEALED AS-BUILT SURVEY AND ANY OTHER RELATED CONSTRUCTION DOCUMENTS, IN ACCORDANCE WITH APPLICABLE PERMITTING AGENCY REQUIREMENTS, AS THE BASIS FOR PROJECT CERTIFICATIONS AND CLOSE-OUT.
- G. **RIGHT-OF-WAY:**
ANY AND ALL WORK CONDUCTED WITHIN THE ST. JOHNS COUNTY RIGHT-OF-WAYS MUST BE IN ACCORDANCE WITH THE APPLICABLE LAND DEVELOPMENT CODES.
- H. **PRE-CONSTRUCTION MEETING:**
IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE A PRE-CONSTRUCTION / PRE PERMIT ISSUANCE MEETING WITH SJIC STAFF AFTER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE COUNTY AND PRIOR TO STARTING ANY SITE ACTIVITIES. THE PRE-CONSTRUCTION MEETING WILL BE HELD IN CONJUNCTION WITH THE SJICUD MANDATORY PRE-CONSTRUCTION MEETING. HOWEVER, IF THE PROJECT FALLS OUTSIDE OF SJICUD JURISDICTION, PLEASE CALL CARL COLEE (904-209-0736) AT LEAST 48 HOURS PRIOR TO SCHEDULE MEETING.



OWNER:
UNITED LANDSCAPES, INC.
6126 US1 NORTH
ST. AUGUSTINE, FLORIDA 32095
PHONE: (904) 829-9255
CONTACT: BOB BLANDFORD

PREPARED BY:
MATTHEWS DESIGN GROUP, INC.
P.O. BOX 3126, 7 WALDO STREET
ST. AUGUSTINE, FLORIDA 32084
PHONE: (904) 826-1334

PERMITS / APPROVALS	SUBMITTED	RECEIVED
ST. JOHNS COUNTY	06-27-14	
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT	06-27-14	
JEA	06-27-14	

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	SURVEY
3	DEMOLITION PLAN
4	SITE PLAN
5	SITE PLAN
6	GRADING PLAN
7	GRADING PLAN
8	UTILITY PLAN
9	LANDSCAPE PLAN
10	SITE DETAILS
11	GRADING & UTILITY DETAILS
12	JEA GENERAL NOTES
13	JEA GENERAL WATER DETAILS
14	JEA GENERAL WATER DETAILS
15	JEA GENERAL SEWER DETAILS
16	SWPPP
17	SWPPP CONTRACTOR'S CERTIFICATION

**JEA AVAILABILITY NUMBER
2014-0607**

RESOURCE LIST:

ST. JOHNS COUNTY ENGINEERING 2740 INDUSTRY CENTER ROAD ST. AUGUSTINE, FLORIDA 32084 (904) 209-0110	JEA 21 WEST CHURCH STREET JACKSONVILLE, FLORIDA 32202 (904) 665-8880
SJRWMD ST. JOHNS RIVER WATER MANAGEMENT DISTRICT - STORM WATER 7775 BAYMEADOWS WAY, SUITE 102 JACKSONVILLE, FLORIDA 32256 (904) 424-3410	FDEP - WATER & SEWER 7825 BAYMEADOWS WAY SUITE B-200 JACKSONVILLE, FLORIDA 32256-7590 (904) 256-1620
ST. JOHNS COUNTY DEVELOPMENT SERVICES 4040 LEWIS SPEEDWAY ST. AUGUSTINE, FLORIDA 32095 (904) 209-0660	

FLOOD CERTIFICATION:
THIS SITE IS SHOWN IN FLOOD ZONE "X" AS DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 12109C0160H, FOR ST. JOHNS COUNTY, FLORIDA, EFFECTIVE SEPTEMBER 2, 2004.



**Know what's below.
Call before you dig.**

<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>7-24-14</td> <td>REVISED PER SJC AND JEA COMMENTS</td> </tr> <tr> <td>2</td> <td>8-29-14</td> <td>REVISED PER SJC AND JEA COMMENTS</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	1	7-24-14	REVISED PER SJC AND JEA COMMENTS	2	8-29-14	REVISED PER SJC AND JEA COMMENTS	<p>REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CAP#6555 FL#68425</p>
NO.	DATE	DESCRIPTION								
1	7-24-14	REVISED PER SJC AND JEA COMMENTS								
2	8-29-14	REVISED PER SJC AND JEA COMMENTS								
<p>MATTHEWS DESIGN GROUP, INC. P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FLORIDA 32084 PHONE: 904.826.1334 FAX: 904.826.4547 INFO@MATTHEWSDESIGN.NET</p>										
<p>COVER SHEET United Landscapes ST. JOHNS COUNTY, FLORIDA PREPARED FOR UNITED LANDSCAPES, INC.</p>										
<p>SHEET NO: 1 OF 17</p>										

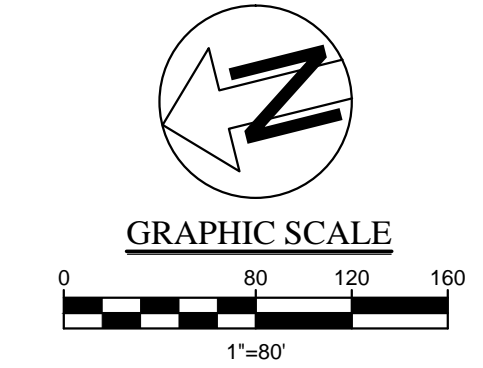
S:\PROJECTS\14091\14091-14093- UNITED LANDSCAPES\CONSTRUCTION DOCUMENTS\14093-COVER SHEET.DWG, L.L. 8/29/2014 11:32 AM, Copying Sheet, Matthew Design Group, Inc.

TOPOGRAPHIC SURVEY

FOR A PORTION OF SECTION 36, TOWNSHIP 4 SOUTH, RANGE 27 EAST, TOGETHER WITH A PORTION OF SECTION 1, TOWNSHIP 5 SOUTH, RANGE 27 EAST, ST. JOHNS COUNTY, FLORIDA



TREE INVENTORY						
TREE NUMBER	TREE SPECIE	TREE DBH (IN)	PROPOSED PLAN OF ACTION	REMOVED INCHES REQUIRING MITIGATION	TREE INCHES PRESERVED	COMMENTS
1	BAY	9	TO REMAIN	-	9	
2	BAY	9	TO REMAIN	-	9	
3	LONGLEAF PINE	8	TO REMAIN	-	8	
4	BAY	10	TO REMAIN	-	10	



EXISTING
 - - - - - PROPERTY / RIGHT OF WAY LINE

PROPOSED
 ● - - - - - TREE PROTECTION FENCING

GENERAL DEMOLITION NOTES

- CONTRACTOR SHALL ABIDE BY ALL ST. JOHNS COUNTY EROSION CONTROL MEASURES AS OUTLINED BELOW.
- ALL UTILITIES SHOWN SHALL REMAIN IN PLACE AND UNHARMED UNLESS SPECIFICALLY CALLED OUT ON THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY ABANDONING ANY EXISTING WELLS OR SEPTIC SYSTEMS FOUND DURING CONSTRUCTION. ABANDONMENT SHALL BE IN ACCORDANCE WITH ALL COUNTY, STATE AND PER THE REQUIREMENTS SET FORTH IN THE F.A.C.

DEMOLITION NOTES

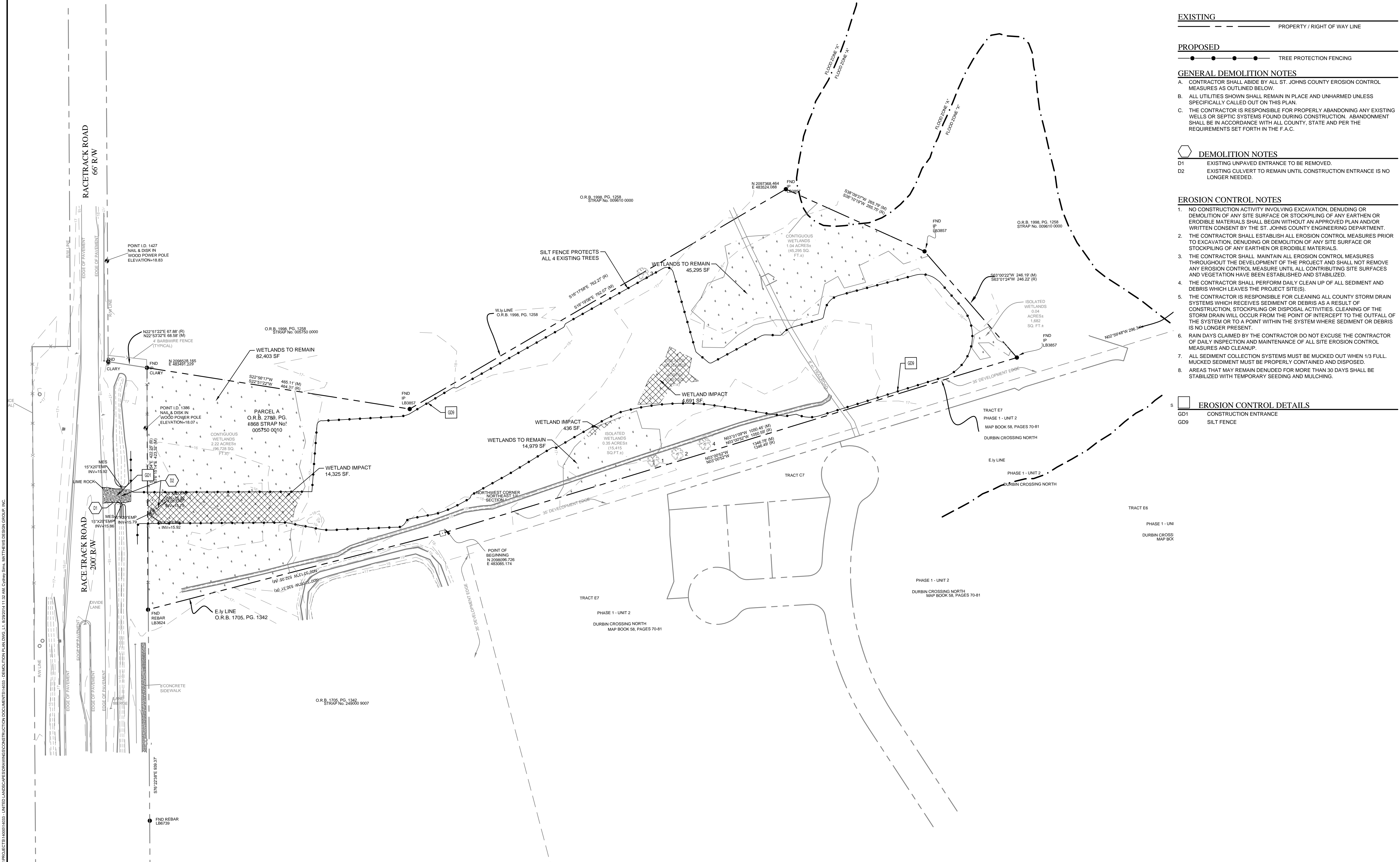
D1 EXISTING UNPAVED ENTRANCE TO BE REMOVED.
 D2 EXISTING CULVERT TO REMAIN UNTIL CONSTRUCTION ENTRANCE IS NO LONGER NEEDED.

EROSION CONTROL NOTES

- NO CONSTRUCTION ACTIVITY INVOLVING EXCAVATION, DENUDING OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS SHALL BEGIN WITHOUT AN APPROVED PLAN AND/OR WRITTEN CONSENT BY THE ST. JOHNS COUNTY ENGINEERING DEPARTMENT.
- THE CONTRACTOR SHALL ESTABLISH ALL EROSION CONTROL MEASURES PRIOR TO EXCAVATION, DENUDING OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DEVELOPMENT OF THE PROJECT AND SHALL NOT REMOVE ANY EROSION CONTROL MEASURE UNTIL ALL CONTRIBUTING SITE SURFACES AND VEGETATION HAVE BEEN ESTABLISHED AND STABILIZED.
- THE CONTRACTOR SHALL PERFORM DAILY CLEAN UP OF ALL SEDIMENT AND DEBRIS WHICH LEAVES THE PROJECT SITES.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL COUNTY STORM DRAIN SYSTEMS WHICH RECEIVES SEDIMENT OR DEBRIS AS A RESULT OF CONSTRUCTION, STOCKPILING OR DISPOSAL ACTIVITIES. CLEANING OF THE STORM DRAIN WILL OCCUR FROM THE POINT OF INTERCEPT TO THE OUTFALL OF THE SYSTEM OR TO A POINT WITHIN THE SYSTEM WHERE SEDIMENT OR DEBRIS IS NO LONGER PRESENT.
- RAIN DAYS CLAIMED BY THE CONTRACTOR DO NOT EXCUSE THE CONTRACTOR OF DAILY INSPECTION AND MAINTENANCE OF ALL SITE EROSION CONTROL MEASURES AND CLEANUP.
- ALL SEDIMENT COLLECTION SYSTEMS MUST BE MUCKED OUT WHEN 1/3 FULL. MUCKED SEDIMENT MUST BE PROPERLY CONTAINED AND DISPOSED.
- AREAS THAT MAY REMAIN DENUDED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING.

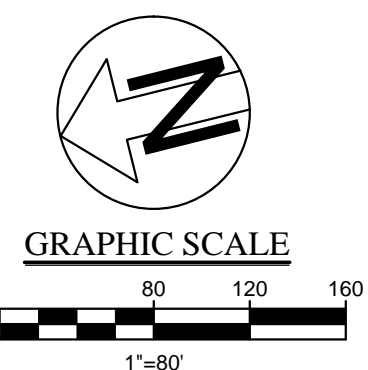
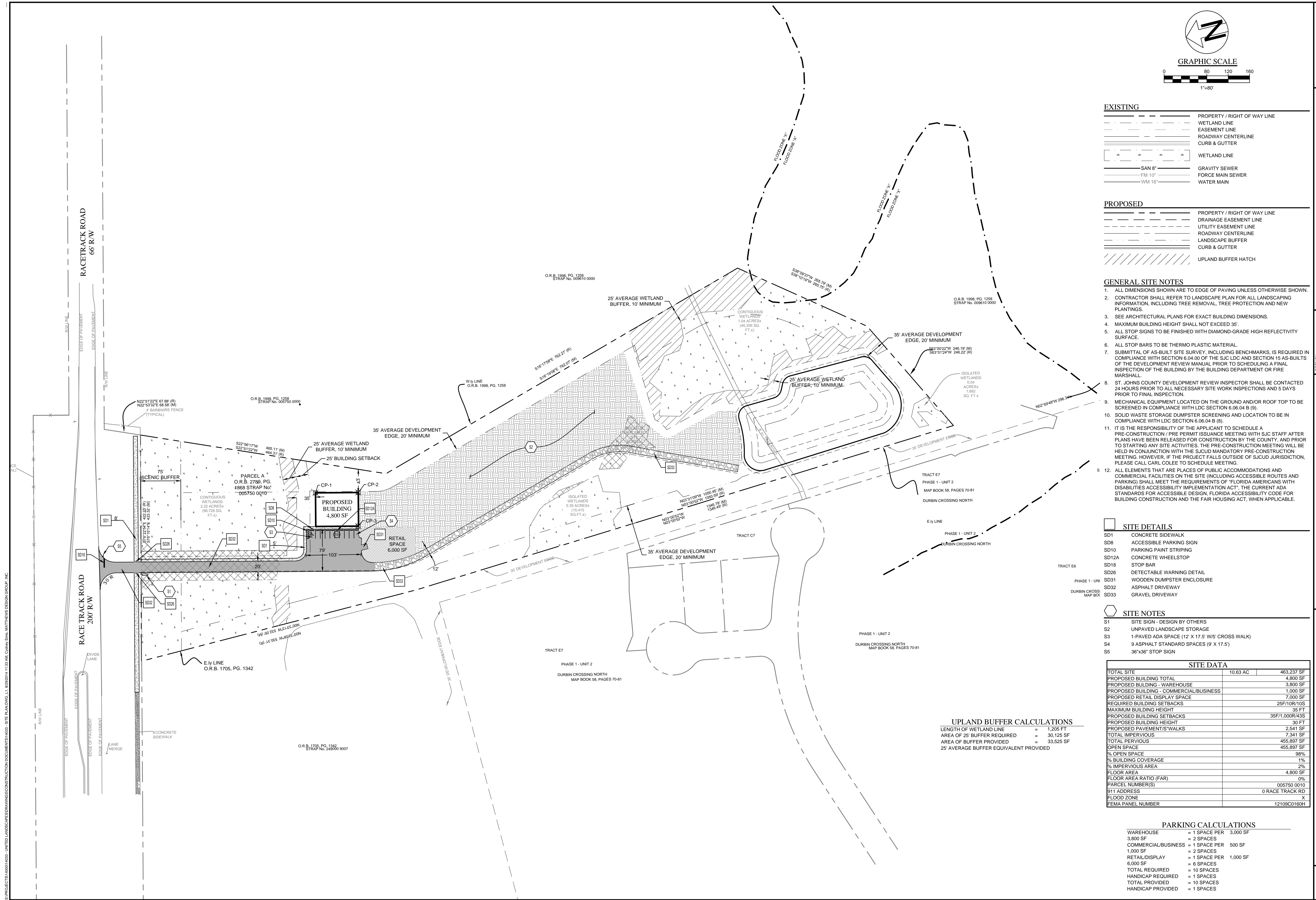
EROSION CONTROL DETAILS

GD1 CONSTRUCTION ENTRANCE
 GD9 SILT FENCE



REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CAP#65515 FL#6425	
REVISIONS	DESCRIPTION
NO.	DATE
1	7-24-14
2	8-29-14
REVISED PER S.C. AND J.E.F. COMMENTS	
REVISED PER S.C. AND J.E.F. COMMENTS	
DATE	08-22-14
JOB NO.	14033
MATTHEWS DESIGN GROUP, INC. P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FLORIDA 32084 PHONE: 904.826.1334 FAX: 904.826.4547 INFO@MATTHEWSDESIGN.NET	
DEMOLITION PLAN United Landscapes ST. JOHNS COUNTY, FLORIDA PREPARED FOR UNITED LANDSCAPES, INC.	
SHEET No.	3
OF 17	

S:\PROJECTS\14001\14003 - UNITED LANDSCAPES\DRAWINGS\CONSTRUCTION DOCUMENTS\14033 - DEMOLITION PLAN DWG_1.dwg, L: 8/20/14 11:52 AM, Cadmus Sim, MATTHEWS DESIGN GROUP, INC.



EXISTING

---	PROPERTY / RIGHT OF WAY LINE
---	WETLAND LINE
---	EASEMENT LINE
---	ROADWAY CENTERLINE
---	CURB & GUTTER
---	WETLAND LINE
---	SAN 8"
---	FM 10"
---	WM 16"
---	GRAVITY SEWER
---	FORCE MAIN SEWER
---	WATER MAIN

PROPOSED

---	PROPERTY / RIGHT OF WAY LINE
---	DRAINAGE EASEMENT LINE
---	UTILITY EASEMENT LINE
---	ROADWAY CENTERLINE
---	LANDSCAPE BUFFER
---	CURB & GUTTER
---	UPLAND BUFFER HATCH

- GENERAL SITE NOTES**
- ALL DIMENSIONS SHOWN ARE TO EDGE OF PAVING UNLESS OTHERWISE SHOWN.
 - CONTRACTOR SHALL REFER TO LANDSCAPE PLAN FOR ALL LANDSCAPING INFORMATION, INCLUDING TREE REMOVAL, TREE PROTECTION AND NEW PLANTINGS.
 - SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
 - MAXIMUM BUILDING HEIGHT SHALL NOT EXCEED 35'.
 - ALL STOP SIGNS TO BE FINISHED WITH DIAMOND-GRADE HIGH REFLECTIVITY SURFACE.
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SITE DETAILS

SD1	CONCRETE SIDEWALK
SD8	ACCESSIBLE PARKING SIGN
SD10	PARKING PAINT STRIPING
SD12A	CONCRETE WHEELSTOP
SD18	STOP BAR
SD26	DETECTABLE WARNING DETAIL
SD31	WOODEN DUMPSTER ENCLOSURE
SD32	ASPHALT DRIVEWAY
SD33	GRAVEL DRIVEWAY

SITE NOTES

S1	SITE SIGN - DESIGN BY OTHERS
S2	UNPAVED LANDSCAPE STORAGE
S3	1-PAVED ADA SPACE (12' X 17.5' W/5' CROSS WALK)
S4	9 ASPHALT STANDARD SPACES (8' X 17.5')
S5	36" X 36" STOP SIGN

SITE DATA

TOTAL SITE	10.63 AC	463,237 SF
PROPOSED BUILDING TOTAL		4,800 SF
PROPOSED BUILDING - WAREHOUSE		3,800 SF
PROPOSED BUILDING - COMMERCIAL/BUSINESS		1,000 SF
PROPOSED RETAIL DISPLAY SPACE		7,000 SF
REQUIRED BUILDING SETBACKS	25F/10R/10S	
MAXIMUM BUILDING HEIGHT	35 FT	
PROPOSED BUILDING SETBACKS	35F/1,000R/4S	
PROPOSED BUILDING HEIGHT	30 FT	
PROPOSED PAVEMENT/S/WALKS	2,541 SF	
TOTAL IMPERVIOUS	7,341 SF	
TOTAL PERVIOUS	455,897 SF	
OPEN SPACE	455,897 SF	
% OPEN SPACE	98%	
% BUILDING COVERAGE	1%	
% IMPERVIOUS AREA	2%	
FLOOR AREA	4,800 SF	
FLOOR AREA RATIO (FAR)	0.045%	
PARCEL NUMBER(S)	005750 0010	
011 ADDRESS	0 RACE TRACK RD	
FLOOD ZONE	X	
FEMA PANEL NUMBER	12109C0160H	

UPLAND BUFFER CALCULATIONS

LENGTH OF WETLAND LINE = 1,205 FT
 AREA OF 25' BUFFER REQUIRED = 30,125 SF
 AREA OF BUFFER PROVIDED = 33,525 SF
 25' AVERAGE BUFFER EQUIVALENT PROVIDED

PARKING CALCULATIONS

WAREHOUSE	= 1 SPACE PER 3,000 SF
3,800 SF	= 2 SPACES
COMMERCIAL/BUSINESS	= 1 SPACE PER 500 SF
1,000 SF	= 2 SPACES
RETAIL/DISPLAY	= 1 SPACE PER 1,000 SF
6,000 SF	= 6 SPACES
TOTAL REQUIRED	= 10 SPACES
HANDICAP REQUIRED	= 1 SPACES
TOTAL PROVIDED	= 10 SPACES
HANDICAP PROVIDED	= 1 SPACES

MATTHEWS DESIGN GROUP, INC.
 P.O. BOX 3126, 7 WALDO STREET
 ST. AUGUSTINE, FLORIDA 32084
 PHONE: 904.826.1334
 FAX: 904.826.4547
 INFO@MATTHEWSDESIGN.NET

REGISTERED ENGINEER
 ROB A. MATTHEWS III, P.E.
 CA#6555 FL#65425

SITE PLAN
 United Landscapes
 ST. JOHNS COUNTY, FLORIDA
 PREPARED FOR
 UNITED LANDSCAPES, INC.

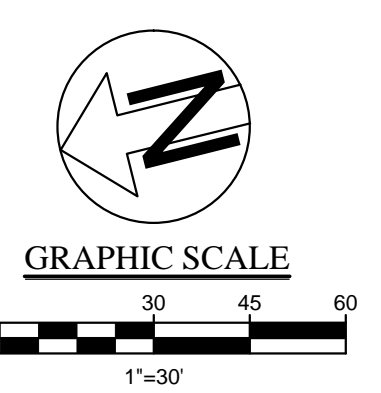
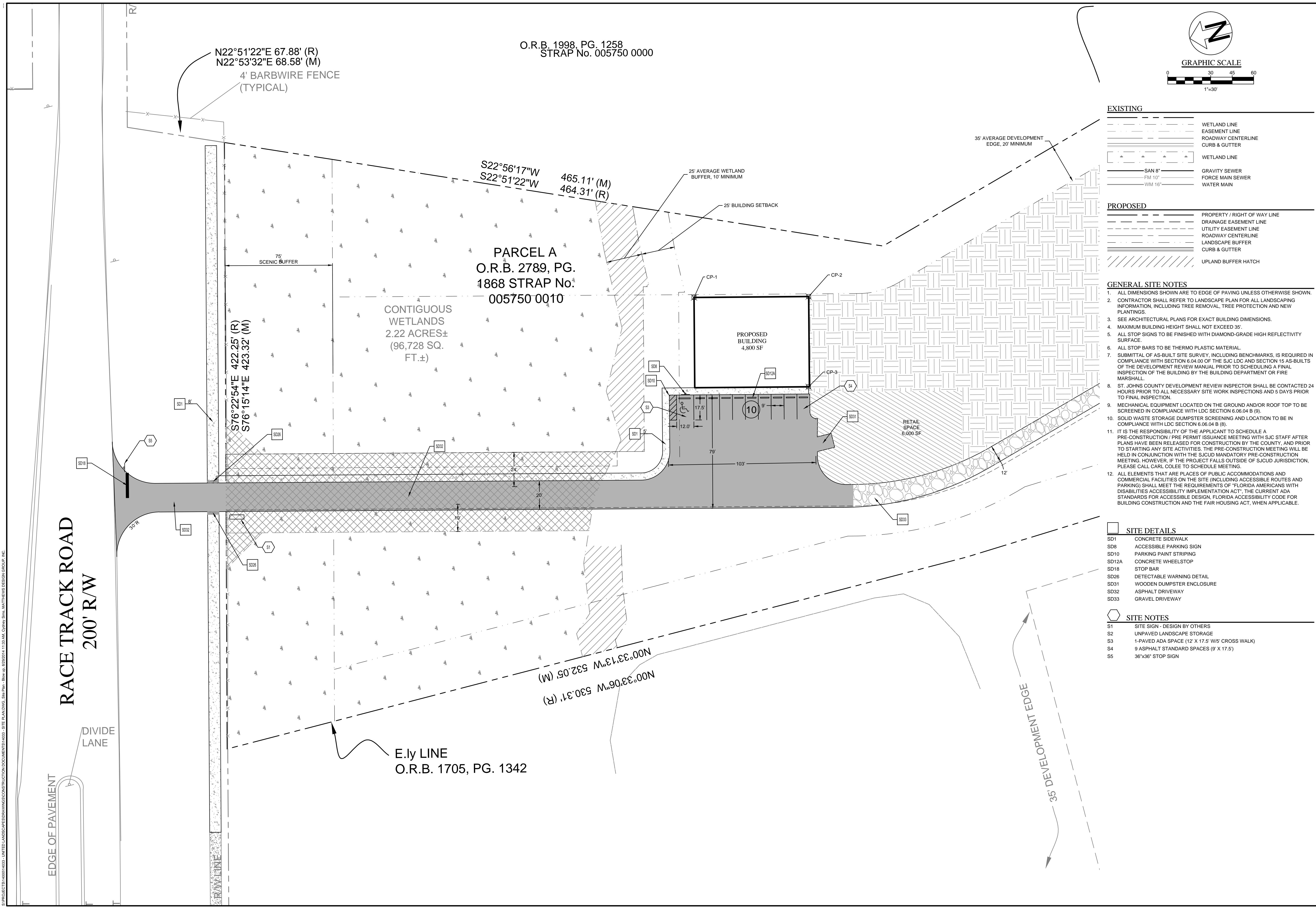
REVISIONS

NO.	DATE	DESCRIPTION
1	7-24-14	REVISED PER SJC AND JEA COMMENTS
2	8-29-14	REVISED PER SJC AND JEA COMMENTS

RAM: CCS
 GEC
 DATE: 08-22-14
 JOB NO.: 14033

SHEET No.: **4**
 OF 17

PROJECTS: 14001-14003 - UNITED LANDSCAPES/CONSTRUCTION DOCUMENTS: 14003 - SITE PLAN: DWG. L1, 8/20/14, 1:33 AM, Created: Sim, MATTHEWS DESIGN GROUP, INC.



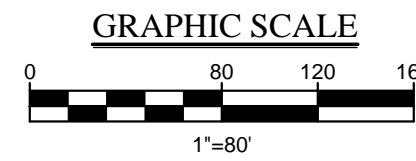
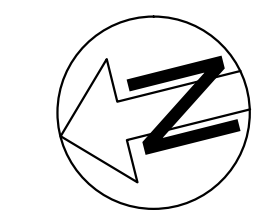
EXISTING	
	WETLAND LINE
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	WATER MAIN
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	PROPERTY / RIGHT OF WAY LINE
	DRAINAGE EASEMENT LINE
	UTILITY EASEMENT LINE
	ROADWAY CENTERLINE
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 - ALL STOP SIGNS TO BE FINISHED WITH DIAMOND-GRADE HIGH REFLECTIVITY SURFACE.
 - ALL STOP BARS TO BE THERMO PLASTIC MATERIAL.
 - SUBMITTAL OF AS-BUILT SITE SURVEY, INCLUDING BENCHMARKS, IS REQUIRED IN COMPLIANCE WITH SECTION 6.04.00 OF THE SJC LDC AND SECTION 15 AS-BUILTS OF THE DEVELOPMENT REVIEW MANUAL PRIOR TO SCHEDULING A FINAL INSPECTION OF THE BUILDING BY THE BUILDING DEPARTMENT OR FIRE MARSHALL.
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 - SOLID WASTE STORAGE DUMPSTER SCREENING AND LOCATION TO BE IN COMPLIANCE WITH LDC SECTION 6.06.04 B (8).
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S5	36"X36" STOP SIGN

REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CAP#6555 FL#68425		
REVISIONS		
NO.	DATE	DESCRIPTION
1	7-24-14	REVISED PER SJC AND JEA COMMENTS
2	8-29-14	REVISED PER SJC AND JEA COMMENTS
DRAWN BY: RAM		DATE: 08-22-14
CHECKED BY: CCS		JOB NO.: 14033
DESIGNED BY: GEC		
MATTHEWS DESIGN GROUP, INC. P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FLORIDA 32084 PHONE: 904.826.1334 FAX: 904.826.4547 INFO@MATTHEWSDESIGN.NET		
SITE PLAN United Landscapes ST. JOHNS COUNTY, FLORIDA PREPARED FOR UNITED LANDSCAPES, INC.		
SHEET No. 5		OF 17

S:\PROJECTS\14001\14033 - UNITED LANDSCAPES\DRAWINGS\CONSTRUCTION DOCUMENTS\14033 - SITE PLAN.DWG, Site Plan - Show Job, 8/29/2014 11:33 AM, Company: Stems, MATTHEWS DESIGN GROUP, INC.



EXISTING

---	PROPERTY / RIGHT OF WAY LINE
- - - -	WETLAND LINE
- · - · -	EASEMENT LINE
=====	ROADWAY CENTERLINE
=====	CURB & GUTTER
-----	WETLAND LINE
-----	MAJOR CONTOUR
-----	MINOR CONTOUR
XX.XX	SPOT ELEVATION

PROPOSED

---	PROPERTY / RIGHT OF WAY LINE
- - - -	DRAINAGE EASEMENT LINE
- · - · -	UTILITY EASEMENT LINE
=====	ROADWAY CENTERLINE
=====	LANDSCAPE BUFFER
=====	CURB & GUTTER
-----	UPLAND BUFFER (25' AVERAGE / 10' MINIMUM)
XX.XX TO XX.XX FT	SPOT ELEVATION
-----	MAJOR CONTOUR
-----	MINOR CONTOUR
---	STORM PIPE
→	SLOPE INDICATOR
→	FLOW ARROW
→	DRAINAGE SWALE / FLOW DIRECTION

GENERAL GRADING NOTES

- PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF DESIGN CONFLICTS.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED:
 - ALL STORM BEDDING SHALL BE INSTALLED PER DETAIL GD15 TYPE 'B' ON SHEET 11, UNLESS CONDITIONS IN THE FIELD DICTATE TYPE 'A' BEDDING.
 - ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND ENDS OF MITERED END SECTIONS.

GRADING DETAILS

GD2	DISCHARGE STRUCTURE
GD3	MITERED END SECTION
GD9	SILT FENCE
GD10	PRECAST TYPE 'C' INLET
GD12	POND CROSS SECTION

GRADING DETAILS

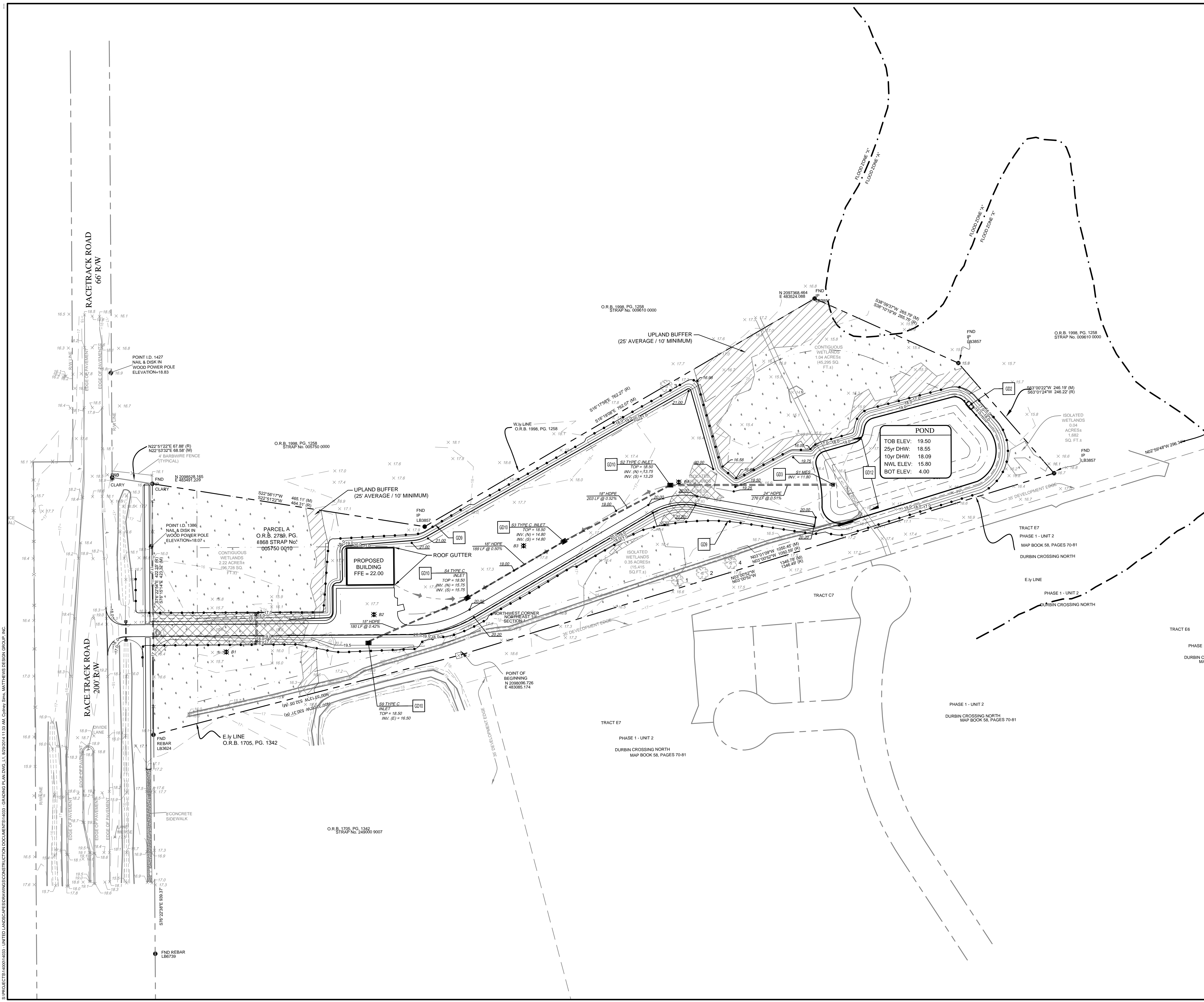
G1	CONNECT PROPOSED SIDEWALK TO EXISTING SIDEWALK
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EROSION CONTROL NOTES

- NO CONSTRUCTION ACTIVITY INVOLVING EXCAVATION, DEMOLITION OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS SHALL BEGIN WITHOUT AN APPROVED PLAN AND/OR WRITTEN CONSENT BY THE ST. JOHNS COUNTY ENGINEERING DEPARTMENT.
- THE CONTRACTOR SHALL ESTABLISH ALL EROSION CONTROL MEASURES PRIOR TO EXCAVATION, DEMOLITION OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DEVELOPMENT OF THE PROJECT AND SHALL NOT REMOVE ANY EROSION CONTROL MEASURE UNTIL ALL CONTRIBUTING SITE SURFACES AND VEGETATION HAVE BEEN ESTABLISHED AND STABILIZED.
- THE CONTRACTOR SHALL PERFORM DAILY CLEAN UP OF ALL SEDIMENT AND DEBRIS WHICH LEAVES THE PROJECT SITE(S).
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL COUNTY STORM DRAIN SYSTEMS WHICH RECEIVES SEDIMENT OR DEBRIS AS A RESULT OF CONSTRUCTION, STOCKPILING OR DISPOSAL ACTIVITIES. CLEANING OF THE STORM DRAIN WILL OCCUR FROM THE POINT OF INTERCEPT TO THE OUTFALL IF THE SYSTEM OR TO A POINT WITHIN THE SYSTEM WHERE SEDIMENT OR DEBRIS IS NO LONGER PRESENT.
- RAIN DAYS CLAIMED BY THE CONTRACTOR. DO NOT EXCUSE THE CONTRACTOR OF DAILY INSPECTION AND MAINTENANCE OF ALL SITE EROSION CONTROL MEASURES AND CLEANUP.
- ALL SEDIMENT COLLECTION SYSTEMS MUST BE MUCKED OUT WHEN 1/3 FULL. MUCKED SEDIMENT MUST BE PROPERLY CONTAINED AND DISPOSED.

BORING TABLE

BORING NUMBER	EG ELEV.	OGW ELEV.	SHGW ELEV.
B1	15.9±	15.3±	15.3±
B2	17.7±	14.9±	14.9±
B3	17.7±	14.2±	14.2±
B4	16.5±	15.2±	15.2±
B5	16.7±	15.9±	15.9±



REVISIONS

NO.	DATE	DESCRIPTION
1	7-24-14	REVISED PER S.I.C. AND J.E.F. COMMENTS
2	8-29-14	REVISED PER S.I.C. AND J.E.F. COMMENTS

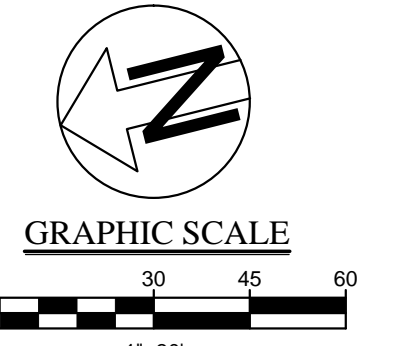
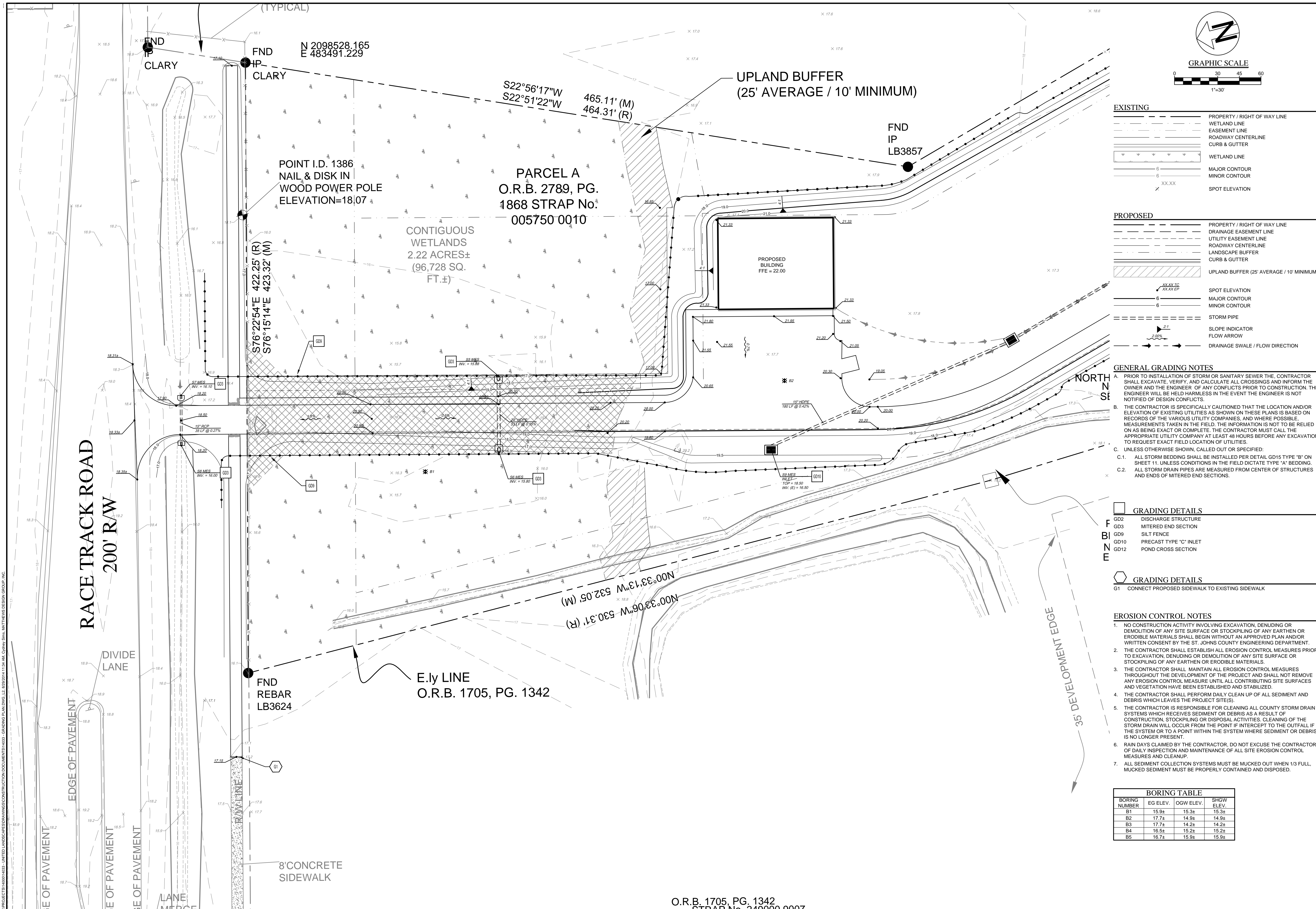
DRAWN BY: RAM
 CHECKED BY: CCS
 DATE: 08-22-14
 JOB NO.: 14033

MATTHEWS DESIGN GROUP, INC.
 P.O. BOX 3126, 7 WALDO STREET
 ST. AUGUSTINE, FLORIDA 32084
 PHONE: 904.826.1334
 FAX: 904.826.4547
 INFO@MATTHEWSDESIGN.NET

GRADING PLAN
United Landscapes
 ST. JOHNS COUNTY, FLORIDA
 PREPARED FOR: UNITED LANDSCAPES, INC.

REGISTERED ENGINEER
 ROB A. MATTHEWS III, P.E.
 CA#6555 FL#65425

SHEET No.: **6**
 OF 17



EXISTING		PROPERTY / RIGHT OF WAY LINE	
[Symbol]	WETLAND LINE	[Symbol]	UTILITY EASEMENT LINE
[Symbol]	EASEMENT LINE	[Symbol]	ROADWAY CENTERLINE
[Symbol]	ROADWAY CENTERLINE	[Symbol]	CURB & GUTTER
[Symbol]	CURB & GUTTER	[Symbol]	WETLAND LINE
[Symbol]	WETLAND LINE	[Symbol]	MAJOR CONTOUR
[Symbol]	MAJOR CONTOUR	[Symbol]	MINOR CONTOUR
[Symbol]	MINOR CONTOUR	[Symbol]	SPOT ELEVATION
[Symbol]	SPOT ELEVATION	[Symbol]	

PROPOSED		PROPERTY / RIGHT OF WAY LINE	
[Symbol]	DRAINAGE EASEMENT LINE	[Symbol]	UTILITY EASEMENT LINE
[Symbol]	UTILITY EASEMENT LINE	[Symbol]	ROADWAY CENTERLINE
[Symbol]	ROADWAY CENTERLINE	[Symbol]	LANDSCAPE BUFFER
[Symbol]	LANDSCAPE BUFFER	[Symbol]	CURB & GUTTER
[Symbol]	CURB & GUTTER	[Symbol]	UPLAND BUFFER (25' AVERAGE / 10' MINIMUM)
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[Symbol]	SPOT ELEVATION	[Symbol]	MAJOR CONTOUR
[Symbol]	MAJOR CONTOUR	[Symbol]	MINOR CONTOUR
[Symbol]	MINOR CONTOUR	[Symbol]	STORM PIPE
[Symbol]	STORM PIPE	[Symbol]	SLOPE INDICATOR
[Symbol]	SLOPE INDICATOR	[Symbol]	FLOW ARROW
[Symbol]	FLOW ARROW	[Symbol]	DRAINAGE SWALE / FLOW DIRECTION
[Symbol]	DRAINAGE SWALE / FLOW DIRECTION		

GENERAL GRADING NOTES

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B. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.

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GD3	MITERED END SECTION
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GD10	PRECAST TYPE 'C' INLET
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EROSION CONTROL NOTES

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REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CAP6555 FL168425
REVISIONS
NO. DATE DESCRIPTION
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PHONE: 904.826.1334
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8: PROJECTS 14001 14033 - UNITED LANDSCAPES/ST. JOHNS COUNTY ENGINEERING DEPARTMENT 14033 - GRADING PLAN 1342 - O.R.B. 1705, PG. 1342 - STRAP No. 249000 9007
 9: PROJECTS 14001 14033 - UNITED LANDSCAPES/ST. JOHNS COUNTY ENGINEERING DEPARTMENT 14033 - GRADING PLAN 1342 - O.R.B. 1705, PG. 1342 - STRAP No. 249000 9007
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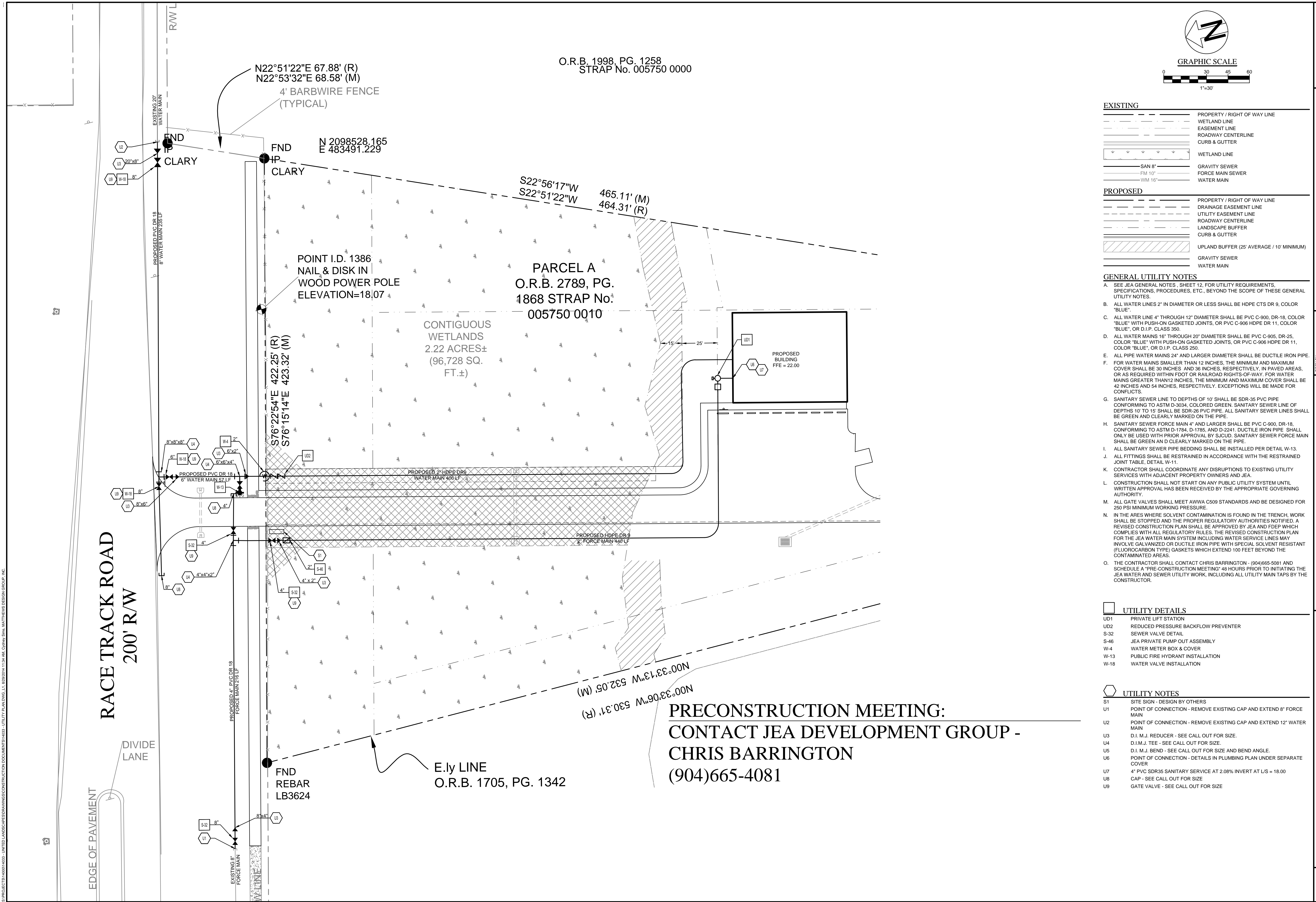
O.R.B. 1705, PG. 1342
STRAP No. 249000 9007

GRADING PLAN

United Landscapes
ST. JOHNS COUNTY, FLORIDA

PREPARED FOR:
UNITED LANDSCAPES, INC.

S:\PROJECTS\14001\14003 - UNITED LANDSCAPES\DRAWINGS\CONSTRUCTION DOCUMENTS\14003 - UTILITY PLAN DWG.L1_18092014.11:54 AM_Correy Simm_MATTHEWS DESIGN GROUP, INC.



EXISTING

---	PROPERTY / RIGHT OF WAY LINE
---	WETLAND LINE
---	EASEMENT LINE
---	ROADWAY CENTERLINE
---	CURB & GUTTER
---	WETLAND LINE
---	SAN 8"
---	FM 10"
---	WM 16"
---	GRAVITY SEWER
---	FORCE MAIN SEWER
---	WATER MAIN

PROPOSED

---	PROPERTY / RIGHT OF WAY LINE
---	DRAINAGE EASEMENT LINE
---	UTILITY EASEMENT LINE
---	ROADWAY CENTERLINE
---	LANDSCAPE BUFFER
---	CURB & GUTTER
---	UPLAND BUFFER (25' AVERAGE / 10' MINIMUM)
---	GRAVITY SEWER
---	WATER MAIN

- GENERAL UTILITY NOTES**
- SEE JEA GENERAL NOTES, SHEET 12, FOR UTILITY REQUIREMENTS, SPECIFICATIONS, PROCEDURES, ETC., BEYOND THE SCOPE OF THESE GENERAL UTILITY NOTES.
 - ALL WATER LINES 2" IN DIAMETER OR LESS SHALL BE HDPE CTS DR 9, COLOR "BLUE".
 - ALL WATER LINE 4" THROUGH 12" DIAMETER SHALL BE PVC C-900, DR-18, COLOR "BLUE" WITH PUSH-ON GASKETED JOINTS, OR PVC C-906 HDPE DR 11, COLOR "BLUE", OR D.I.P. CLASS 350.
 - ALL WATER MAINS 16" THROUGH 20" DIAMETER SHALL BE PVC C-905, DR-25, COLOR "BLUE" WITH PUSH-ON GASKETED JOINTS, OR PVC C-906 HDPE DR 11, COLOR "BLUE", OR D.I.P. CLASS 350.
 - ALL PIPE WATER MAINS 24" AND LARGER DIAMETER SHALL BE DUCTILE IRON PIPE.
 - FOR WATER MAINS SMALLER THAN 12 INCHES, THE MINIMUM AND MAXIMUM COVER SHALL BE 30 INCHES AND 36 INCHES, RESPECTIVELY, IN PAVED AREAS, OR AS REQUIRED WITHIN FOOT OR RAILROAD RIGHTS-OF-WAY. FOR WATER MAINS GREATER THAN 12 INCHES, THE MINIMUM AND MAXIMUM COVER SHALL BE 42 INCHES AND 54 INCHES, RESPECTIVELY. EXCEPTIONS WILL BE MADE FOR CONFLICTS.
 - SANITARY SEWER LINE TO DEPTHS OF 10' SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034, COLORED GREEN. SANITARY SEWER LINE OF DEPTHS 10' TO 16' SHALL BE SDR-26 PVC PIPE. ALL SANITARY SEWER LINES SHALL BE GREEN AND CLEARLY MARKED ON THE PIPE.
 - SANITARY SEWER FORCE MAIN 4" AND LARGER SHALL BE PVC C-900, DR-18, CONFORMING TO ASTM D-1784, D-1785, AND D-2241. DUCTILE IRON PIPE SHALL ONLY BE USED WITH PRIOR APPROVAL BY SJCDJ. SANITARY SEWER FORCE MAIN SHALL BE GREEN AND CLEARLY MARKED ON THE PIPE.
 - ALL SANITARY SEWER PIPE BEDDING SHALL BE INSTALLED PER DETAIL W-13.
 - ALL FITTINGS SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINED JOINT TABLE, DETAIL W-11.
 - CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS AND JEA.
 - CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE APPROPRIATE GOVERNING AUTHORITY.
 - ALL GATE VALVES SHALL MEET AWWA C509 STANDARDS AND BE DESIGNED FOR 250 PSI MINIMUM WORKING PRESSURE.
 - IN THE AREAS WHERE SOLVENT CONTAMINATION IS FOUND IN THE TRENCH, WORK SHALL BE STOPPED AND THE PROPER REGULATORY AUTHORITIES NOTIFIED. A REVISED CONSTRUCTION PLAN SHALL BE APPROVED BY JEA AND FDPF WHICH COMPLIES WITH ALL REGULATORY RULES. THE REVISED CONSTRUCTION PLAN FOR THE JEA WATER MAIN SYSTEM INCLUDING WATER SERVICE LINES MAY INVOLVE GALVANIZED OR DUCTILE IRON PIPE WITH SPECIAL SOLVENT RESISTANT (FLUOROCARBON TYPE) GASKETS WHICH EXTEND 100 FEET BEYOND THE CONTAMINATED AREAS.
 - THE CONTRACTOR SHALL CONTACT CHRIS BARRINGTON - (904)665-5081 AND SCHEDULE A "PRE-CONSTRUCTION MEETING" 48 HOURS PRIOR TO INITIATING THE JEA WATER AND SEWER UTILITY WORK, INCLUDING ALL UTILITY MAIN TAPS BY THE CONSTRUCTOR.

UTILITY DETAILS

UD1	PRIVATE LIFT STATION
UD2	REDUCED PRESSURE BACKFLOW PREVENTER
S-32	SEWER VALVE DETAIL
S-46	JEA PRIVATE PUMP OUT ASSEMBLY
W-4	WATER METER BOX & COVER
W-13	PUBLIC FIRE HYDRANT INSTALLATION
W-18	WATER VALVE INSTALLATION

- UTILITY NOTES**
- SITE SIGN - DESIGN BY OTHERS
 - POINT OF CONNECTION - REMOVE EXISTING CAP AND EXTEND 8' FORCE MAIN
 - POINT OF CONNECTION - REMOVE EXISTING CAP AND EXTEND 12' WATER MAIN
 - D.I. M.J. REDUCER - SEE CALL OUT FOR SIZE.
 - D.I. M.J. TEE - SEE CALL OUT FOR SIZE.
 - D.I. M.J. BEND - SEE CALL OUT FOR SIZE AND BEND ANGLE.
 - POINT OF CONNECTION - DETAILS IN PLUMBING PLAN UNDER SEPARATE COVER
 - 4" PVC SDR35 SANITARY SERVICE AT 2.08% INVERT AT L/S = 18.00
 - CAP - SEE CALL OUT FOR SIZE
 - GATE VALVE - SEE CALL OUT FOR SIZE

PRECONSTRUCTION MEETING:
CONTACT JEA DEVELOPMENT GROUP -
CHRIS BARRINGTON
(904)665-4081

REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CAP#6555 FL#65425												
NO.	DATE	DESCRIPTION										
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<table border="1"> <tr> <td>DESIGNED BY:</td> <td>RAM</td> </tr> <tr> <td>DRAWN BY:</td> <td>CCS</td> </tr> <tr> <td>CHECKED BY:</td> <td>GEC</td> </tr> <tr> <td>DATE:</td> <td>08-22-14</td> </tr> <tr> <td>JOB NO.:</td> <td>14003</td> </tr> </table>			DESIGNED BY:	RAM	DRAWN BY:	CCS	CHECKED BY:	GEC	DATE:	08-22-14	JOB NO.:	14003
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MATTHEWS DESIGN GROUP, INC. P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FLORIDA 32084 PHONE: 904.826.1334 FAX: 904.826.4547 INFO@MATTHEWSDESIGN.NET												
UTILITY PLAN United Landscapes ST. JOHNS COUNTY, FLORIDA PREPARED FOR UNITED LANDSCAPES, INC.												
SHEET No. 8												
OF 17												

TREE REQUIREMENT CALCULATIONS

MINIMUM TREE REQUIREMENT = 80 INCHES/ ACRE
 DISTURBED SITE AREA = 5.07 ACRES
 MINIMUM TREES INCHES = 406 INCHES
 REQUIRED = 406
 PRESERVED TREES INCHES + PLANTED TREE INCHES = TOTAL TREE INCHES
 36 + 372 = 408 REQUIREMENT MET

SIC TREE MITIGATION REQUIREMENT
 PLANTED TREE INCHES MUST BE ≥ REMOVED PROTECTED TREE INCHES
 REMOVED PROTECTED TREE INCHES = 0 INCHES
 PLANTED TREE INCHES = 372 INCHES
 372 ≥ 0 REQUIREMENT MET

PLANTED SHRUB TABLE

SYMBOL	KEY	QUANTITY	COMMON NAME BOTANICAL NAME	SIZE	REMARKS
SA	SA	230	SPARTINA SPARTINA ALTERNIFLORA	1 GALLON	30" SPACING

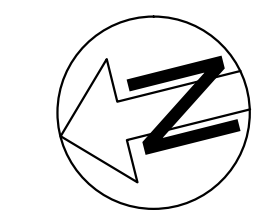
TREE INVENTORY

TREE NUMBER	TREE SPECIE	TREE DBH (IN)	PROPOSED PLAN OF ACTION
1	BAY	9	TO REMAIN
2	BAY	9	TO REMAIN
3	LONGLEAF PINE	8	TO REMAIN
4	BAY	10	TO REMAIN
TOTAL INCHES		36	TO REMAIN

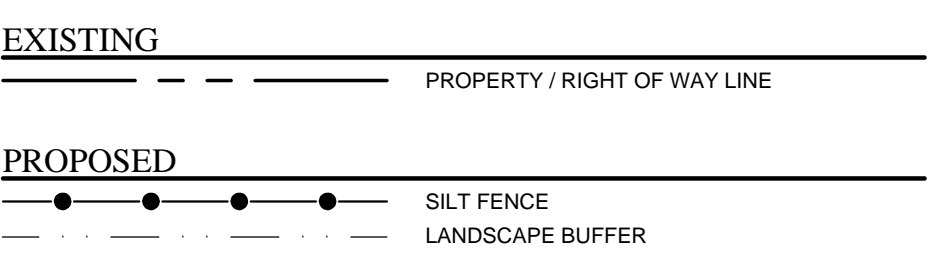
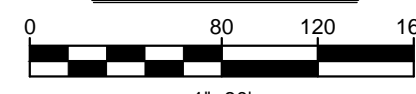
PLANTED TREE TABLE

SYMBOLS	KEY	QTY/%	COMMON NAME/ BOTANICAL NAME	SIZE	TOTAL INCHES	ROOT	REMARKS
TD	TD	35/30%	BALD CYPRESS TAXODIUM DISTICHUM	6" CAL (MIN.)	210"	B&B	BRANCHED 8'-10" HT.
QV	QV	41/35%	LIVE OAK QUERCUS VIRGINIANA	2" CAL (MIN.)	82"	B&B	BRANCHED 8'-10" HT.
AR	AR	40/35%	RED MAPLE ACER RUBRUM	2" CAL (MIN.)	80"	B&B	BRANCHED 8'-10" HT.
TREES PLANTED		116 (100%)	TOTAL TREE INCHES PLANTED		372"		

IRRIGATION SHALL BE ALL LOW VOLUME BUBBLERS FOR TREES AND OTHER LANDSCAPED AREAS
 NO HIGH VOLUME IRRIGATION IS TO BE PROVIDED



GRAPHIC SCALE



GENERAL LANDSCAPE NOTES

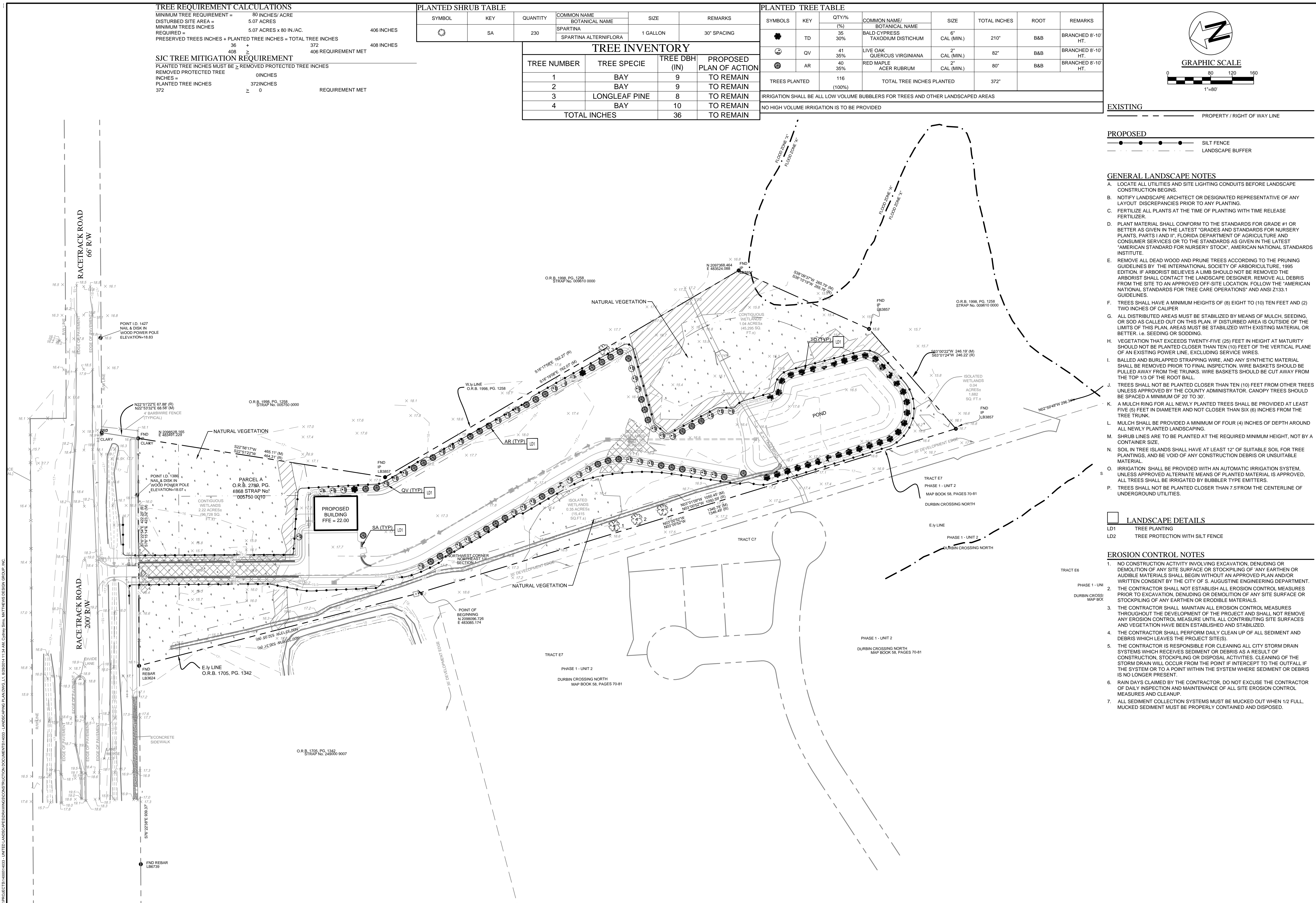
- LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE LANDSCAPE CONSTRUCTION BEGINS.
- NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING.
- FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME RELEASE FERTILIZER.
- PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR GRADE #1 OR BETTER AS GIVEN IN THE LATEST "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OR TO THE STANDARDS AS GIVEN IN THE LATEST "AMERICAN STANDARD FOR NURSERY STOCK," AMERICAN NATIONAL STANDARDS INSTITUTE.
- REMOVE ALL DEAD WOOD AND PRUNE TREES ACCORDING TO THE PRUNING GUIDELINES BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE, 1995 EDITION. IF ARBORIST BELIEVES A LIMB SHOULD NOT BE REMOVED THE ARBORIST SHALL CONTACT THE LANDSCAPE DESIGNER. REMOVE ALL BRUSH FROM THE SITE TO AN APPROVED OFF-SITE LOCATION. FOLLOW THE "AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS" AND ANSI Z133.1 GUIDELINES.
- TREES SHALL HAVE A MINIMUM HEIGHTS OF (8) EIGHT TO (10) TEN FEET AND (2) TWO INCHES OF CALIPER.
- ALL DISTRIBUTED AREAS MUST BE STABILIZED BY MEANS OF MULCH, SEEDING, OR SOD AS CALLED OUT ON THIS PLAN. IF DISTURBED AREA IS OUTSIDE OF THE LIMITS OF THIS PLAN, AREAS MUST BE STABILIZED WITH EXISTING MATERIAL OR BETTER, i.e. SEEDING OR SODDING.
- VEGETATION THAT EXCEEDS TWENTY-FIVE (25) FEET IN HEIGHT AT MATURITY SHOULD NOT BE PLANTED CLOSER THAN TEN (10) FEET OF THE VERTICAL PLANE OF AN EXISTING POWER LINE, EXCLUDING SERVICE WIRES.
- BALLED AND BURLAPPED STRAPPING WIRE, AND ANY SYNTHETIC MATERIAL SHALL BE REMOVED PRIOR TO FINAL INSPECTION. WIRE BASKETS SHOULD BE PULLED AWAY FROM THE TRUNKS. WIRE BASKETS SHOULD BE CUT AWAY FROM THE TOP 1/3 OF THE ROOT BALL.
- TREES SHALL NOT BE PLANTED CLOSER THAN TEN (10) FEET FROM OTHER TREES UNLESS APPROVED BY THE COUNTY ADMINISTRATOR. CANOPY TREES SHOULD BE SPACED A MINIMUM OF 20' TO 30'.
- A MULCH RING FOR ALL NEWLY PLANTED TREES SHALL BE PROVIDED AT LEAST FIVE (5) FEET IN DIAMETER AND NOT CLOSER THAN SIX (6) INCHES FROM THE TREE TRUNK.
- MULCH SHALL BE PROVIDED A MINIMUM OF FOUR (4) INCHES OF DEPTH AROUND ALL NEWLY PLANTED LANDSCAPING.
- SHRUB LINES ARE TO BE PLANTED AT THE REQUIRED MINIMUM HEIGHT, NOT BY A CONTAINER SIZE.
- SOIL IN TREE ISLANDS SHALL HAVE AT LEAST 12" OF SUITABLE SOIL FOR TREE PLANTINGS, AND BE VOID OF ANY CONSTRUCTION DEBRIS OR UNSUITABLE MATERIAL.
- IRRIGATION SHALL BE PROVIDED WITH AN AUTOMATIC IRRIGATION SYSTEM, UNLESS APPROVED ALTERNATE MEANS OF PLANTED MATERIAL IS APPROVED, ALL TREES SHALL BE IRRIGATED BY BUBBLER TYPE EMITTERS.
- TREES SHALL NOT BE PLANTED CLOSER THAN 7.5' FROM THE CENTERLINE OF UNDERGROUND UTILITIES.

LANDSCAPE DETAILS

- LD1 TREE PLANTING
- LD2 TREE PROTECTION WITH SILT FENCE

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- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DEVELOPMENT OF THE PROJECT AND SHALL NOT REMOVE ANY EROSION CONTROL MEASURE UNTIL ALL CONTRIBUTING SITE SURFACES AND VEGETATION HAVE BEEN ESTABLISHED AND STABILIZED.
- THE CONTRACTOR SHALL PERFORM DAILY CLEAN UP OF ALL SEDIMENT AND DEBRIS WHICH LEAVES THE PROJECT SITES.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL CITY STORM DRAIN SYSTEMS WHICH RECEIVES SEDIMENT OR DEBRIS AS A RESULT OF CONSTRUCTION, STOCKPILING OR DISPOSAL ACTIVITIES. CLEANING OF THE STORM DRAIN WILL OCCUR FROM THE POINT OF INTERCEPT TO THE OUTFALL IF THE SYSTEM OR TO A POINT WITHIN THE SYSTEM WHERE SEDIMENT OR DEBRIS IS NO LONGER PRESENT.
- RAIN DAYS CLAIMED BY THE CONTRACTOR, DO NOT EXCLUDE THE CONTRACTOR OF DAILY INSPECTION AND MAINTENANCE OF ALL SITE EROSION CONTROL MEASURES AND CLEANUP.
- ALL SEDIMENT COLLECTION SYSTEMS MUST BE MUCKED OUT WHEN 1/2 FULL. MUCKED SEDIMENT MUST BE PROPERLY CONTAINED AND DISPOSED.



REVISIONS

NO.	DATE	DESCRIPTION
1	7-24-14	REVISED PER S.I.C. AND J.E.C. COMMENTS
2	8-29-14	REVISED PER S.I.C. AND J.E.C. COMMENTS

BY: [Signature]

DATE: 08-22-14

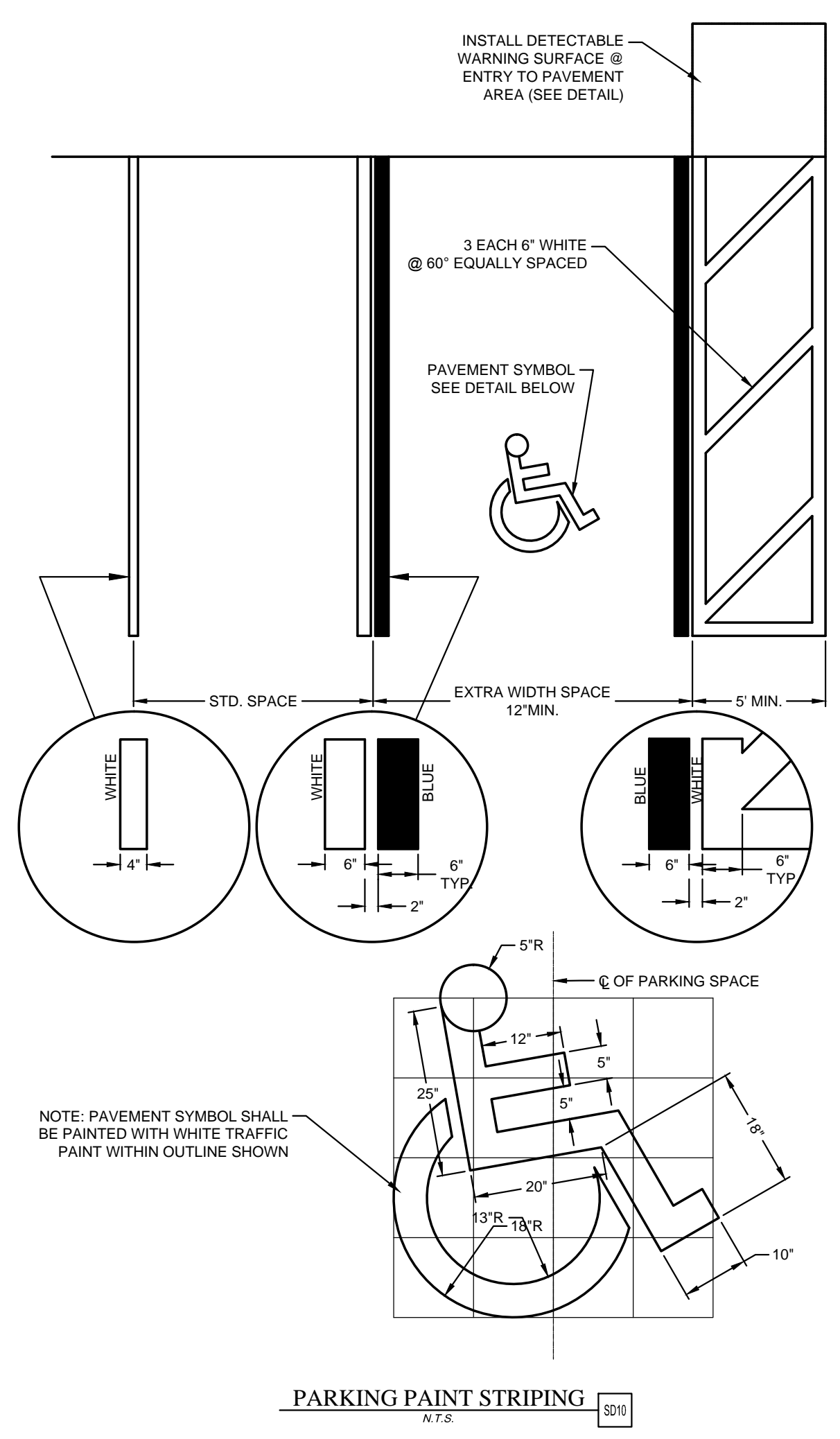
PROJECT NO.: 14003

MATTHEWS DESIGN GROUP, INC.
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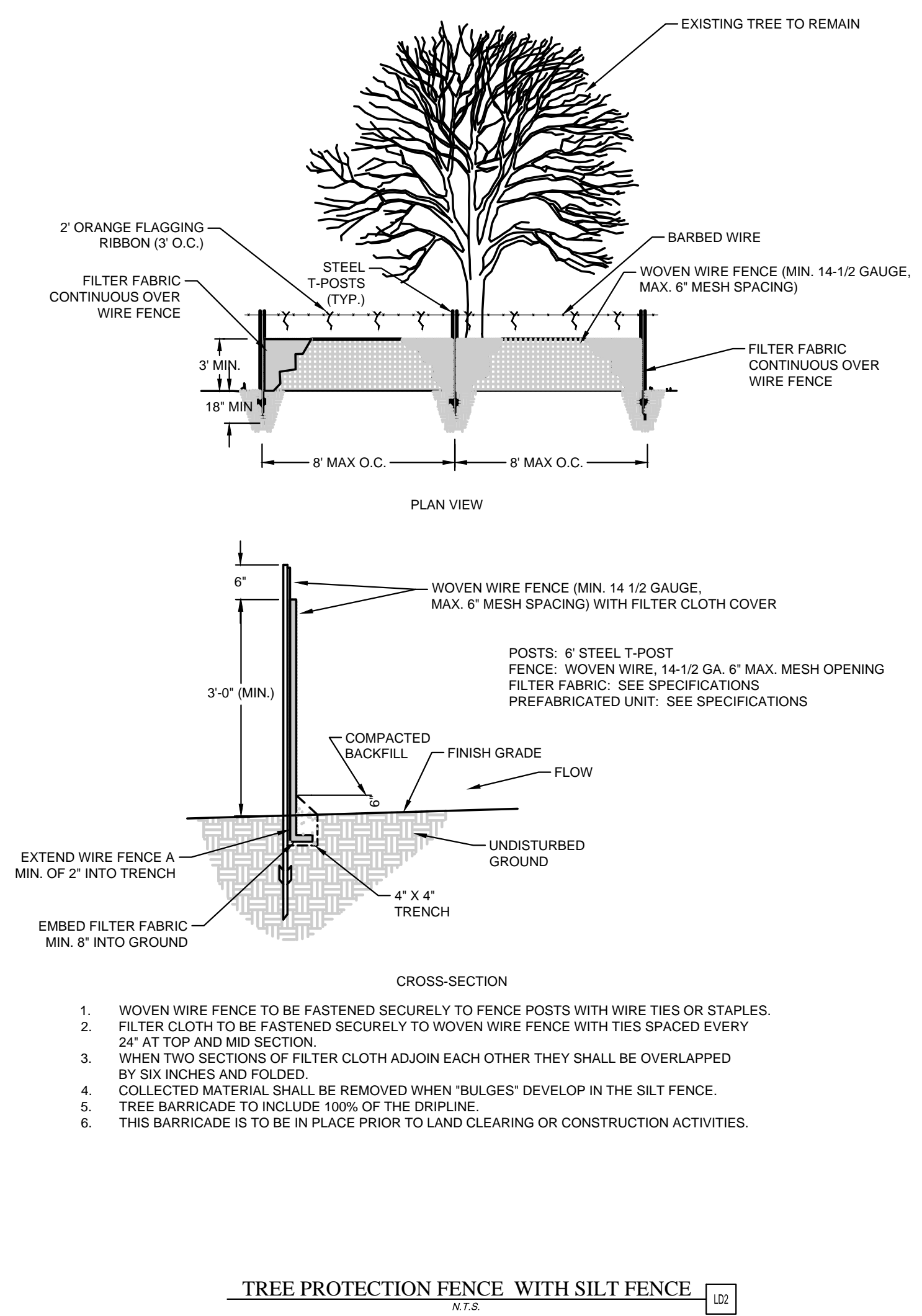
LANDSCAPE PLAN
 United Landscapes
 ST. JOHNS COUNTY, FLORIDA
 PREPARED FOR
 UNITED LANDSCAPES, INC.

SHEET NO.: 9
 OF 17

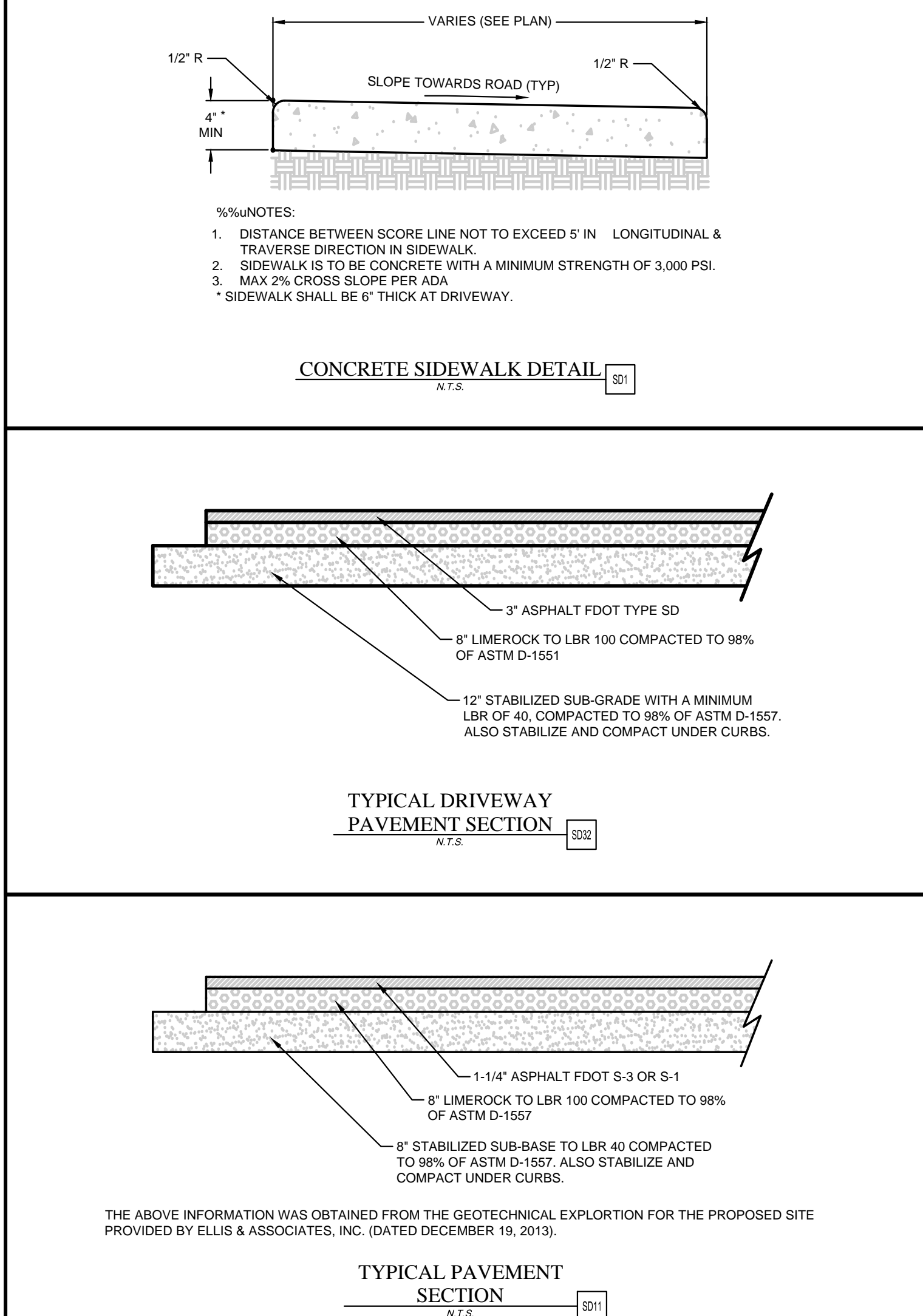
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PARKING PAINT STRIPING
N.T.S. S01

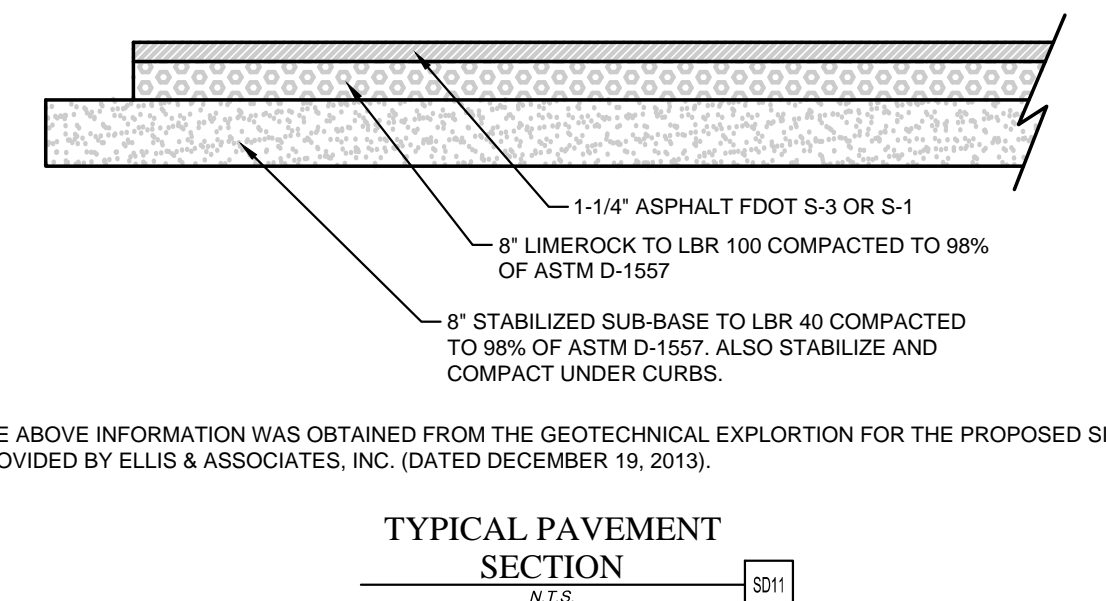


TREE PROTECTION FENCE WITH SILT FENCE
N.T.S. L01

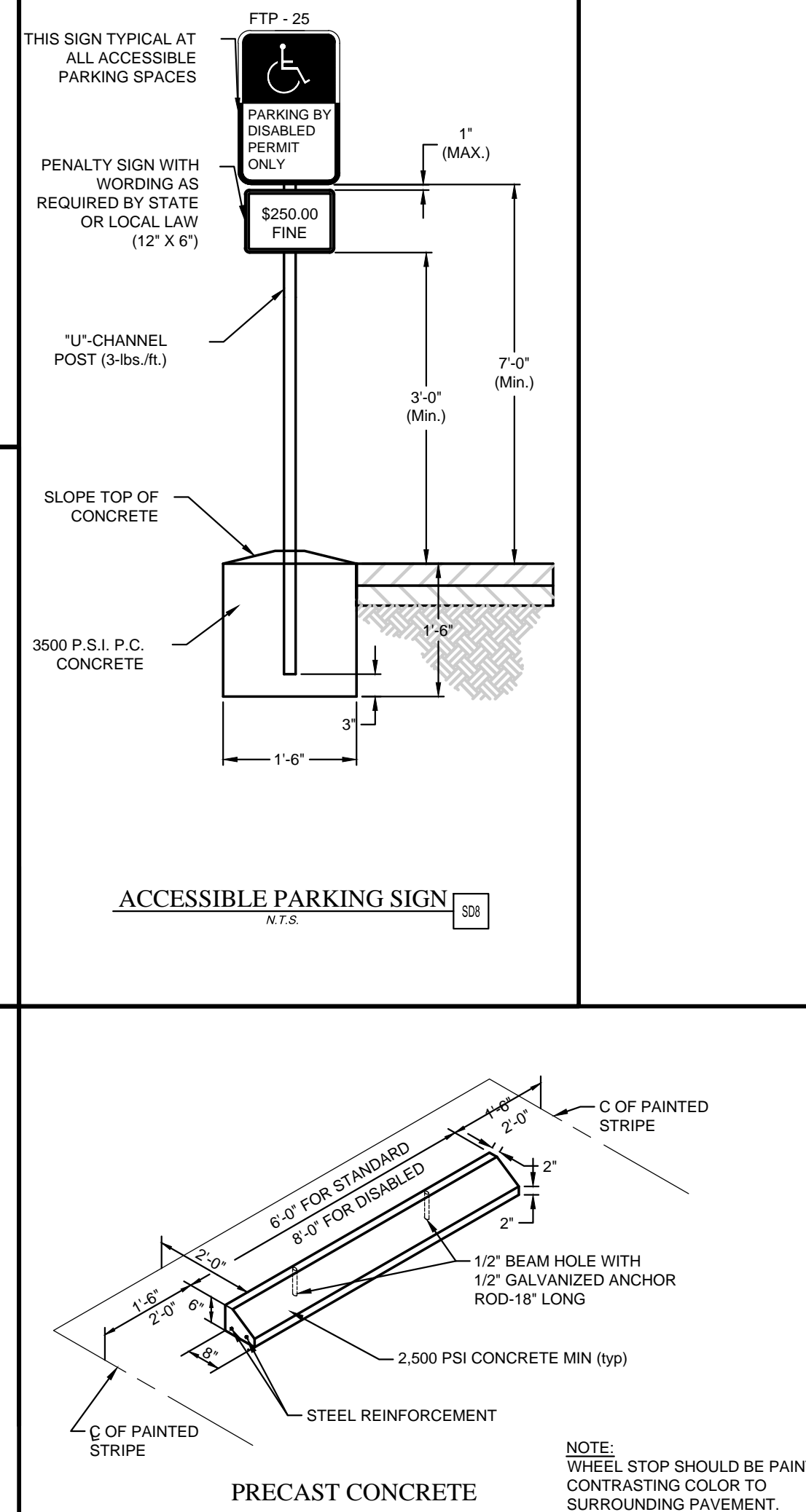


CONCRETE SIDEWALK DETAIL
N.T.S. S01

TYPICAL DRIVEWAY PAVEMENT SECTION
N.T.S. S02

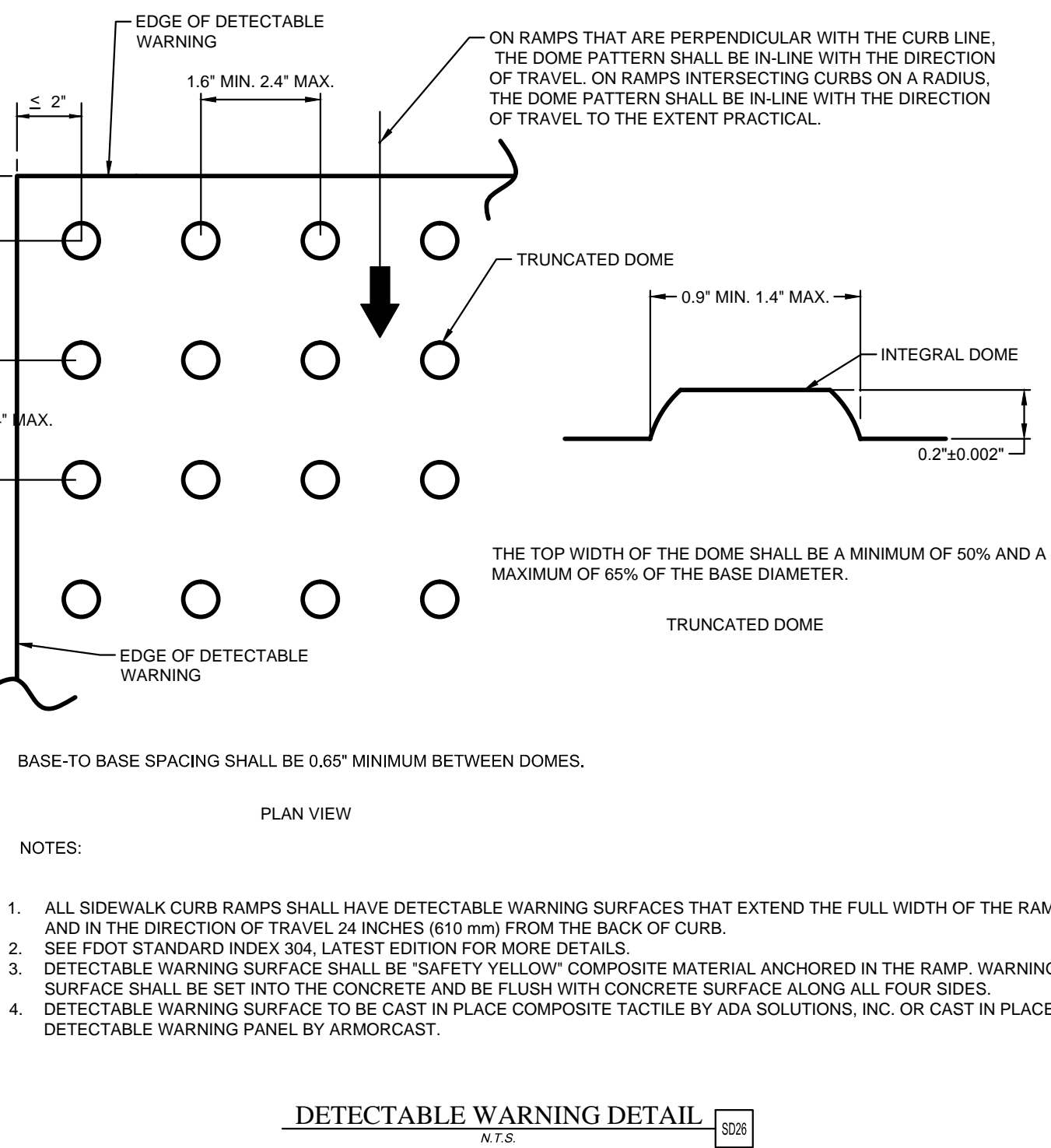


TYPICAL PAVEMENT SECTION
N.T.S. S01

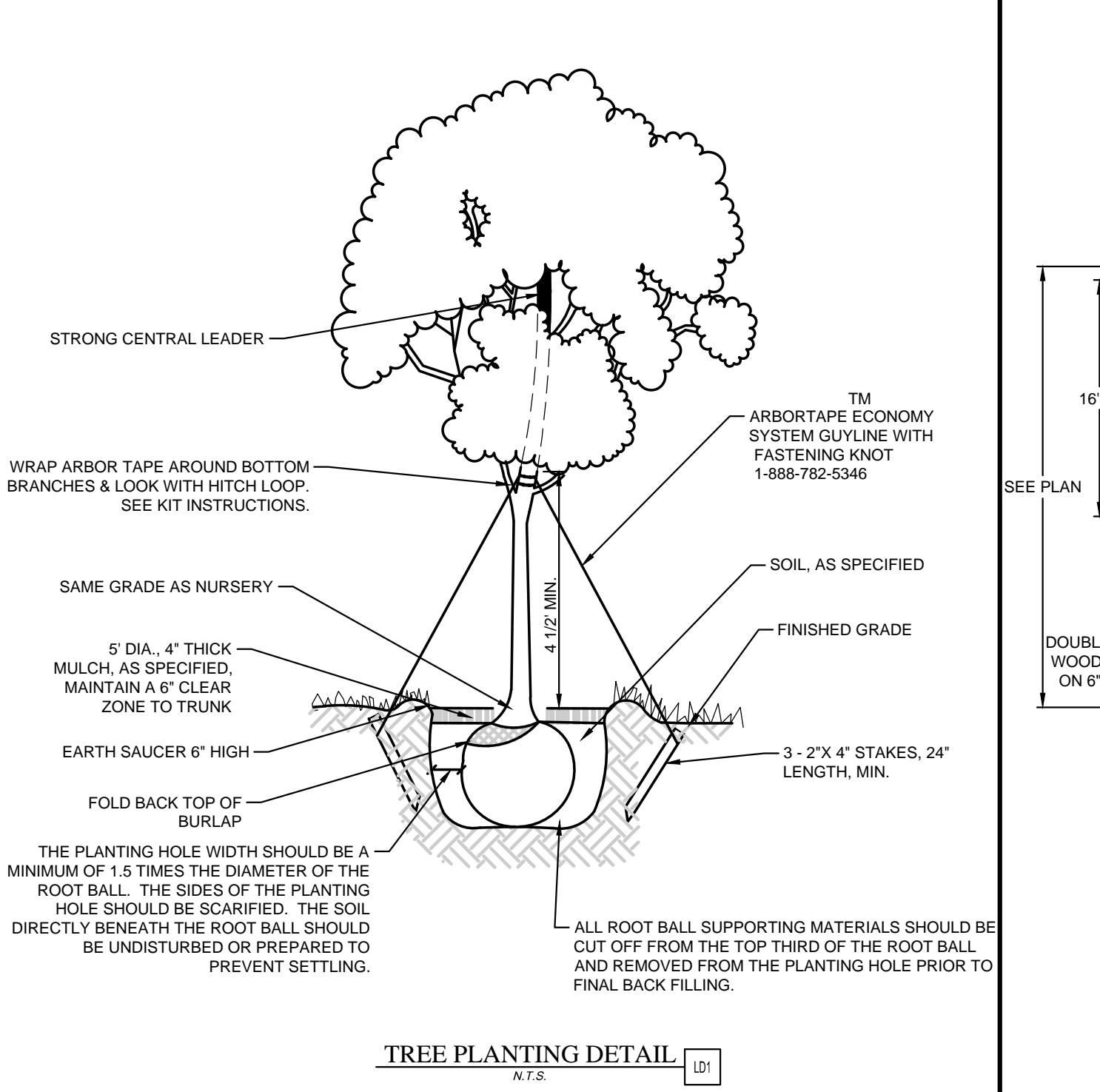


ACCESSIBLE PARKING SIGN
N.T.S. S08

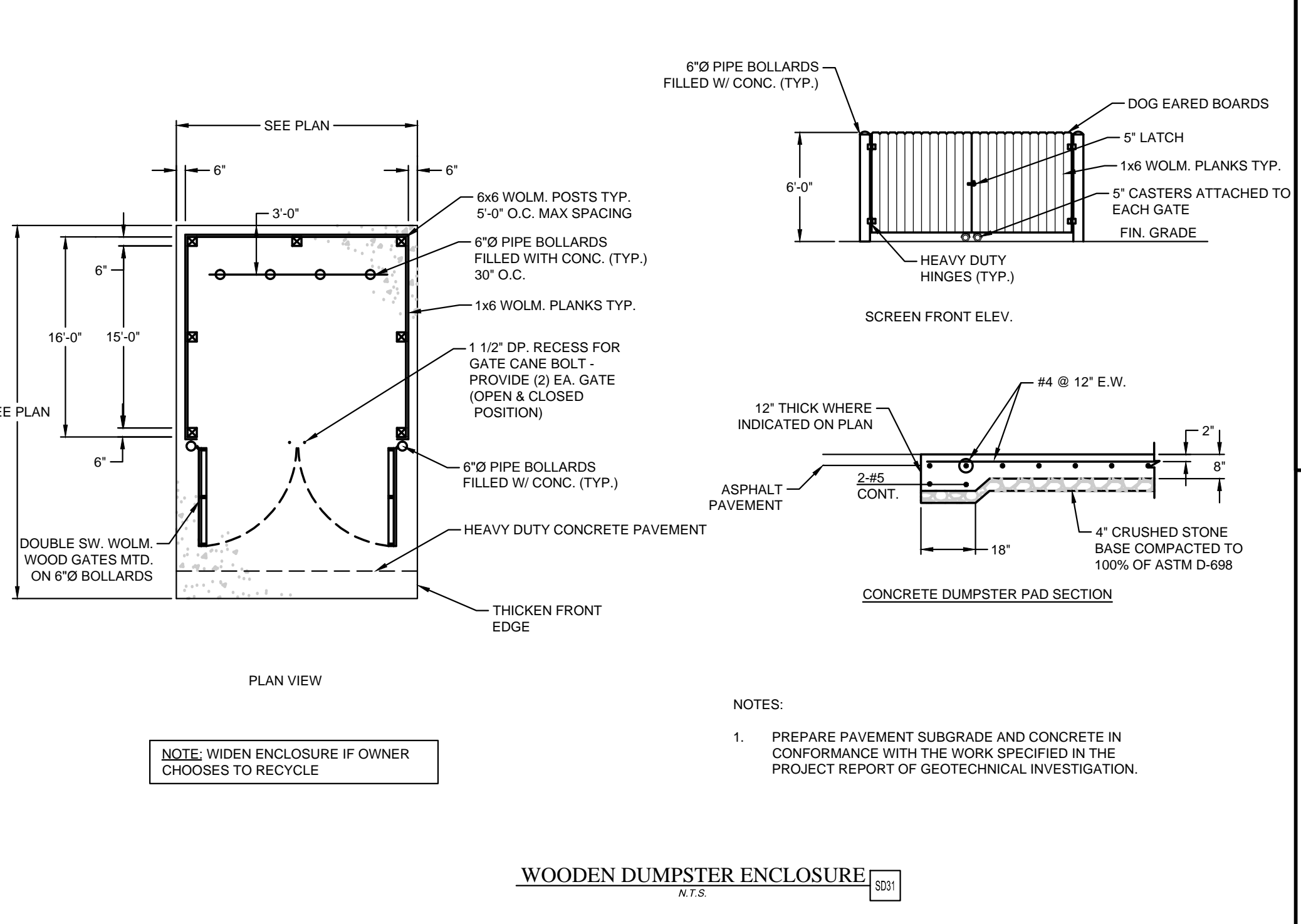
PRECAST CONCRETE WHEEL STOP
N.T.S. S012



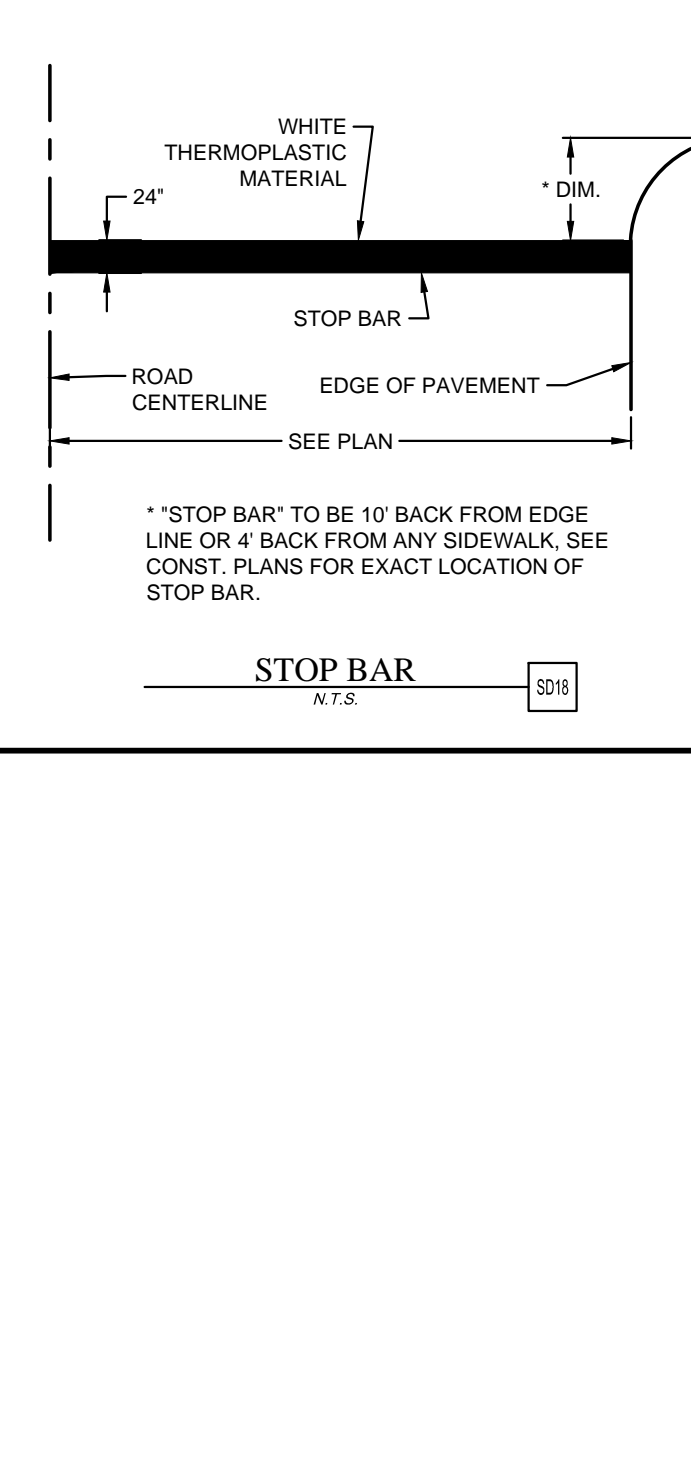
DETECTABLE WARNING DETAIL
N.T.S. S08



TREE PLANTING DETAIL
N.T.S. L01



WOODEN DUMPSTER ENCLOSURE
N.T.S. S03



STOP BAR
N.T.S. S018

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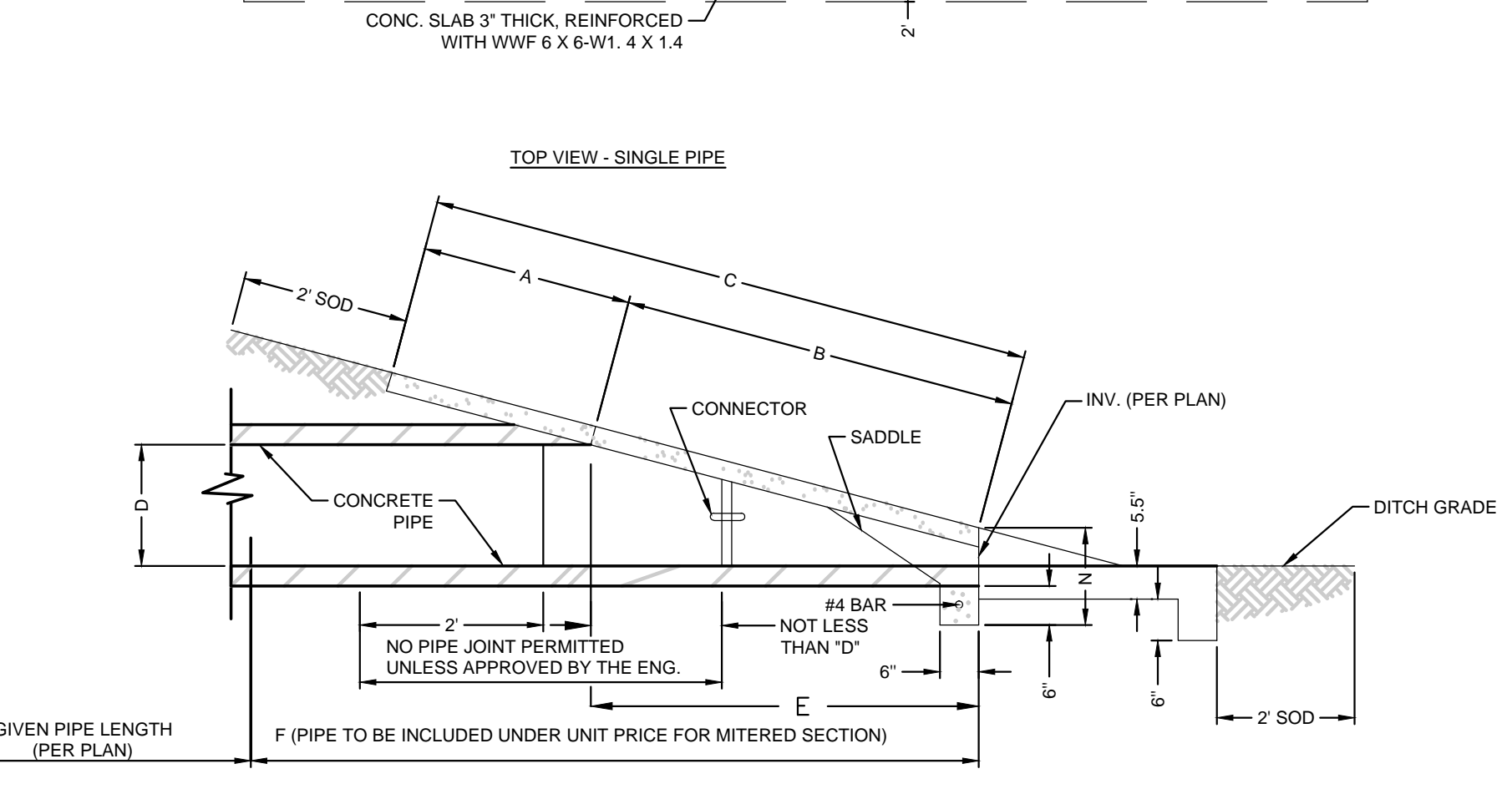
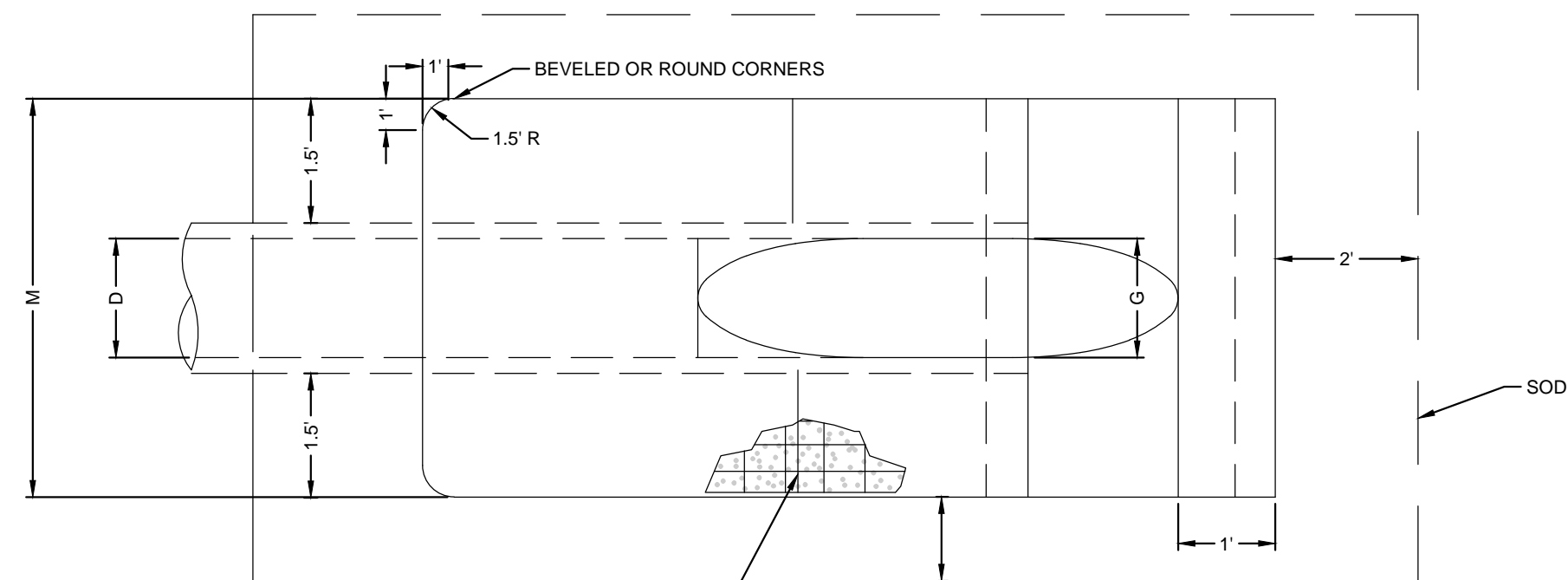
NO.	DATE	DESCRIPTION

REGISTERED ENGINEER
ROB A. MATTHEWS III, P.E.
CA26255 FL #5925

RAM: CS
GEC: 08-22-14
JOB No.: 14033

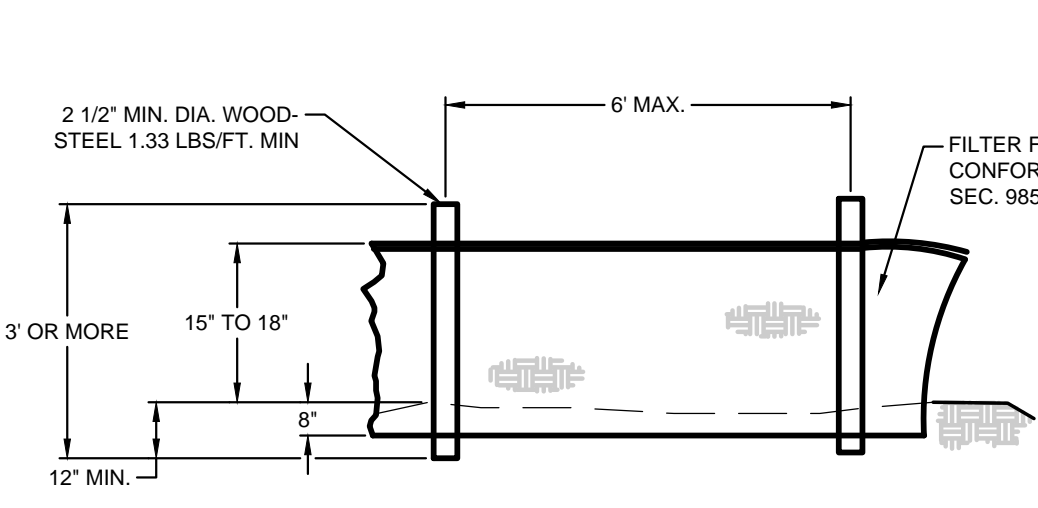
SHEET No.: **10**
OF 17

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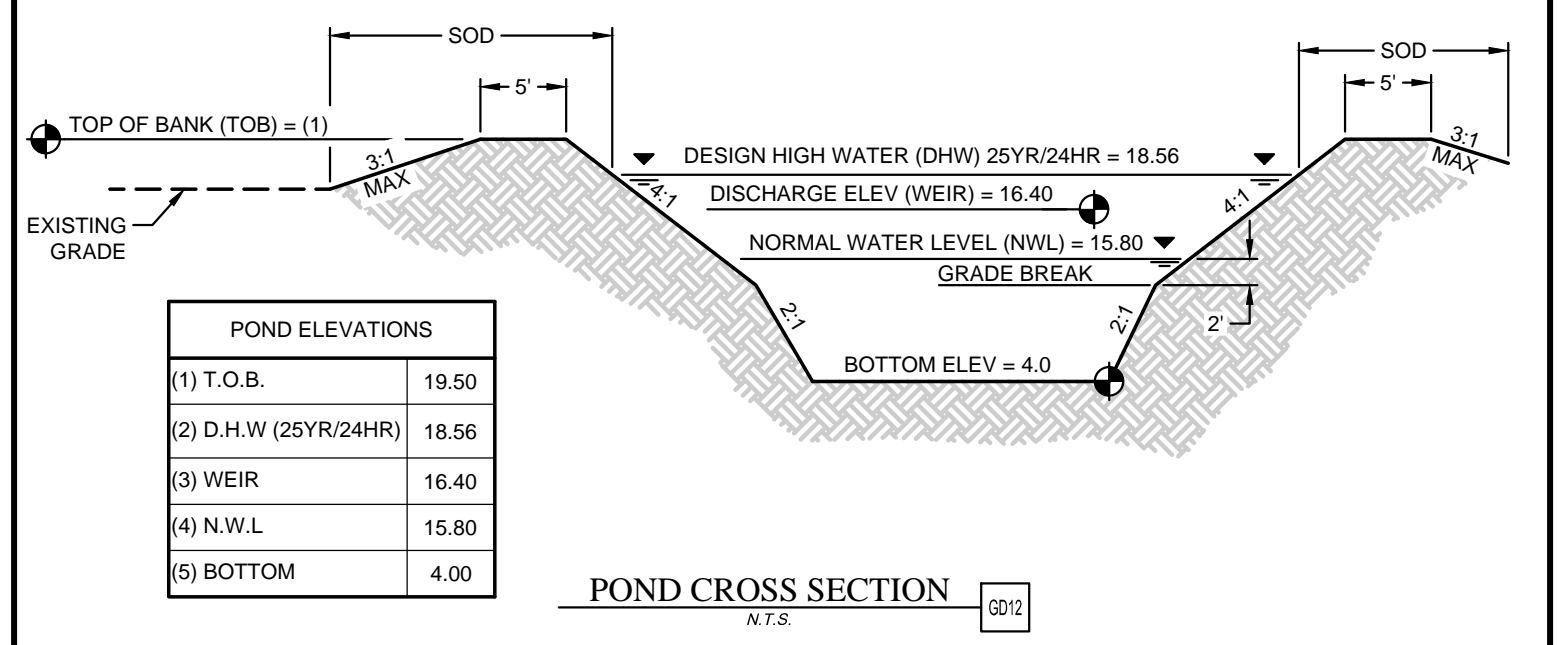
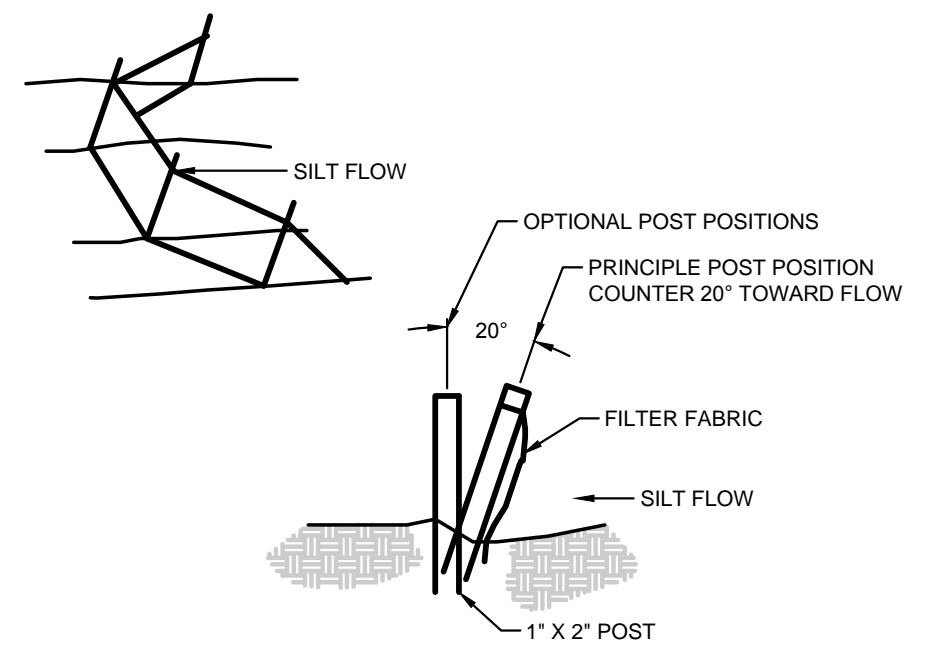


D	A	B	C	E	F	G	M	N	X	CONC. (CY)	SOD (SY)
8"	2.5'	0.72'	3.22'	0.7'	4.0'	0.58'	3.75'	1.04'	-	.52	7
15"	2.5'	3.09'	5.59'	3.0'	7.0'	1.23'	4.33'	1.04'	-	.64	8
18"	2.5'	4.12'	6.62'	4.0'	8.0'	1.41'	4.58'	1.04'	-	.69	9
24"	2.5'	6.18'	8.68'	6.0'	10.0'	1.73'	5.08'	1.04'	-	.83	10
30"	2.5'	8.25'	10.75'	8.0'	12.0'	2.00'	5.58'	1.04'	-	.96	11
36"	2.5'	10.31'	12.81'	10.0'	14.0'	2.24'	6.08'	1.04'	-	1.08	12

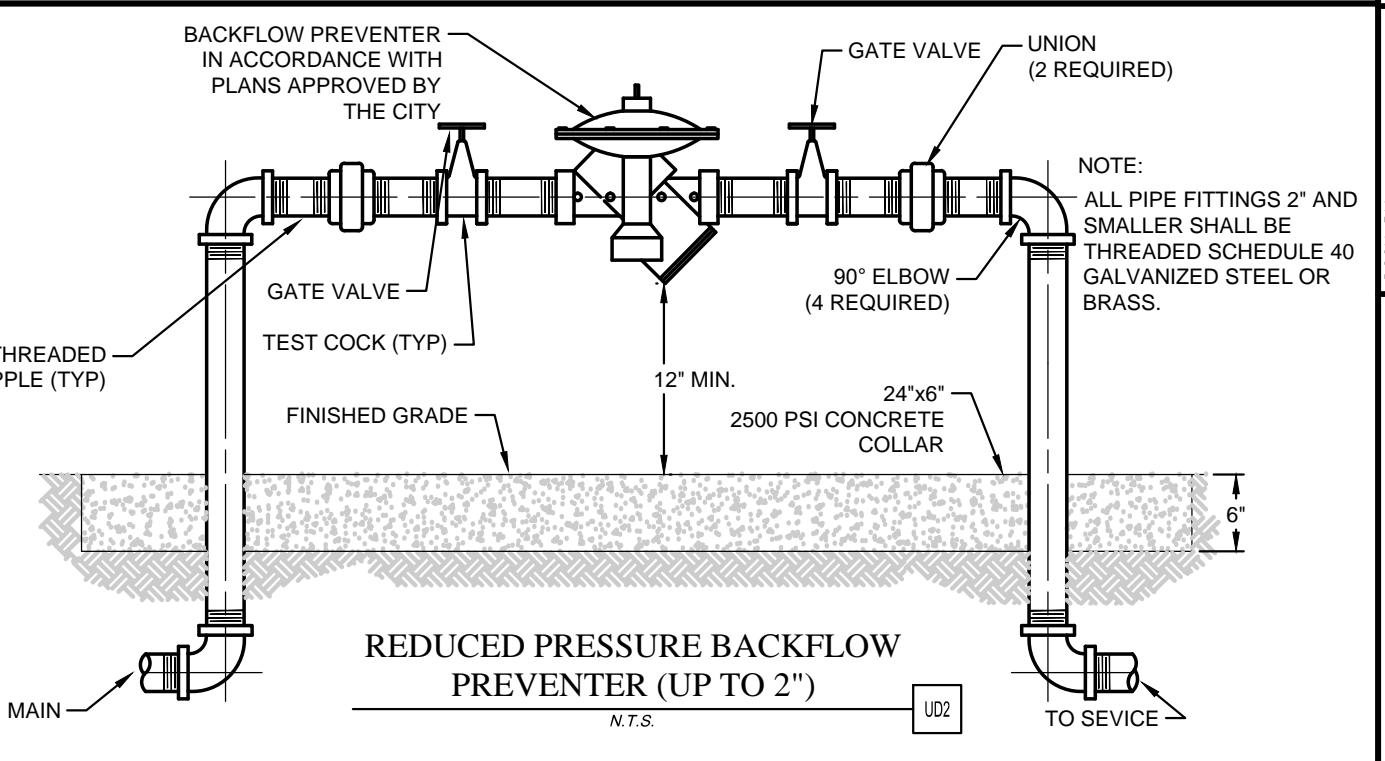
MITERED END SECTION (003) N.T.S.



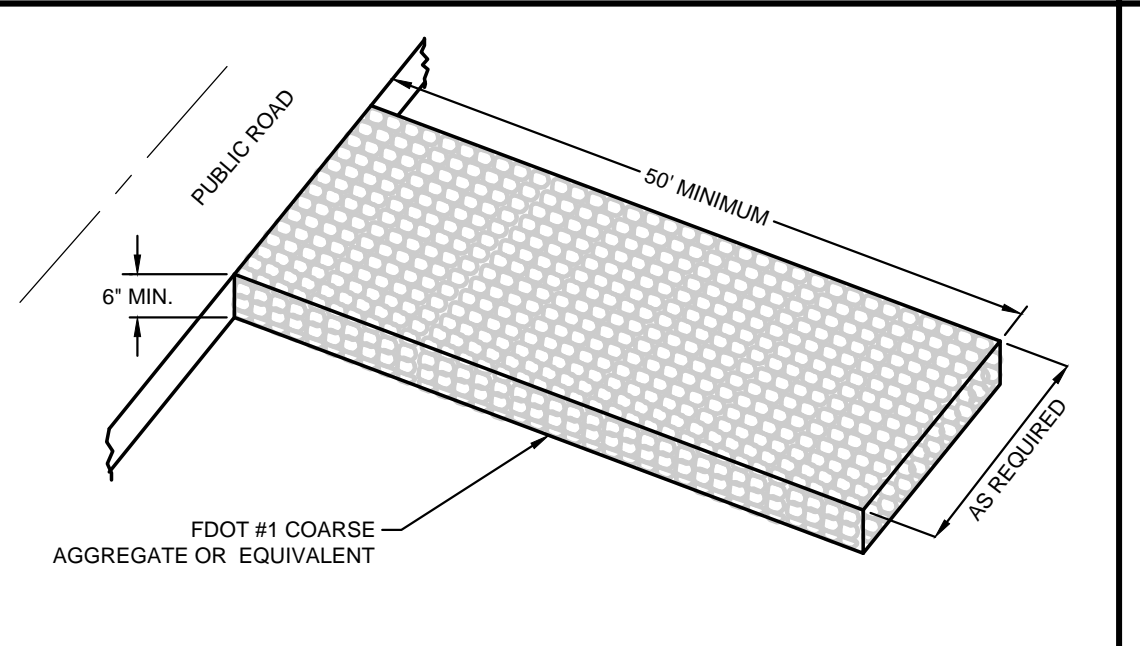
TYPE III SILT FENCE (009) N.T.S.



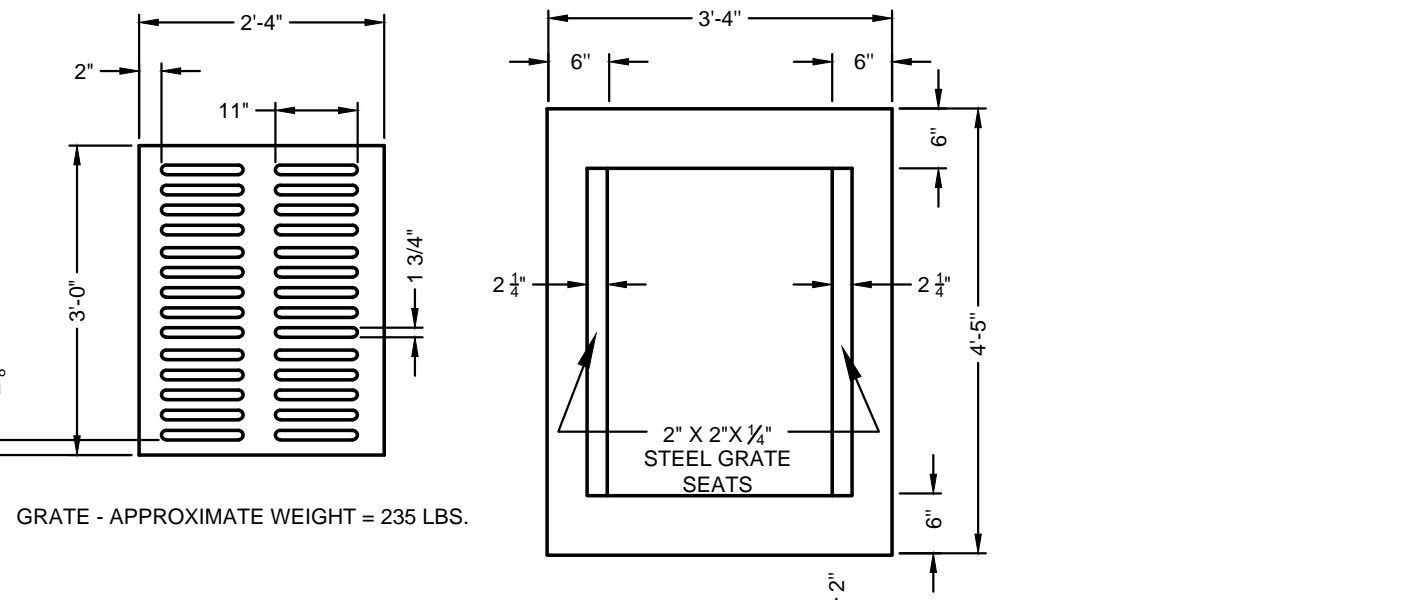
POND CROSS SECTION (010) N.T.S.



REDUCED PRESSURE BACKFLOW PREVENTER (UP TO 2") (002) N.T.S.



STABILIZED CONSTRUCTION ENTRANCE (001) N.T.S.



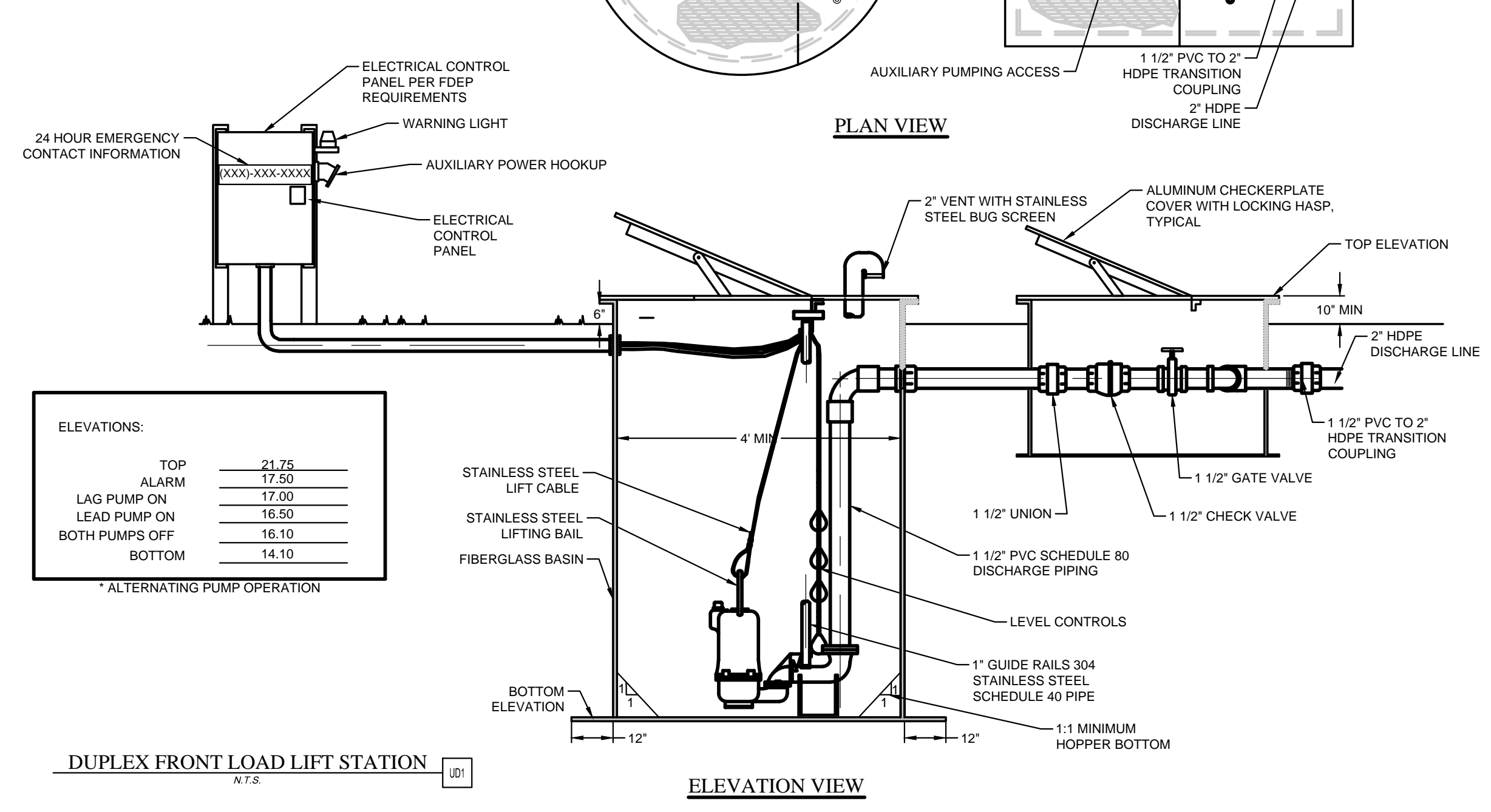
GRATE - APPROXIMATE WEIGHT = 235 LBS.

NOTES:
 1. PRECAST IN ACCORDANCE WITH LATEST INDUSTRY STANDARDS.
 2. GROUT OR "RAM-NEK" JOINTS AS REQUIRED.
 3. CONCRETE DESIGN STRENGTH = 4000 PSI.
 4. PIPE MUST NOT BE IN CONSTRUCTION JOINT.
 5. TYPE II CEMENT TO BE USED.
 6. PIPES SHALL BE FLUSH WITH INSIDE WALL.
 7. SEE FDOT INDEX 201 FOR REINFORCEMENT BAR SCHEDULE.

RECOMMENDED MAXIMUM PIPE SIZE:
 2'-0" WALL - 18" PIPE
 3'-1" WALL - 24" PIPE

PRECAST TYPE "C" INLET (010) N.T.S.

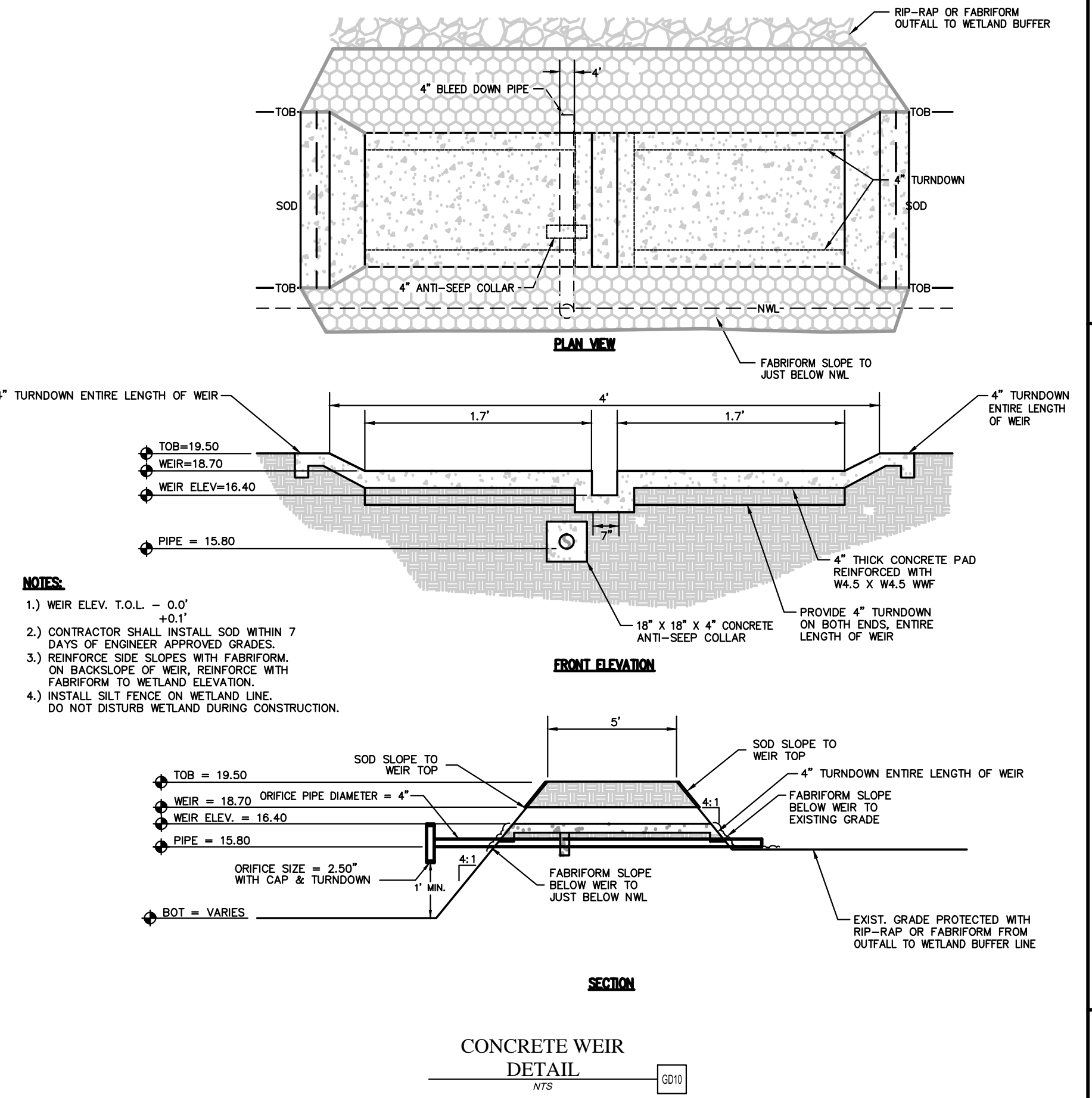
PUMPS REQUIRED	2
MANUFACTURER	MYERS
MODEL NUMBER	MGH200
CAPACITY EACH (GPM)	13
TOTAL HEAD (FEET)	99
MOTOR HP REQUIRED	2
SPEED (RPM)	3430
ELECTRICAL	SINGLE PH 230V



TOP	21.75
ALARM	17.00
LAG PUMP ON	17.00
LEAD PUMP ON	16.50
BOTH PUMPS OFF	16.10
BOTTOM	14.10

* ALTERNATING PUMP OPERATION

DUPLEX FRONT LOAD LIFT STATION (001) N.T.S.



- NOTES:
- 1) WEIR ELEV. T.O.L. - 0.0' +/- 0.1'
 - 2) CONTRACTOR SHALL INSTALL SOD WITHIN 7 DAYS OF ENGINEER APPROVED GRADES.
 - 3) REINFORCE SIDE SLOPES WITH FABRIFORM. ON BACKSLOPE OF WEIR, REINFORCE WITH FABRIFORM TO WETLAND ELEVATION.
 - 4) INSTALL SILT FENCE ON WETLAND LINE. DO NOT DISTURB WETLAND DURING CONSTRUCTION.

CONCRETE WEIR DETAIL (010) N.T.S.

REGISTERED ENGINEER
ROB A. MATTHEWS III, P.E.
CA#28535 FL #58425

REVISIONS

NO.	DATE	DESCRIPTION

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RAM
CS
GEC
DATE: 08-22-14
JOB No.: 14033

United Landscapes
ST. JOHNS COUNTY, FLORIDA
PREPARED FOR
UNITED LANDSCAPES, INC.

GRADING & UTILITY DETAILS

SHEET No.: **11**
OF 17

UTILITY CONSTRUCTION NOTES:

- ALL WATER, RECLAIMED WATER AND SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST JEA WATER AND SEWER STANDARDS MANUAL, ALL APPLICABLE LOCAL AND STATE REGULATORY RULES & REGULATIONS AND OTHER APPLICABLE JEA RULES.
- ALL WATER, RECLAIMED WATER AND SANITARY SEWER CONSTRUCTION SHALL BE PROVIDED BY A CONTRACTOR QUALIFIED AS REQUIRED UNDER THE CURRENT FLORIDA STATUTE OR BY AN UNDERGROUND UTILITY CONTRACTOR, LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CITY OR COUNTY RIGHT-OF-WAY PERMITS FOR WORK IN THE CITY R/W, COUNTY R/W OR A FDOT PERMIT FOR WORK IN THE FDOT R/W.
- THE CONTRACTOR SHALL CONTACT THE JEA FIELD INSPECTOR AND SCHEDULE A "PRE-CONSTRUCTION MEETING" 48 HOURS PRIOR TO INITIATING THE JEA WATER AND SEWER UTILITY WORK, INCLUDING ALL UTILITY MAIN TAPS BY THE CONTRACTOR.
- JEA WATER AND SEWER TAP FEES, JEA WATER AND SEWER CAPACITY FEES AND JEA METER FEES SHALL BE PAID PRIOR TO THE WATER METER INSTALLATION. CONTACT THE JEA SERVICE CENTER AT 665-6290 (JEA.COM) FOR ADDITIONAL INFORMATION. WATER METERS WILL NOT BE INSTALLED PRIOR TO THE ISSUANCE OF A REGULATORY CLEARANCE LETTER (COC) FOR THE WATER AND SEWER IMPROVEMENTS. COMPLETION AND APPROVAL OF FINAL INSPECTION AND APPROVED AS-BUILT DRAWINGS.
- FINAL CONNECTION TO THE JEA SYSTEM MAY BE CONTINGENT UPON THE CONSTRUCTION, DEDICATION AND FINAL ACCEPTANCE (TRANSFER OF OWNERSHIP/MAINTENANCE) OF THE JEA OFF-STIE UTILITIES.
- THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS FOR THE WATER, RECLAIMED WATER AND SEWER IMPROVEMENTS SHALL CONFORM TO THE LATEST JEA AND FDEP RULES. THE MINIMUM HORIZONTAL SEPARATION REQUIREMENTS BETWEEN THE PROPOSED WATER AND SEWER UTILITIES AND PONDS OR STRUCTURES SHALL CONFORM TO THE LATEST JEA WATER AND SEWER STANDARDS MANUAL.
- WATER AND SEWER PIPES SHALL BE CONSTRUCTED WITH A MINIMUM 30" COVER IN PAVED AREAS. THE MAXIMUM COVER FOR UTILITIES UTILIZING HORIZONTAL DIRECTIONAL DRILL METHODS SHALL COMPLY WITH THE LATEST JEA WATER AND SEWER STANDARDS MANUAL.
- WATER AND SEWER PRESSURE MAINS AND SERVICES SHALL PASS A JEA PRESSURE AND LEAKAGE TEST AT 150 PSI FOR 2 HOURS. IN ADDITION, WATER MAINS SHALL BE DISINFECTED AND PASS A BACTERIOLOGICAL ANALYSIS. ALL TESTS SHALL CONFORM TO JEA AND DEP RULES AND REGULATIONS AND AWWA C-651. THE JEA INSPECTOR SHALL BE NOTIFIED 48 HOURS (MIN) PRIOR TO PERFORMING THESE TESTS. NO FINAL CONNECTIONS TO EXISTING POTABLE WATER MAINS SHALL BE MADE UNTIL THE NEW MAIN IS PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE.
- IN THE AREAS WHERE SOLVENT CONTAMINATION IS FOUND IN THE TRENCH, WORK SHALL BE STOPPED AND THE PROPER REGULATORY AUTHORITIES NOTIFIED. A REVISED CONSTRUCTION PLAN SHALL BE APPROVED BY JEA AND FDEP WHICH COMPLIES WITH ALL REGULATORY RULES. THE REVISED CONSTRUCTION PLAN FOR THE JEA WATER MAIN SYSTEM INCLUDING WATER SERVICE LINES MAY INVOLVE GALVANIZED OR DUCTILE IRON PIPE WITH SPECIAL SOLVENT RESISTANT (FLUOROCARBON TYPE) GASKETS WHICH EXTEND 100 FEET BEYOND THE CONTAMINATED AREAS.
- THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS TO EXISTING JEA WATER AND SEWER CUSTOMERS. IF JEA APPROVES A SERVICE INTERRUPTION, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE AFFECTED CUSTOMERS IN ACCORDANCE WITH THE LATEST JEA RULES.
- RESIDENTIAL SERVICES USING RECLAIMED WATER FOR IRRIGATION MUST HAVE A JEA APPROVED BACKFLOW PREVENTER INSTALLED ON EACH POTABLE WATER SERVICE PRIOR TO THE INSTALLATION OF A JEA RECLAIMED WATER METER. THE INSTALLATION OF A BACKFLOW PREVENTER SHALL BE IN ACCORDANCE WITH THE JEA RULES AND REGULATIONS FOR WATER, SEWER, AND RECLAIMED WATER SERVICES. APPENDIX B, CROSS CONNECTION CONTROL POLICY.
- FOR DEVELOPMENTS UTILIZING RECLAIMED WATER, A JEA APPROVED RECLAIMED WATER SIGNAGE PLAN SHALL BE IMPLEMENTED PRIOR TO THE INSTALLATION OF THE RECLAIMED WATER METERS.

SURVEY AND LOCATE DATA:

- ALL ELEVATIONS ARE BASED ON U.S.C.&G.S. DATUM AND SHOWN IN FEET.
- ELEVATIONS ARE BASED ON N.G.V.D. 1929.
- LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS.
- EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS.
- UNDERGROUND UTILITIES WERE LOCATED UTILIZING GROUND PENETRATING RADAR (GPR) AND A DIGITAL LOCATOR. SURVEY SHALL BE AWARE THAT IN SOME CASES UTILITIES HAVE BEEN LOCATED, AND SURVEY HAS BEEN COMPLETED ONLY ON ONE SIDE OF THE ROAD.
- ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
- INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED.
- THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.
- BENCHMARK DATA: _____

PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
- CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
- THE DEPARTMENT OF TRANSPORTATION, RAILROAD COMPANIES AND C.O.J. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
- ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, REV. 401, AND CITY OF JACKSONVILLE STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.
- THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- TREE PROTECTION SHALL BE IN ACCORDANCE WITH JACKSONVILLE ORDINANCE CODE 656 AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
- THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE CITY OF JACKSONVILLE STORMWATER POLLUTION PREVENTION PLAN.
- CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

EXISTING UTILITY PROTECTION:


- IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE DUVAL COUNTY RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

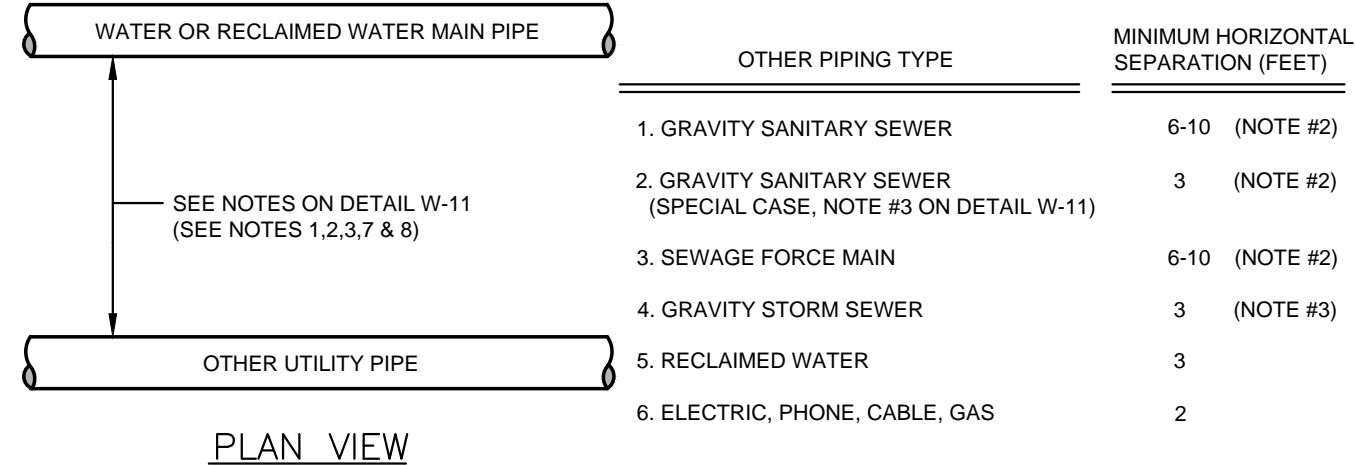
RESTORATION NOTES:

- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION. KNOWN CORNER LOCATIONS ARE AVAILABLE FROM THE CITY OF JACKSONVILLE ENGINEERING DIVISION.
- THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
- TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH CITY OF JACKSONVILLE/FDOT STANDARD SPECIFICATIONS.
- SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH JACKSONVILLE STANDARD SPECIFICATIONS. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAWCUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
- GRASS SOD SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
- ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE CITY OF JACKSONVILLE/FDOT STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
- UNLESS OTHERWISE NOTED, REMOVE AND REPLACE EXISTING PAVEMENT AS PER C.O.J. CASE X (10) PAVEMENT REPLACEMENT DETAIL.
- CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

INSTALLATION NOTES:

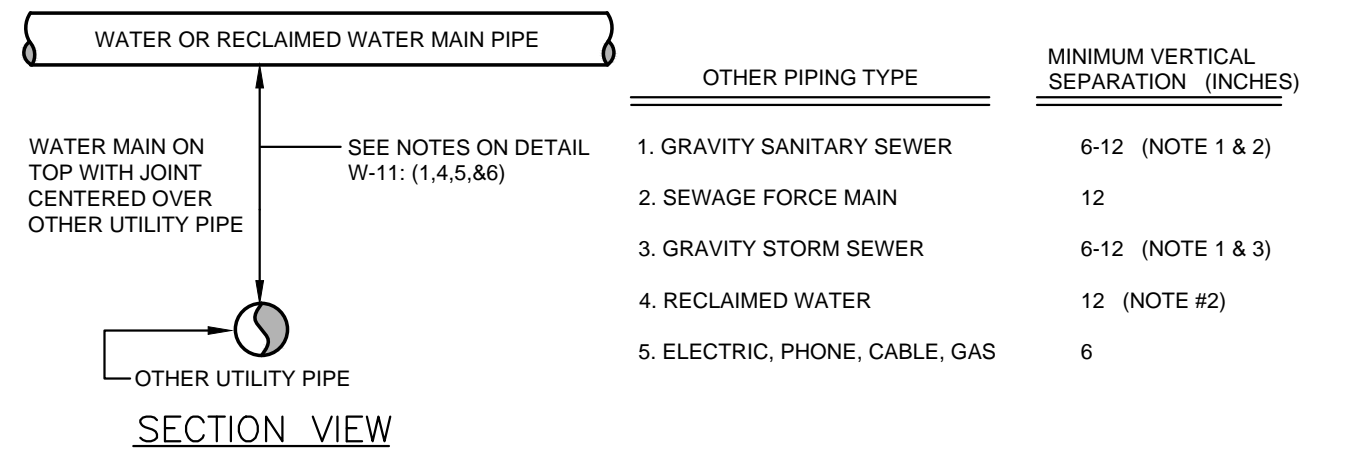
- CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446.2, UNLESS OTHERWISE NOTED ON THE PLANS.
- CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
- CONTRACTOR TO INSTALL SEWER SERVICE PIPING A MINIMUM OF 60 INCHES BELOW GRADE, WHERE NEW SANITARY SEWER MAIN IS LESS THAN 5 FEET DEEP. THE SEWER SERVICE PIPE SHALL BE INSTALLED AS DEEP AS POSSIBLE.
- WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH JEA ELECTRICAL PERSONNEL TO SECURE POWER POLES. THE CONTACTS FOR JEA ARE AS FOLLOWS:
NORTHSIDE-EAST OF US-1 MIKE CORBITT @ 665-7991 (mobile 662-0635)
NORTHSIDE-WEST OF US-1 ANDY YEAGER @ 665-7998 (mobile 662-0622)
NORTHSIDE-BACKUP ALAN ANSLEY @ 665-7303 (mobile 662-6557)
SOUTHSIDE-SOUTH OF BEACH BLVD. TOM KERNS @ 665-6947 (mobile 660-1687)
SOUTHSIDE-NORTH OF BEACH BLVD. DERYL BASFORD @ 665-6855 (mobile 662-0616)
SOUTHSIDE-BACKUP EDDIE GALES @ 665-6855 (mobile 662-0616)
A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH JEA ELECTRICAL TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY JEA ELECTRICAL FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
- ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
- THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" METHOD OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
- THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS. NO EXISTING ACTIVE SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.
- CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS (AS-BUILTS).
- WATER AND SEWER SERVICES SHALL BE TRANSFERRED TO THE NEW MAIN UPON COMPLETION AND F.D.E.P./J.E.A. CERTIFICATION, AND PRIOR TO THE EXISTING MAINS BEING ABANDONED.
- IF EXISTING VALVES ARE IN UNPAVED AREAS AND ARE TO BE TAKEN OUT OF SERVICE, THEY SHALL BE CLOSED AND THE VALVE BOX AND COVER SHALL BE REMOVED. IF THE VALVES ARE UNDER PAVED AREAS, THEY SHALL BE CLOSED, THE VALVE BOX GROUT FILLED AND THE COVER REMOVED.
- CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR.
- CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA STANDARDS.
- WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION. CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY.
- PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
- SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET.

<p>JEA GENERAL NOTES</p> <p>United Landscapes ST. JOHNS COUNTY, FLORIDA PREPARED FOR UNITED LANDSCAPES, INC.</p>		<p>MATTHEWS DESIGN GROUP, INC. P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FLORIDA 32084 PHONE: 904.826.1334 FAX: 904.826.4547 INFO@MATTHEWSDSIGN.NET</p> 																			
<p>REGISTERED ENGINEER ROB A. MATTHEWS III, P.E. CA26255 FL #59425</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION															
NO.	DATE	DESCRIPTION																			
<p>DESIGN BY: RAM</p> <p>DWG BY: CCS</p> <p>CHK BY: GEC</p> <p>DATE: 08-22-14</p> <p>JOB No.: 14033</p>	<p>SHEET No.: 12</p> <p>OF 17</p>																				



- NOTES:**
- THE PLANTING OF HARDWOOD TREES WITHIN 36 INCHES HORIZONTAL CLEARANCE OF THE MAIN SHALL BE PROHIBITED.
 - THE HORIZONTAL SEPARATION BETWEEN RECLAIMED WATER AND SEWAGE FORCE MAINS OR GRAVITY SANITARY SEWERS IS 3 FEET (MIN).
 - THE HORIZONTAL SEPARATION BETWEEN RECLAIMED WATER AND GRAVITY STORM SEWERS IS 3 FEET PER JEA RULES.

MINIMUM HORIZONTAL SEPARATION REQUIREMENTS

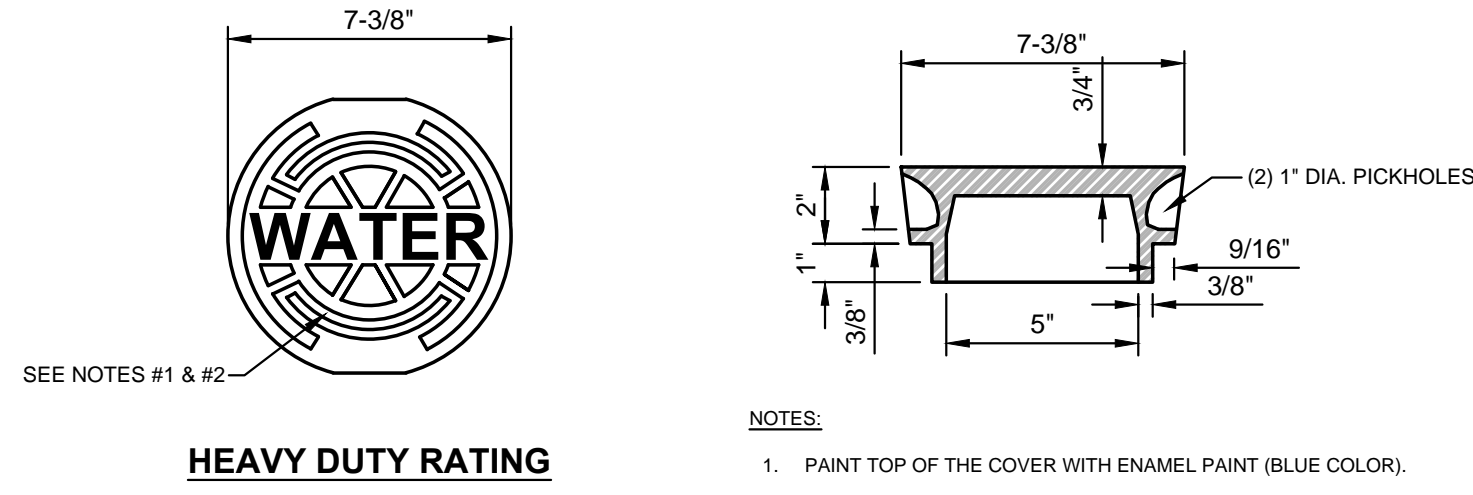


- NOTES:**
- IF THE WATER MAIN IS BELOW THE SANITARY GRAVITY SEWER PIPE, RECLAIMED WATER MAIN OR STORM GRAVITY SEWER PIPE, THEN A MINIMUM OF 12" VERTICAL SEPARATION IS REQUIRED.
 - THE VERTICAL SEPARATION BETWEEN RECLAIMED WATER AND POTABLE WATER, GRAVITY SANITARY SEWER, OR SEWAGE FORCE MAIN IS 12-INCHES (MIN).
 - THE VERTICAL SEPARATION BETWEEN RECLAIMED WATER AND GRAVITY STORM SEWER IS 6-INCHES (MIN.) PER JEA RULES.

MINIMUM VERTICAL SEPARATION REQUIREMENTS

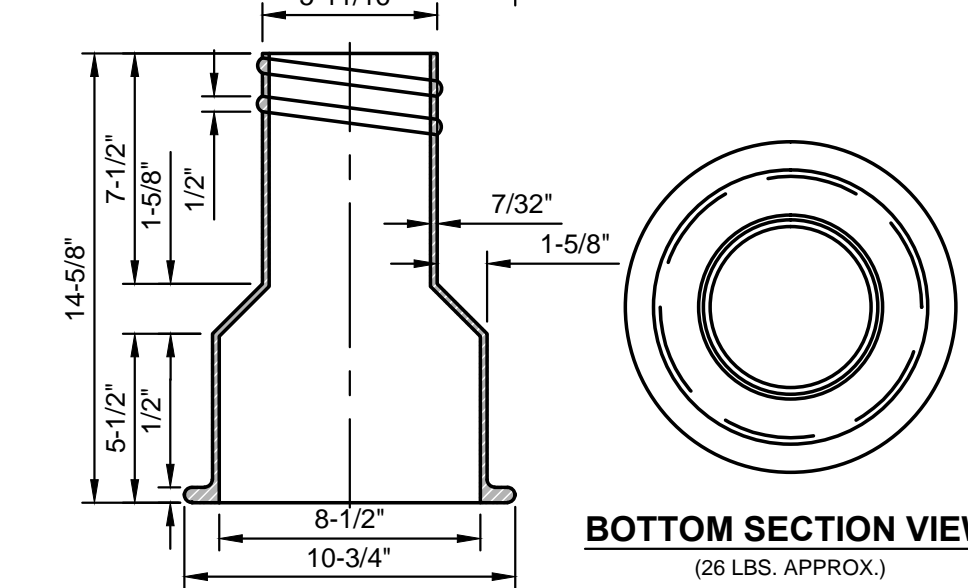
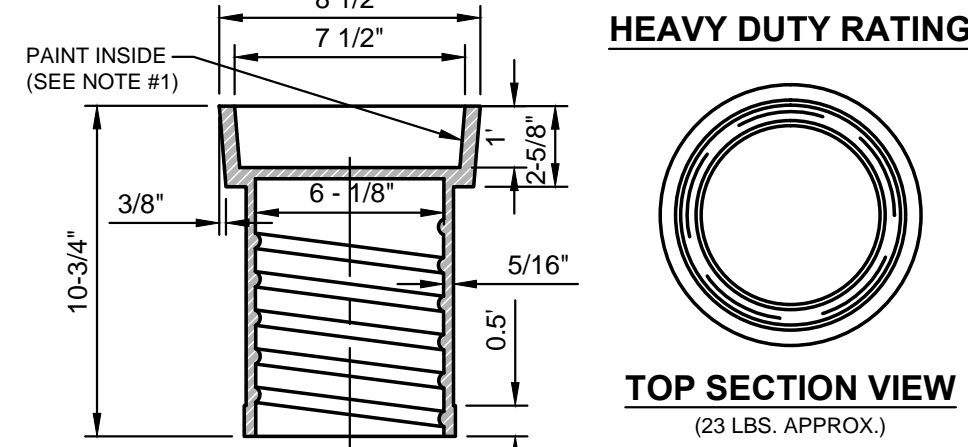
MINIMUM SEPARATION REQUIREMENTS FOR WATER MAINS

JANUARY 2014 PLATE W-10



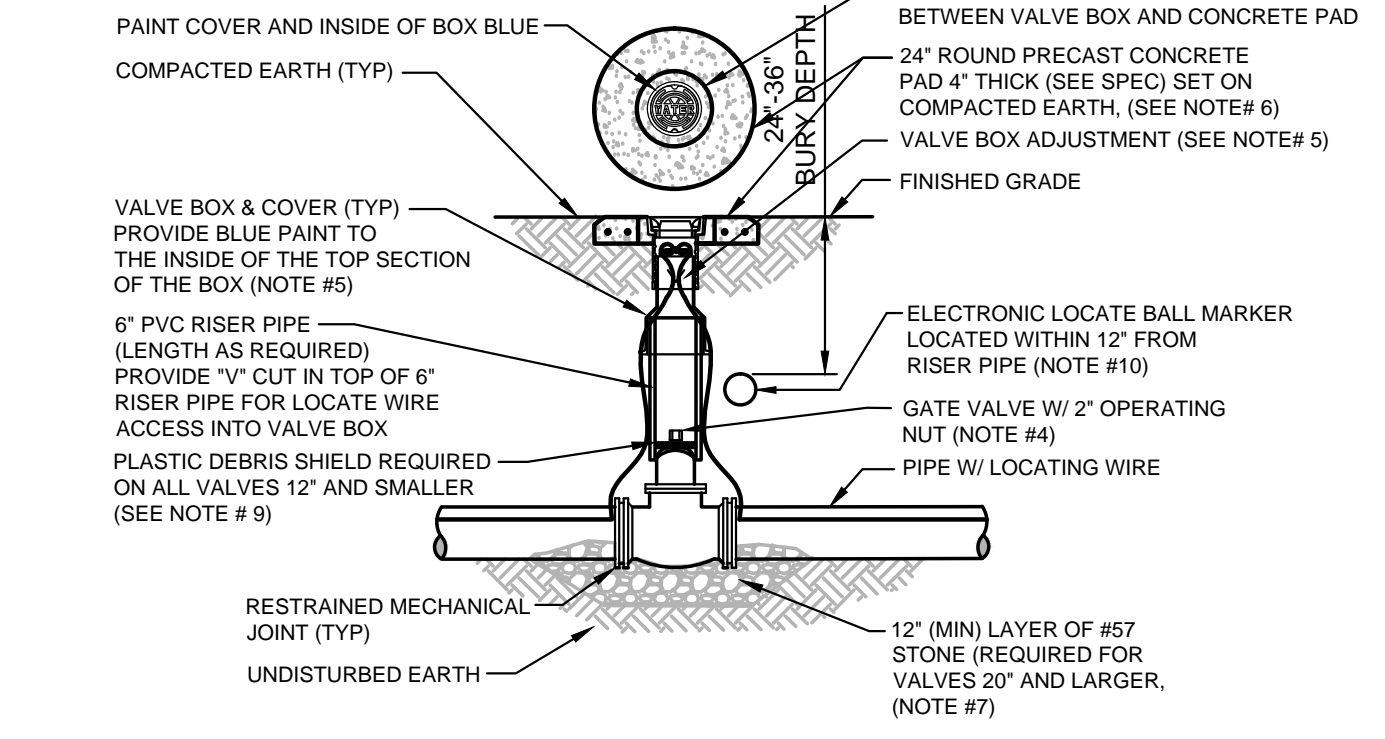
WATER SYSTEM VALVE BOX COVER

JANUARY 2014 PLATE W-16



WATER SYSTEM VALVE BOX

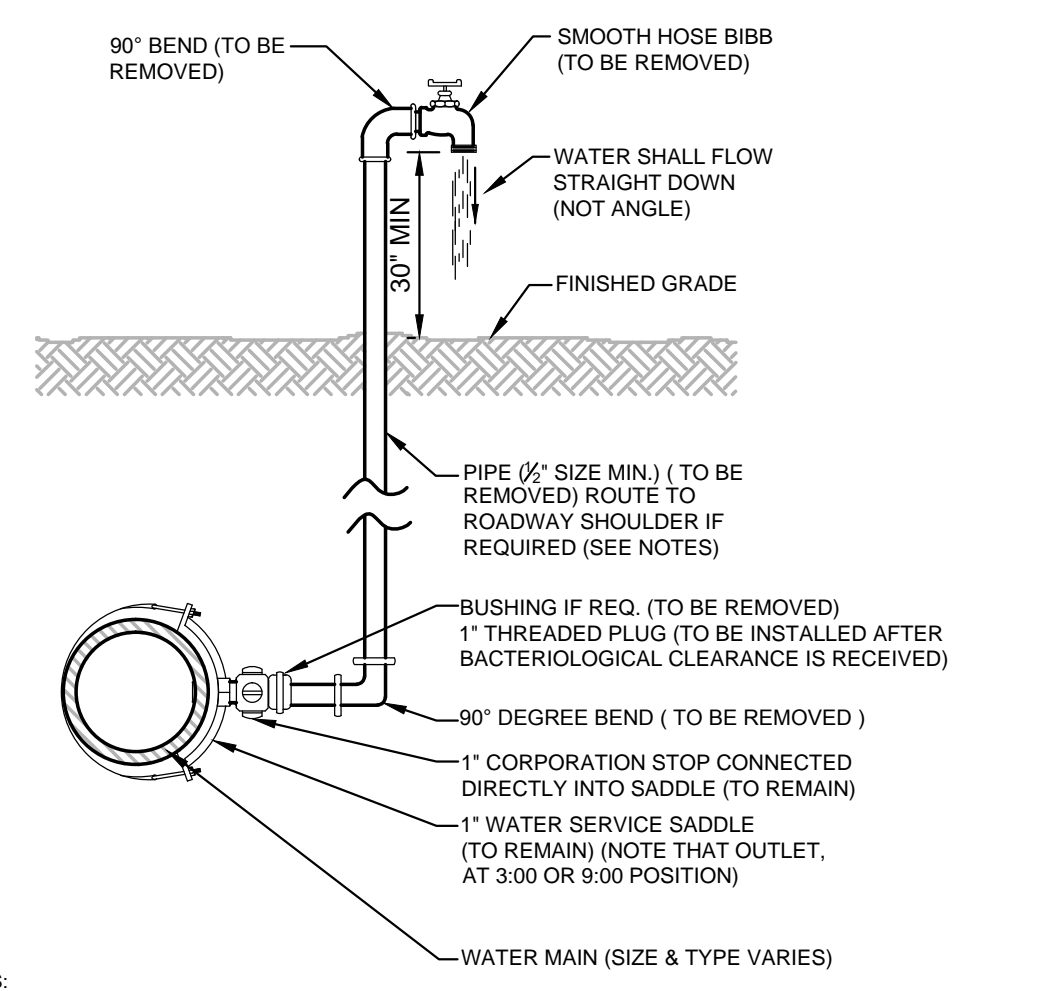
JANUARY 2014 PLATE W-17



- NOTES:**
- FOR UNPAVED LOCATIONS, A PRECAST CONCRETE VALVE PAD SHALL BE PROVIDED AND INSTALLED FLUSH WITH GRADE. CONCRETE PAD IS NOT REQUIRED FOR VALVE LOCATED IN THE ROADWAY, UNLESS SHOWN OR NOTED OTHERWISE.
 - LOCATING WIRE IS REQUIRED ON ALL PRESSURE PIPING (SEE DETAIL W-44).
 - A "V" CUT SHALL BE CARVED IN THE CURB CLOSEST ADJACENT TO ALL BELOW GRADE VALVES. THE "V" CUT IS TO BE PAINTED GREEN.
 - ON PAVED AREAS, INSTALL VALVE AT A DEPTH TO ALLOW A 12" MIN. DISTANCE BETWEEN THE VALVE COVER PLATE AND THE TOP OF THE VALVE OPERATING NUT. OUTSIDE OF PAVED AREAS (GRASS), INSTALL VALVE AT A DEPTH TO ALLOW A 6" MINIMUM DISTANCE BETWEEN THE VALVE COVER AND THE TOP OF THE VALVE OPERATING NUT. OPERATING NUT/OTHER EXTENSION SHALL BE PROVIDED (WHERE APPLICABLE) SO THAT THE OPERATING NUT WILL BE NO MORE THAN 30 INCHES BELOW FINISHED GRADE.
 - FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDDLE TO ALLOW FOR FUTURE BOX ADJUSTMENTS. ROUTE LOCATE WIRES THRU A "V" CUT IN THE TOP OF THE 6" PVC RISER PIPE FOR LOCATE WIRE ACCESS INTO VALVE BOX. THE LOCATE WIRES WITH A 12" LONG PIG-TAIL AT THE TOP SHALL BE CONNECTED TOGETHER WITH A WIRE NUT.
 - BRASS IDENTIFICATION TAG INDICATING "WATER", VALVE SIZE, DIRECTION AND TURNS TO OPEN & VALVE TYPE. PROVIDE A 2" HOLE IN BRASS TAG AND ATTACH TAG (TWIST WIRE AROUND TAG) TO THE END OF THE LOCATE WIRE. TAGS ARE NOT REQUIRED ON VALVES INSTALLED ON FIRE HYDRANT BRANCH LINES.
 - IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD W/2 - #4 REBAR AROUND PERIMETER, MAY BE USED.
 - GRAVEL SHALL BE PROVIDED UNDER ALL VALVES 20" AND LARGER. THE MINIMUM VERTICAL LIMIT OF GRAVEL IS 12" UNDER THE VALVE UP TO, THE OVERALL HEIGHT OF THE VALVE.
 - FOR VALVES 12 INCH AND SMALLER, PROVIDE A WHITE OR BLACK PLASTIC DEBRIS SHIELD WHICH INSTALLS BELOW THE OPERATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE OPERATING NUT AND MINIMIZE INFILTRATION. SHIELD SHALL BE BY AFC, BOXLOK OR APPROVED EQUAL.
 - ALL VALVES SHALL BE INSTALLED WITH AN ELECTRIC LOCATE MARKER. MARKER SHALL BE 4" DIA. COLOR CODED BALL MARKER (3M-1403XR FOR WATER AND 1408XR FOR RECLAIMED WATER).

WATER VALVE INSTALLATION DETAIL

JANUARY 2014 PLATE W-18



- NOTES:**
- LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS).
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED), AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 - PIPE AND FITTINGS SHALL BE PVC (SCH. 40) OR GALV. MATERIAL.
 - THE USE OF THE ABOVE CONSTRUCTION FOR A TEMPORARY SAMPLE POINT SHALL BE LIMITED TO AREAS WHERE A SAMPLE TAP BY ALTERNATIVE METHODS (SEE W-24) IS NOT FEASIBLE OR IF DIRECTED OTHERWISE BY JEA.
 - THE CONTRACTOR SHALL COMPLY WITH ALL JEA RULES AND POLICIES AS AS OUTLINED BY JEA'S ENVIRONMENTAL RESPONSE COORDINATOR (ERC) AND OTHER ASSOCIATED JEA STANDARDS.

TEMPORARY SAMPLE TAP

JANUARY 2014 PLATE W-25

(SEE PLATE Nos. 31C & 31D FOR ADDITIONAL DETAILS)

RUN SIZE (IN.)	P.V.C. PIPE BRANCH SIZE (IN.) SEE NOTE 5. FOR																											
	4	6	8	10	12	14	16	18	20	24	30	36	42	4	6	8	10	12	14	16	18	20	24	30	36	42		
4	29													6	29													
6	23	44												8	52	31												
8	18	41	61											10	71	53	29											
10	12	37	58	75										12	89	74	54	30										
12	6	33	55	73	91									14	105	93	76	55	30									
14	1	28	52	70	88	105								16	121	111	96	78	56	30								
16	1	24	48	68	86	103	116							18	136	127	114	98	79	56	30							
18	1	19	45	65	84	101	118	133						20	151	143	131	117	100	79	56	30						
20	1	15	41	62	82	99	116	132	147					24	179	172	163	151	137	120	101	80	56					
24	1	4	34	56	76	95	112	128	144	173				30	217	211	204	195	184	171	156	140	121	78				
30	1	1	21	46	68	88	106	123	139	169	209			36	253	249	243	235	223	216	204	190	175	141	78			
36	1	1	8	35	59	80	99	117	134	165	206	244		42	285	282	277	271	263	255	245	233	221	192	140	75		
42	1	1	1	23	49	71	92	111	128	160	202	241	276	48	318	315	310	305	299	292	283	273	263	238	194	139	75	
48	1	1	1	10	39	62	84	104	122	155	198	238	273	307														

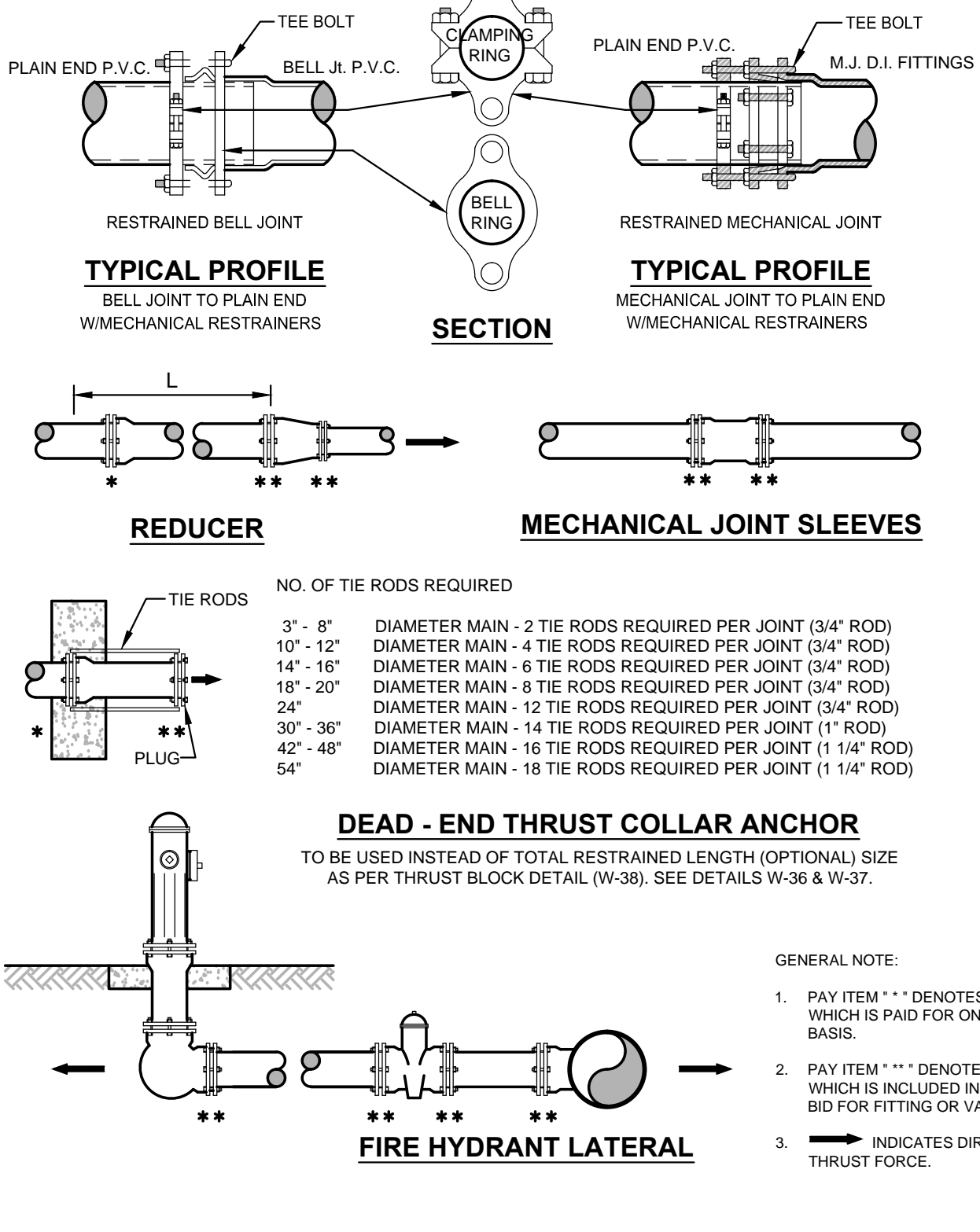
P.V.C. PIPE RESTRAINT NOTES:

- THIS SCHEDULE SHALL BE UTILIZED ON ALL WATER, SEWER FORCE MAIN OR RECLAIMED WATER SYSTEMS. ALL FITTINGS SHALL BE RESTRAINED TO LENGTHS INDICATED ON THE ABOVE SCHEDULE, AT A MINIMUM.
- ASSUMPTIONS: PVC PIPE, SAFETY FACTOR=1.5, TEST PRESSURE=150PSI, SOIL-CGM OR SM, TRENCH TYPE 3, DEPTH OF COVER=36 INCHES.
- BENDS AND VALVES: SHALL BE RESTRAINED ON EACH SIDE OF FITTING.
- VERTICAL OFFSETS: ARE APPROX. 3 FEET COVER ON TOP AND APPROX. 6 FEET COVER ON BOTTOM. PER THE DETAILS, L_U IS THE RESTRAINED LENGTH FOR THE UPPER (TOP) LEVEL, L_L IS THE RESTRAINED LENGTH FOR THE LOWER (DEEPER) LEVEL. ASSUME 45 DEGREE BENDS.
- TEES: TOTAL LENGTH BETWEEN FIRST JOINTS OR RESTRAINED LENGTH ON EITHER SIDE OF TEE (RUN) SHALL BE A TOTAL DISTANCE OF 3 FEET (MIN). SEE SCHEDULE ABOVE FOR RESTRAINT LENGTH ON TEE "BRANCH" LINE. THE PROJECT ENGINEER CAN INCREASE THIS DISTANCE TO REDUCE THE RESTRAINTS REQUIRED ON THE BRANCH SIDE. ANY CHANGES MUST BE APPROVED BY JEA.
- HOPE TO PVC TRANSITIONS: THE PVC PIPE SIDE SHALL BE RESTRAINED 36 FT (MIN).
- THE INSTALLATION OF BELL HARNESS RESTRAINTS AT PVC JOINTS (DR-18 & 25 PIPE) SHALL BE COMPLETED PER THE MANUFACTURER'S RECOMMENDATION, WHICH INCLUDES NOT OVER TIGHTENING THE PARALLEL RODS/NUTS. THESE NUTS SHOULD ONLY BE SNUG TIGHT. THE HOME MARKS ON THE PIPE SHOULD ALWAYS BE VISIBLE AFTER THE RESTRAINT IS INSTALLED. OVER TIGHTENING THE JOINT MAY CAUSE A FAILURE AT THE BELL, RESULTING IN A SERVICE OUTAGE.

NOMINAL PIPE SIZE (IN.)	HORIZONTAL BENDS				VERTICAL BENDS				VALVES OR DEAD ENDS	
	90° L (FT.)	45° L (FT.)	22.5° L (FT.)	11.25° L (FT.)	45° L (FT.)	22.5° L (FT.)	11.25° L (FT.)	BENDS L (FT.)	BENDS L (FT.)	
4	18	8	4	2	17	8	4	39		
6	25	11	5	3	23	11	6	55		
8	33	14	7	4	30	15	8	72		
10	39	16	8	4	36	18	9	87		
12	45	19	9	5	43	21	11	102		
14	51	21	11	5	49	24	12	116		
16	57	24	12	6	55	27	13	131		
18	63	26	13	7	60	29	15	145		
20	68	29	14	7	66	32	16	159		
24	79	33	16	8	77	37	19	185		
30	93	39	19	10	92	45	22	222		
36	106	44	21	11	107	52	26	257		
42	117	49	24	12	120	58	29	289		
48	128	53	26	13	133	64	32	321		

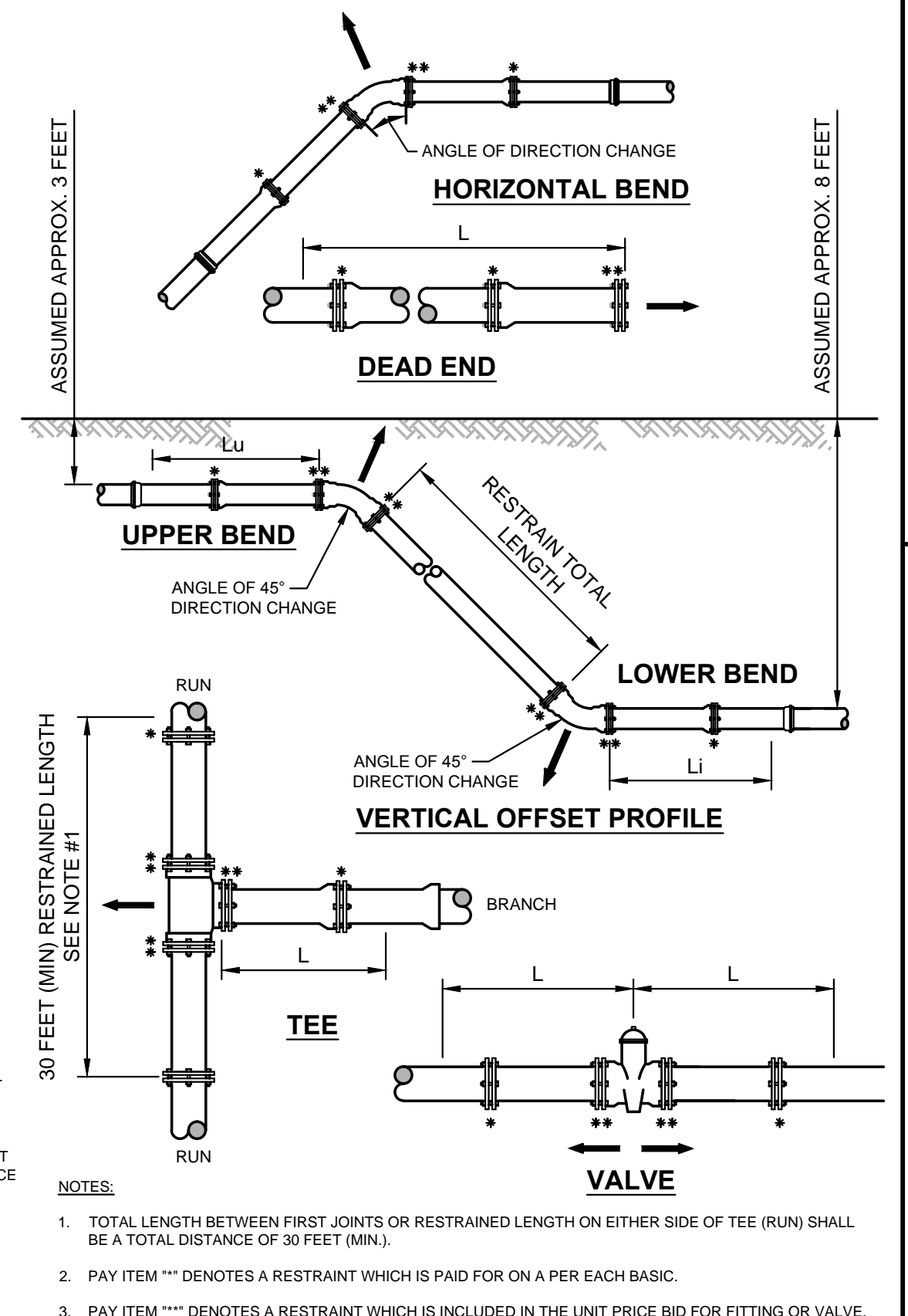
PVC PIPE RESTRAINT JOINT SCHEDULE

JANUARY 2014 PLATE W-31A



MECHANICAL RESTRAINT DETAILS - I

JANUARY 2014 PLATE W-31C



MECHANICAL RESTRAINT DETAILS - II

JANUARY 2014 PLATE W-31D

NOTES ON UTILITY SEPARATION REQUIREMENTS

JANUARY 2014 PLATE W-11

MATTHEWS DESIGN GROUP, INC.
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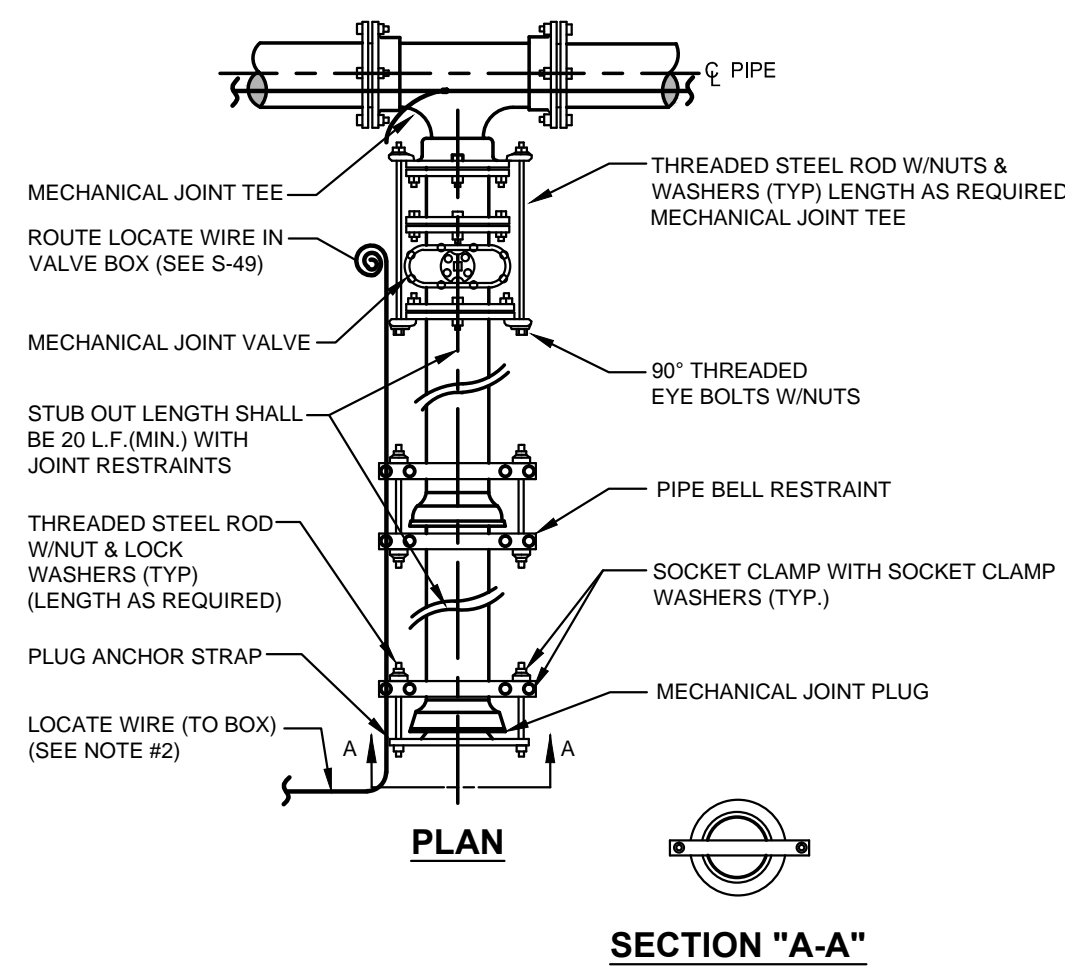
JEA GENERAL WATER DETAILS
United Landscapes
ST. JOHNS COUNTY, FLORIDA
PREPARED FOR
UNITED LANDSCAPES, INC.

REGISTERED ENGINEER
ROB A. MATTHEWS III, P.E.
CA26253 FL #59425

REVISIONS
NO. DATE DESCRIPTION

RAM
CS
GEC
DATE: 08-22-14
JOB No.: 14033

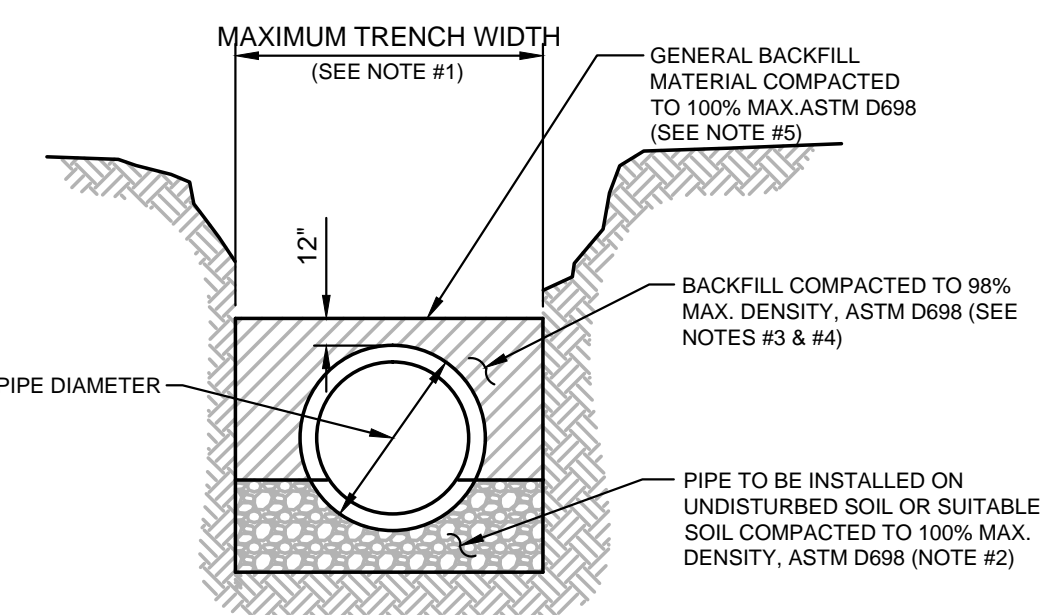
13
OF 17



- NOTES:**
1. IN LIEU OF BELL/ROD RESTRAINTS, MECHANICAL JOINT RESTRAINTS MAY BE USED.
 2. LOCATING WIRE REQUIRED, UTILIZING A LOCATE WIRE BOX INSTALLED AT PLUG LOCATION.
 3. NUMBER OF THE RODS REQUIRED IS AS FOLLOWS:
 - 3" - 6" DIAMETER MAIN - 2 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 6" - 10" DIAMETER MAIN - 4 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 10" - 12" DIAMETER MAIN - 6 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 14" - 16" DIAMETER MAIN - 8 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 18" - 20" DIAMETER MAIN - 10 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 24" DIAMETER MAIN - 12 THE RODS REQUIRED PER JOINT (3/4" ROD)
 - 30" - 36" DIAMETER MAIN - 14 THE RODS REQUIRED PER JOINT (1" ROD)
 - 42" - 48" DIAMETER MAIN - 16 THE RODS REQUIRED PER JOINT (1 1/4" ROD)
 - 54" DIAMETER MAIN - 18 THE RODS REQUIRED PER JOINT (1 1/4" ROD)
 4. THE LOCATION OF THE DEAD END PLUG SHALL NOT BE UNDER PAVEMENT, IF POSSIBLE, THE STUB OUT SHALL EXTEND BEYOND THE INTERSECTION AREAS OR ROAD CROSSING BY 10 FEET (MIN.) WHERE POSSIBLE.

PLUGGED DEAD END USING MECHANICAL RESTRAINTS

JANUARY 2014 PLATE W-37

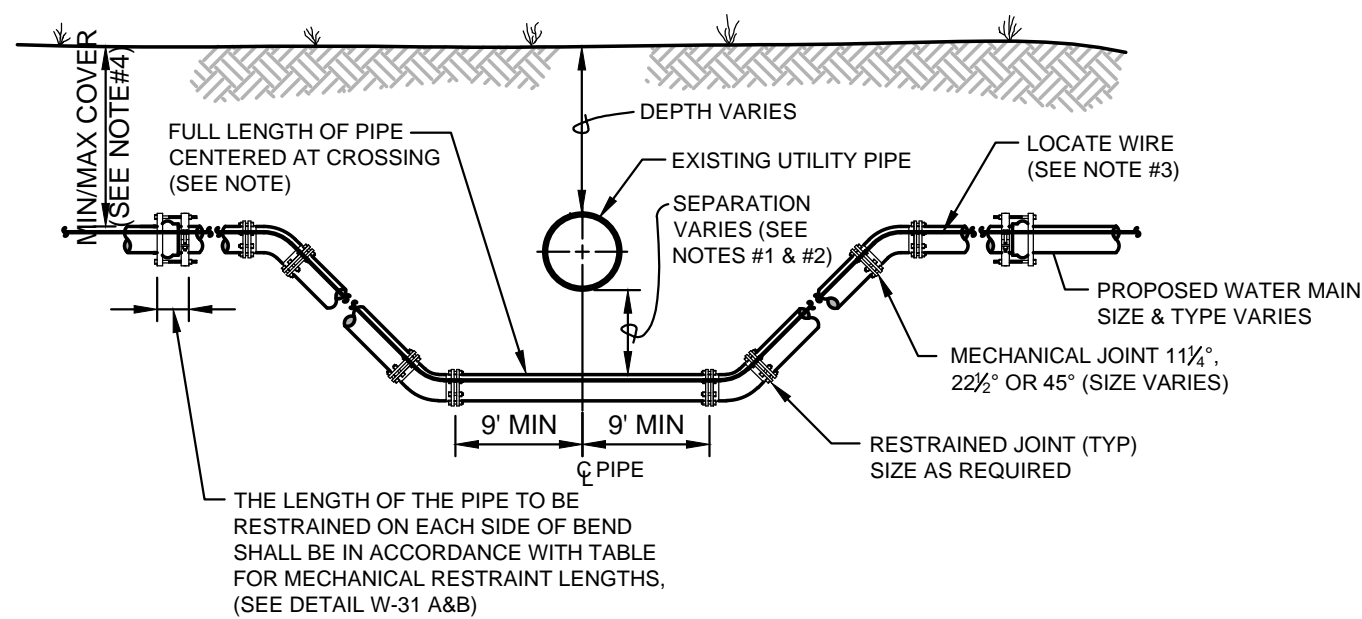


TYPICAL TRENCH

- NOTES:**
1. TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE. OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #601, PARAGRAPH #4) TO DETERMINE MAXIMUM PAYLINE WIDTHS.
 2. BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
 3. BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
 4. BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 100% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D698.
 5. SEE "EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS AND EXCEPTIONS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

JANUARY 2014 IN STATE ROAD RIGHT -OF-WAY PLATE W-42A

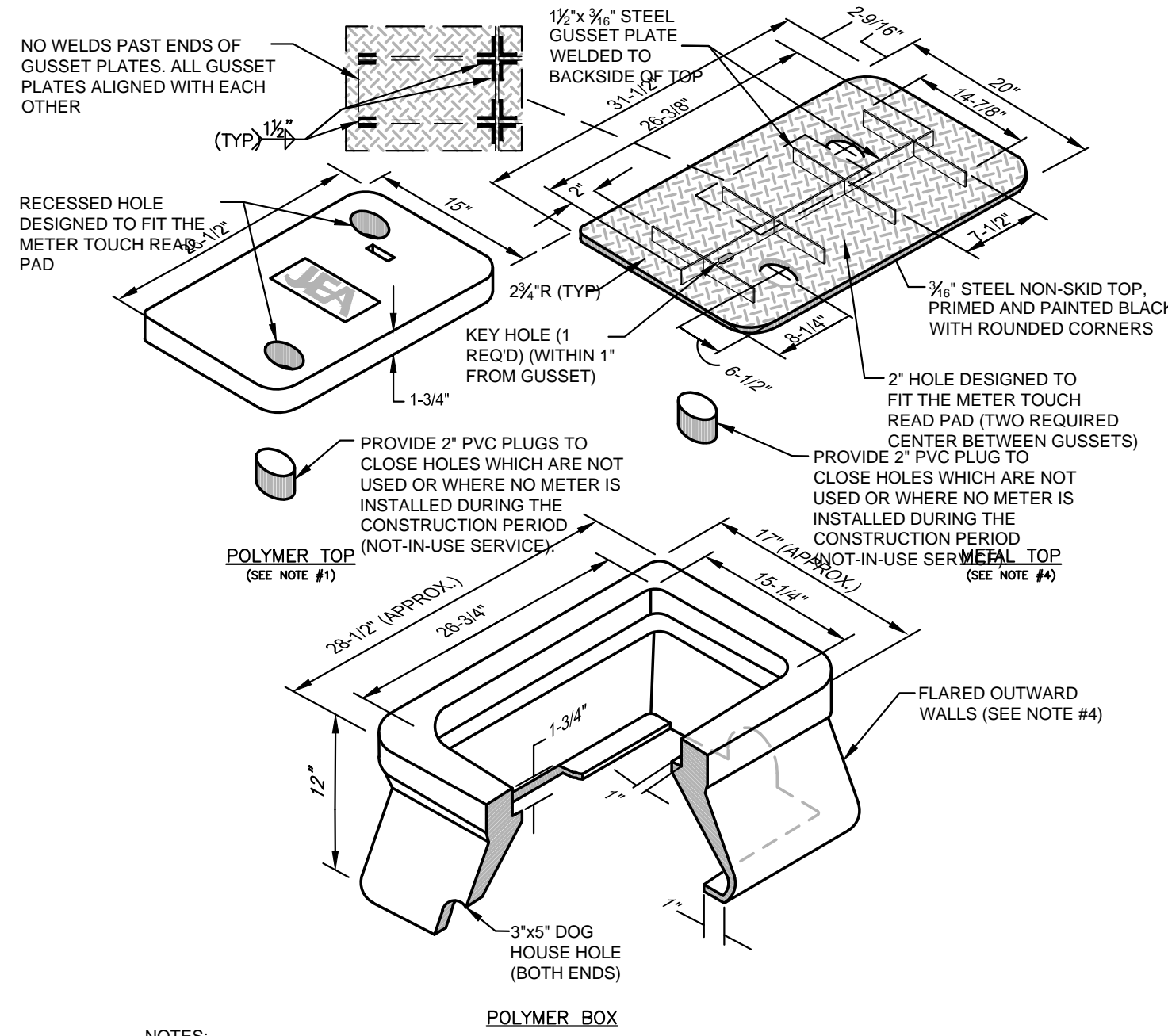


CASE "B" CROSSING

- NOTES:**
1. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557
 2. FOR MINIMUM VERTICAL SEPARATION REQUIREMENTS SEE DETAILS (W-10 AND W-11)
 3. LOCATING WIRE REQUIRED: SEE DETAIL W-44.
 4. THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREA, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 60", UNLESS APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 84", UNLESS APPROVED BY JEA.

ADJUSTMENT UNDER EXISTING UTILITIES MECHANICAL RESTRAINTS

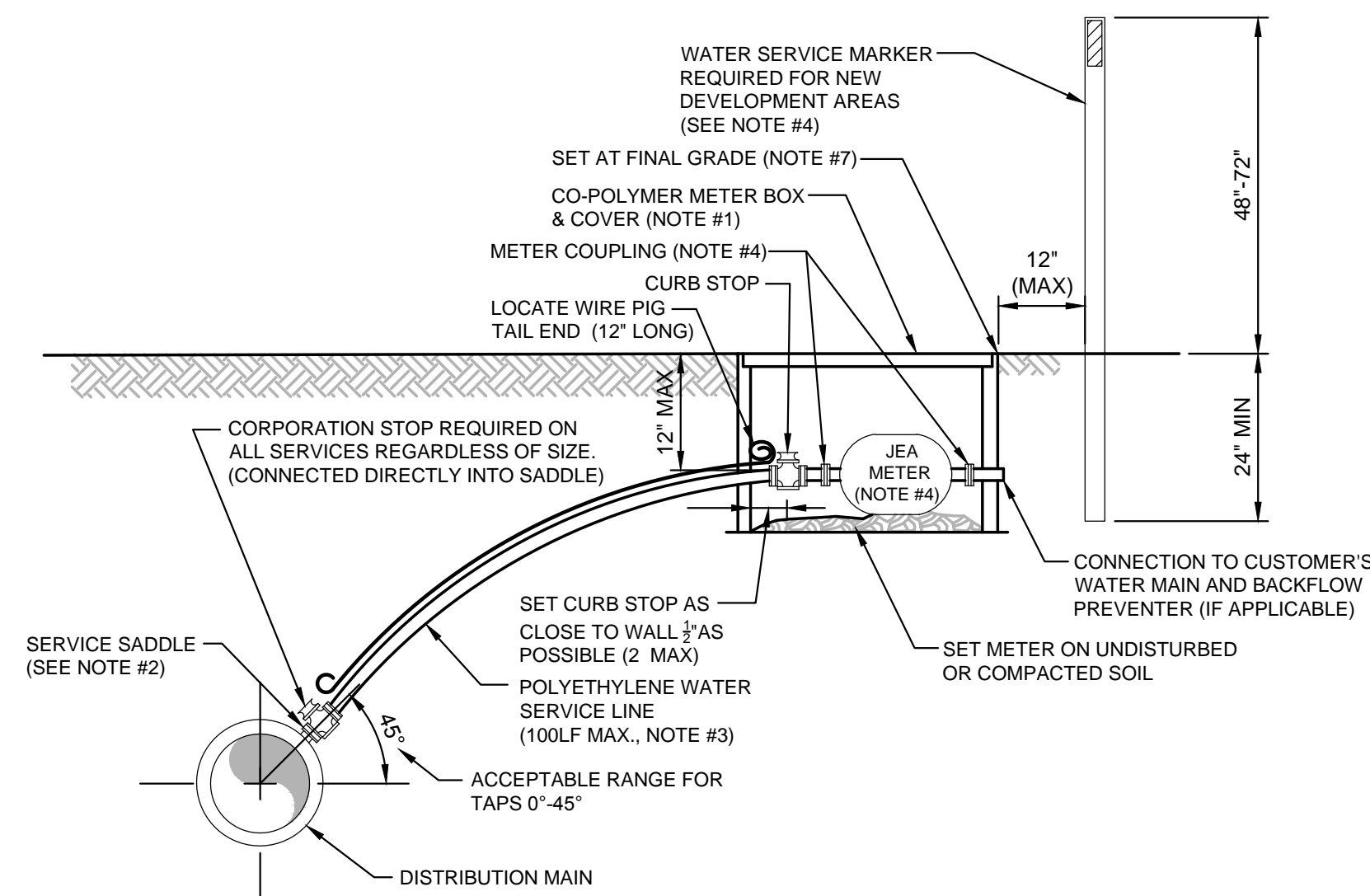
JANUARY 2014 PLATE W-34



- NOTES:**
1. THE STANDARD BOX (FLARED OUTWARD WALLS) & TOP (2 HOLE) SHALL BE MADE OF POLYMER CONCRETE. (SIMILAR TO OLD BROOKS SERIES 85). BOX WALLS SHALL BE FIBERGLASS. BOX, INCLUDING THE INSIDE LIP, AND TOP SHALL MEET A-3 (ATSM C567) LOAD RATING.
 2. ALL SIZES SHOWN ARE IN INCHES AND ARE APPROXIMATE SIZES.
 3. POLYMER BOX APPROXIMATE WEIGHT 50lbs. POLYMER TOP APPROXIMATE WEIGHT 50lbs. SEE CONSTRUCTION DETAIL W-4A FOR MANUFACTURING DETAIL FOR TWO HOLE COVER.
 4. UNLESS APPROVED OTHERWISE IN WRITING BY JEA, ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN THE ROADWAY, DRIVEWAYS OR SIDEWALKS).
 5. METAL TOPS MAY BE UTILIZED IF SPECIFICALLY APPROVED BY A JEA MANAGER OR BY JEA METER O&M STAFF.

WATER METER BOX & COVER FOR 1-1/2" AND 2" METERS

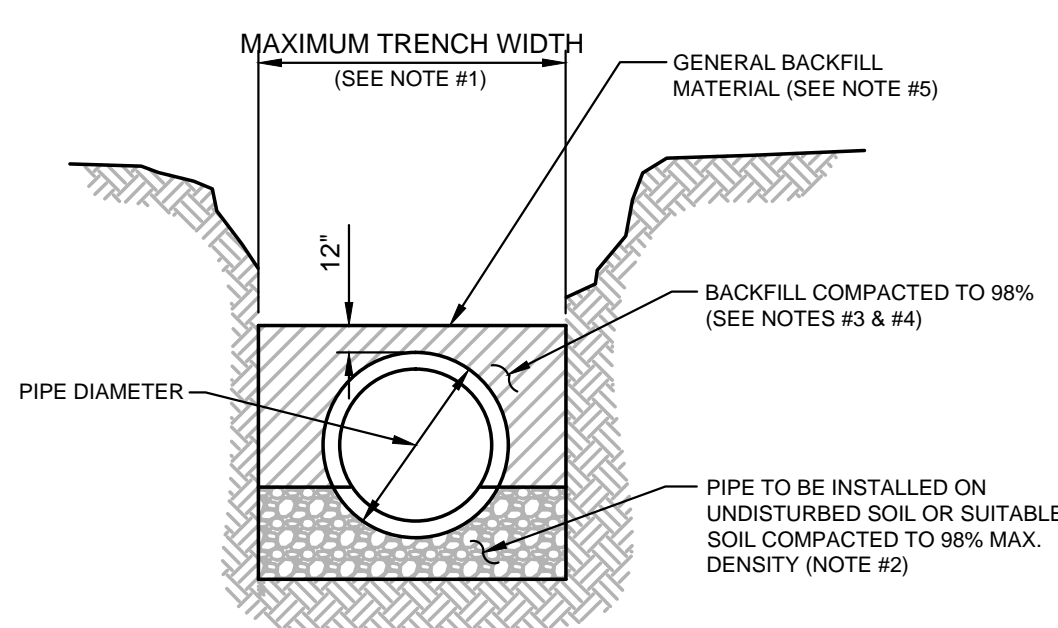
JANUARY 2014 PLATE W-4



- NOTES:**
1. SEE PLATE W-1 FOR METER LOCATION REQUIREMENTS.
 2. SINGLE BAND SADDLES MAYBE UTILIZED ON NEW 1" WATER SERVICES WHICH ARE INSTALLED ON A DRY 10" SIZE OR SMALLER WATER MAIN (NEW WATER MAIN CONSTRUCTION). FOR WET TAPS OR WATER MAINS 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED. BRASS SADDLES MAY BE UTILIZED ON NEW 1" INCH AND SMALLER WATER SERVICES WHICH ARE INSTALLED ON A DRY 10 INCH OR SMALLER PVC WATER MAIN.
 3. NO OPEN CUT UNDER ROADWAY PAVING ALLOWED UNLESS THE ROADWAY IS BEING RECONSTRUCTED OR IF DIRECTED OTHERWISE BY J.E.A. CONSTRUCT POLY LINE WITH 24" (MIN) COVER UNDER ROADWAYS. THE POLY WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (1" MINIMUM) AND BE INSTALLED PERPENDICULAR TO THE MAIN AND NOT EXCEED 1000LF UNLESS APPROVED OTHERWISE BY JEA.
 4. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (I.E. IF NO METER IS INSTALLED). WATER SERVICES SERVING VACANT LOTS (SERVICE NOT IN USE), SHALL INCLUDE A "W" CUT INTO THE CURB (CLOSEST TO THE METER BOX), AND PAINTED BLUE (PAINTED PURPLE FOR RECLAIMED WATER). IN ADDITION, FOR NEW DEVELOPMENT AREAS WHERE THE WATER SERVICE IS "NOT IN USE", A LANDSCAPE TIMBER OR METAL P.F. POST (TOP PAINTED BLUE OR PURPLE FOR RECLAIMED WATER), THE REMOVAL OR TRANSFER OF A WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON BARREL TYPE).
 5. NO 2" AND SMALLER WATER SERVICE TAPS PERMITTED ON WATER MAINS WHICH ARE 20" AND LARGER SIZE.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE METER OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.
 7. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (I.E. NO DIRT, TRASH OR OTHER DEBRIS PLACED ON TOP OF BOX).
 8. LOCATE WIRING REQUIRED ON ALL SERVICES 10' OR GREATER IN LENGTH. SEE PLATE W-44.

WATER SERVICE DETAIL- 2" AND SMALLER METER

JANUARY 2014 PLATE W-2

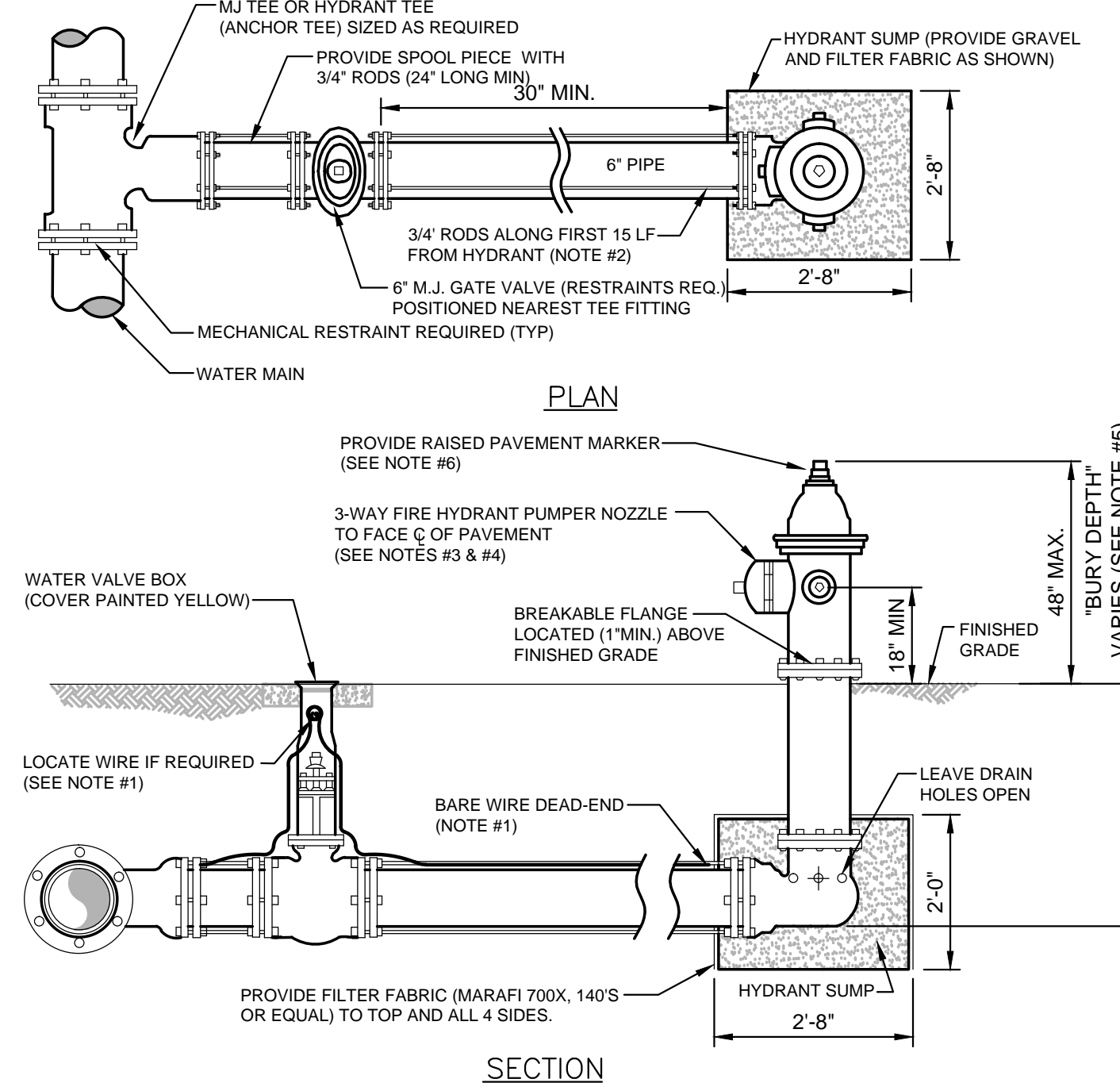


TYPICAL TRENCH

- NOTES:**
1. TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE. OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #601, PARAGRAPH #4) TO DETERMINE MAXIMUM PAYLINE WIDTHS.
 2. BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
 3. BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
 4. BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 98% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
 5. SEE "EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

JANUARY 2014 IN CITY RIGHT -OF-WAY PLATE W-42



- NOTES:**
1. LOCATE WIRE IS ONLY REQUIRED IF THE DISTANCE BETWEEN VALVE AND HYDRANT IS OVER 15 LINEAR FEET IF REQUIRED, THE WIRE SHALL BE ROUTED FROM THE VALVE TO THE HYDRANT AS SHOWN ABOVE. THE END OF THE WIRE SHALL BE SECURED TO THE PIPE MAIN. SEE SECTION 350. LOCATE WIRE INSTALLATION PARAGRAPH.
 2. FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK AND NOT WITHIN SWALE/DITCH AREAS. THE DISTANCE RANGE FROM EDGE OF ADJACENT PAVEMENT, BACK OF CURB AND FACE OF SIDEWALK SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA AND APPLICABLE PERMITTING AGENCIES. DISTANCE SHALL BE MEASURED TO THE CLOSEST PART OF THE FIRE HYDRANT (I.E. THE PUMPER NOZZLE). THE MAXIMUM DISTANCE (BACK OF CURB) SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA. FOR OTHER LOCATION LIMITATIONS SEE PLATES W-10 AND W-11. IF PIPING BETWEEN TEE AND HYDRANT IS LONGER THAN 80 LF, AN ADDITIONAL GATE VALVE IS REQUIRED AT THE HYDRANT LOCATION (PROVIDE 30" SEPARATION). ALL PIPING, VALVES AND FITTINGS ALONG THE HYDRANT BRANCH MAIN WHICH IS WITHIN 15 LF OF THE HYDRANT SHALL BE RESTRAINED UTILIZING ONLY TWO 3/4" DIA (THREADED ENDS) STEEL RODS AND EYE BOLTS (NO JOINT RESTRAINT DEVICES REQUIRED). A SPLIT SERRATED RING WITH RESTRAINT EARS (EBA 15 PF06 OR EQUAL) MAYBE USED IN THIS ASSEMBLY. ALL OTHER JOINTS ALONG THE HYDRANT BRANCH MAIN OUTSIDE OF THE FIRST 15 LF SHALL INCLUDE JOINT RESTRAINTS.
 3. OPERATION OF THE FIRE HYDRANT SHALL BE EITHER FULL OPEN POSITION OR TOTALLY CLOSED POSITION. THE HYDRANT SHALL NOT BE UTILIZED TO THROTTLE OUTLET FLOW.
 4. PRIOR TO PROJECT FINAL INSPECTION, THE HYDRANT AND ALL ABOVE GROUND PIPING SHALL BE RE-OILED, GREASED AND REPAINTED (RUS-KIL ENAMEL-INTERNATIONAL YELLOW OR EQUAL). PRIVATELY OWNED AND MAINTAINED FIRE HYDRANTS SHALL BE PAINTED RED.
 5. FIRE HYDRANTS SHALL BE ORDERED WITH PROPER "BURY DEPTH" TO MEET ACTUAL FIELD CONDITIONS. THIS IS ESPECIALLY IMPORTANT FOR BRANCH LINES WHICH TEE-OFF A 12" OR LARGER WATER MAIN. UNLESS APPROVED OTHERWISE BY JEA, THE INSTALLATION OF 45° BENDS IS NOT ACCEPTABLE WHEN UTILIZED TO CORRECT AN IMPROPERLY FURNISHED HYDRANT. THE USE OF HYDRANT EXTENSIONS SHOULD BE MINIMIZED.
 6. BLUE REFLECTIVE MARKERS SHALL BE INSTALLED IN SUCH A MANNER THAT THE REFLECTIVE FACE OF THE MARKER IS PERPENDICULAR TO A LINE PARALLEL TO THE ROADWAY CENTERLINE. THE BLUE REFLECTIVE MARKERS SHALL BE PLACED IN THE CENTER OF THE TRAVEL LANE, DIRECTLY ACROSS FROM AND ADJACENT TO EACH FIRE HYDRANT.

FIRE HYDRANT INSTALLATION USING MECHANICAL JOINT TEE

JANUARY 2014 PLATE W-13

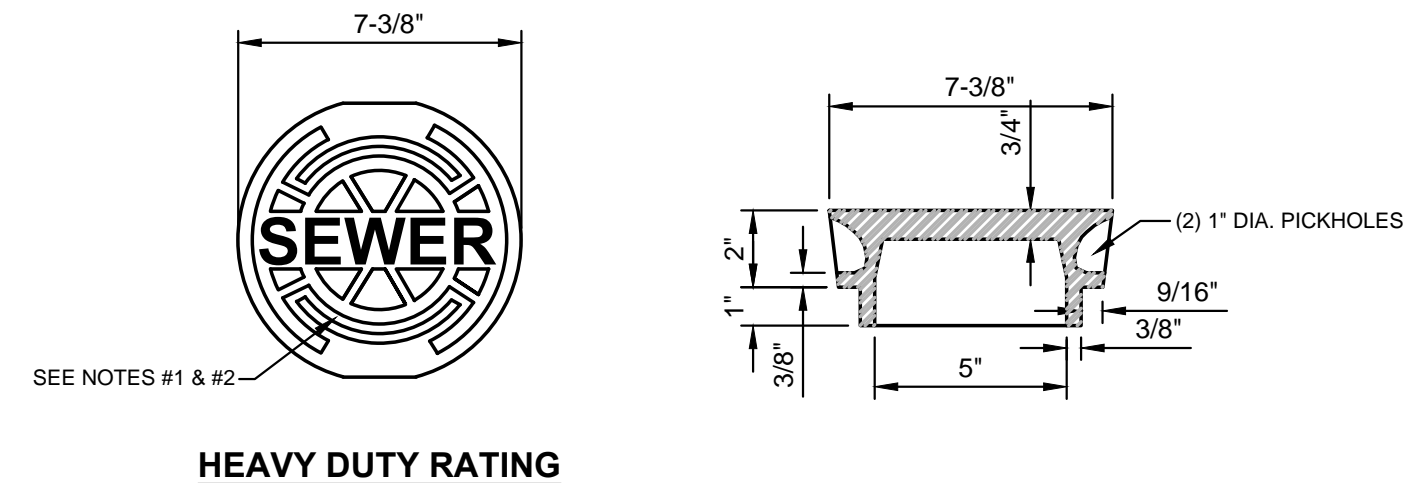
REGISTERED ENGINEER
ROB A. MATTHEWS III, P.E.
CA26253 FL #59425

NO.	DATE	REVISIONS DESCRIPTION

RAM
CS
GEC
08-22-14
14033

MATTHEWS DESIGN GROUP, INC.
P.O. BOX 3126, 7 WALDO STREET
ST. AUGUSTINE, FLORIDA 32084
PHONE: 904.826.1334
FAX: 904.826.4547
INFO@MATTHEWSDSIGN.NET

JEA GENERAL WATER DETAILS
United Landscapes
ST. JOHNS COUNTY, FLORIDA
PREPARED FOR
UNITED LANDSCAPES, INC.



HEAVY DUTY RATING

NOTES:

1. PAINT TOP OF THE COVER WITH ENAMEL PAINT (GREEN COLOR).
2. LID WEIGHT: APPROX. 12 LBS.

SEWER SYSTEM VALVE BOX COVER

JANUARY 2014

PLATE S-31

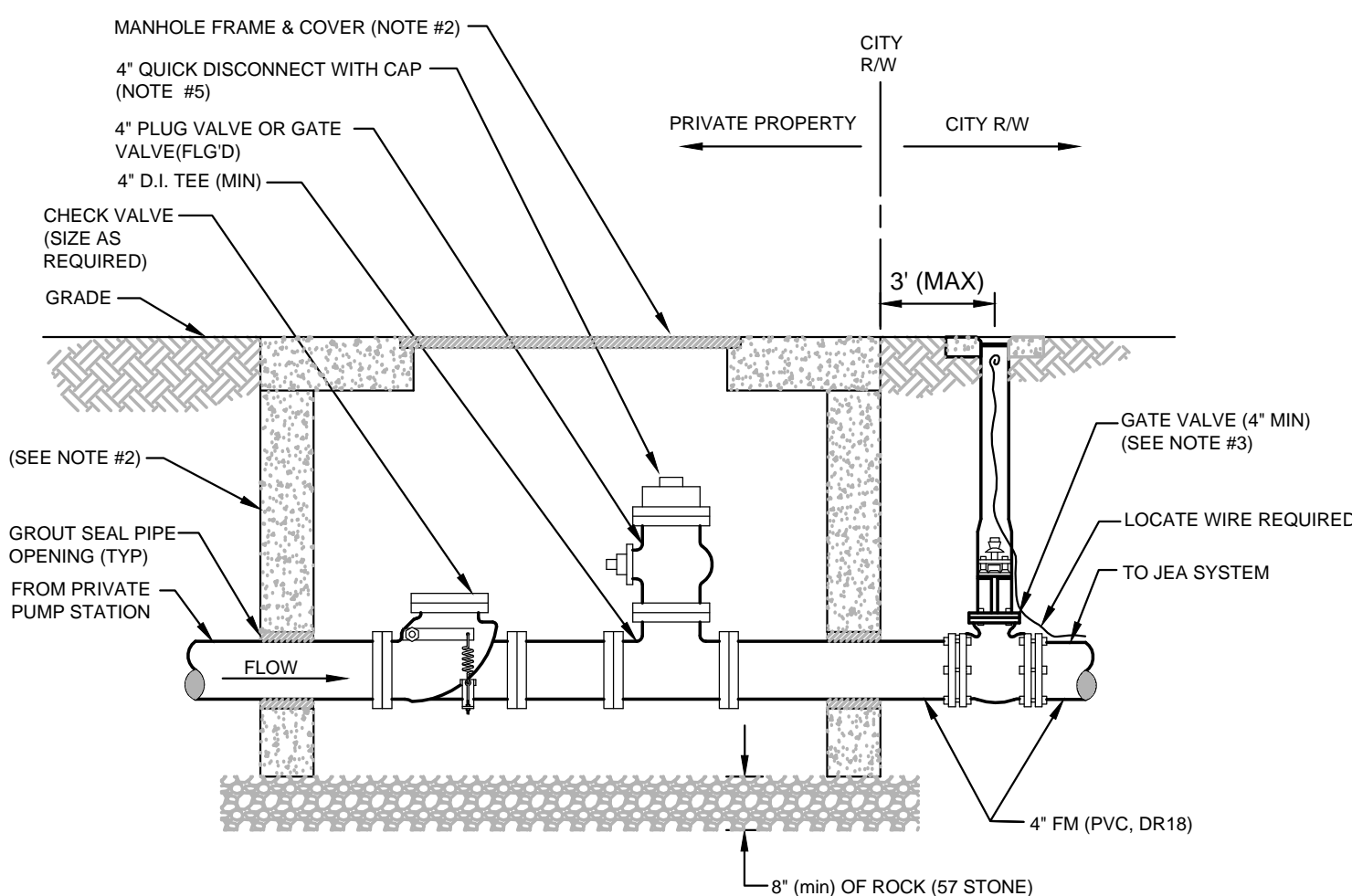
WATER MAIN AND NON-WATER MAIN SEPARATION REQUIREMENTS - NOTES

1. IT IS REQUIRED THAT "WATER MAINS" BE INSTALLED, CLEANED, DISINFECTED AND HAVE A SATISFACTORY BACTERIOLOGICAL SURVEY PERFORMED IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS, CHAPTER 62-555, F.A.C. AND LATEST JEA WATER AND SEWER STANDARDS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER, FIRE HYDRANT LEADS, AND SERVICE LINES THAT HAVE AN INSIDE DIAMETER OF THREE (3) INCHES OR GREATER. IN ADDITION, THE PHRASE "RECLAIMED WATER" REFERS TO THE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
3. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS, JANUARY BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER (SPECIAL CASE).
4. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX (6) INCHES, AND PREFERABLY TWELVE (12) INCHES, ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
5. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
6. AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 4 AND 5 ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINE CONVEYING RECLAIMED WATER.
7. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SO THAT THE HYDRANTS ARE AT LEAST THREE (3) FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER; AT LEAST THREE (3) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER OR WASTEWATER FORCE MAIN.
8. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE, THE CONTRACTOR SHALL CONSULT THE DESIGN ENGINEER TO OBTAIN APPROVAL OF ANY ALTERNATIVE CONSTRUCTION METHODS, PRIOR TO CONSTRUCTION.

NOTES ON UTILITY SEPARATION REQUIREMENTS - SEWER

JANUARY 2014

PLATE S-27



NOTES:

1. SEWER PUMP-OUT BOX SHALL BE CONSTRUCTED ON PRIVATE PROPERTY AND LOCATED AT THE R/W LINE. THE PREFERRED CONSTRUCTION LAYOUT IS SHOWN ABOVE.
2. ASSEMBLY TO BE ENCLOSED WITHIN A 48"x48" (MIN) PRECAST CONCRETE BOX WITH OPEN BOTTOM WITH 20 TRAFFIC LOADING COVER OR TYPE "C" MANHOLE OPEN BOTTOM WITH FRAME AND COVER (NON-JEA LOGO TYPE COVER).
3. A JEA APPROVED GATE VALVE (4" MIN) SHALL BE PROVIDED AT THE R/W LINE FOR ALL FORCE MAIN PIPING WHICH EXCEEDS 15' LINEAR FEET WITHIN THE CITY R/W AREA. THE GATE VALVE AT THE R/W LINE IS NOT REQUIRED WHERE THE CONNECTION (CONNECTION AT JEA MAIN) IS LOCATED ON THE SAME SIDE OF THE STREET AS THE PUMP-OUT BOX (SHORT-SEE SERVICE) AND CONSIST OF 15' LINEAR FEET OR LESS WITHIN THE CITY R/W AREA.
4. NO CONNECTIONS PERMITTED INTO JEA FORCE MAINS WHICH ARE GREATER THAN 12" SIZE UNLESS THE CONNECTION IS FROM A MASTER PUMP STATION (441GPM, MIN).
5. QUICK DISCONNECT WITH CAP SHALL BE ALUMINUM AND BE POSITIONED DIRECTLY UNDER MANHOLE LID FOR ACCESS.

PRIVATE PUMP OUT ASSEMBLY

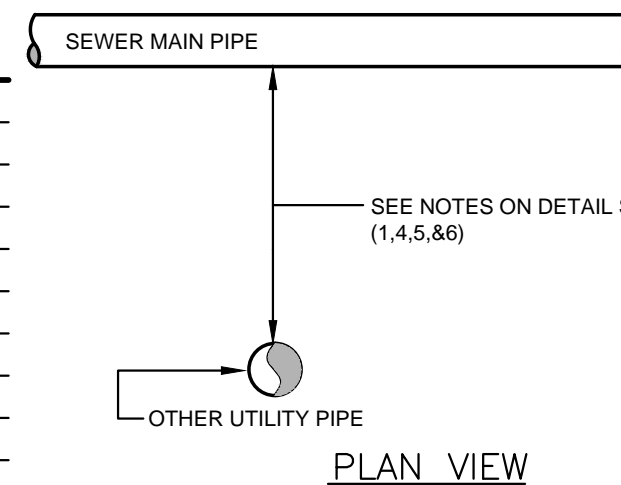
JANUARY 2014

PLATE S-46

LARGE END (IN.)	SMALL END (IN.)												
	4	6	8	10	12	14	16	18	20	24	30	36	42
6	29												
8	52	31											
10	71	53	29										
12	89	74	54	30									
14	105	93	76	55	30								
16	121	111	96	78	56	30							
136	127	114	98	79	56	30							
151	143	131	117	100	79	56	30						
179	172	163	151	137	120	101	80	56					
217	211	204	195	184	171	156	140	121	78				
253	249	243	235	223	216	204	190	175	141	78			
285	282	277	271	263	255	245	233	221	192	140	75		
48	318	315	310	305	299	292	283	273	263	238	194	139	75

(SEE PLATE Nos. 38C & 38D FOR ADDITIONAL DETAILS)

NOMINAL PIPE SIZE (IN.)	HORIZONTAL BENDS				VERTICAL BENDS				VALVES OR DEAD ENDS (L.F.T.)
	90° BENDS L (F.T.)	45° BENDS L (F.T.)	22.5° BENDS L (F.T.)	11.25° BENDS L (F.T.)	45° BENDS L (F.T.)	22.5° BENDS L (F.T.)	11.25° BENDS L (F.T.)		
4	18	8	4	2	17	8	4	39	
6	25	11	5	3	23	11	6	55	
8	33	14	7	4	30	15	8	72	
10	39	16	8	4	36	18	9	87	
12	45	19	9	5	43	21	11	102	
14	51	21	11	5	49	24	12	116	
16	57	24	12	6	55	27	13	131	
18	63	26	13	7	60	29	15	145	
20	68	29	14	7	66	32	16	159	
24	79	33	16	8	77	37	19	185	
30	93	39	19	10	92	45	22	222	
36	106	44	21	11	107	52	26	257	
42	117	49	24	12	120	58	29	289	
48	128	53	26	13	133	64	32	321	



MINIMUM HORIZONTAL SEPARATION REQUIREMENTS

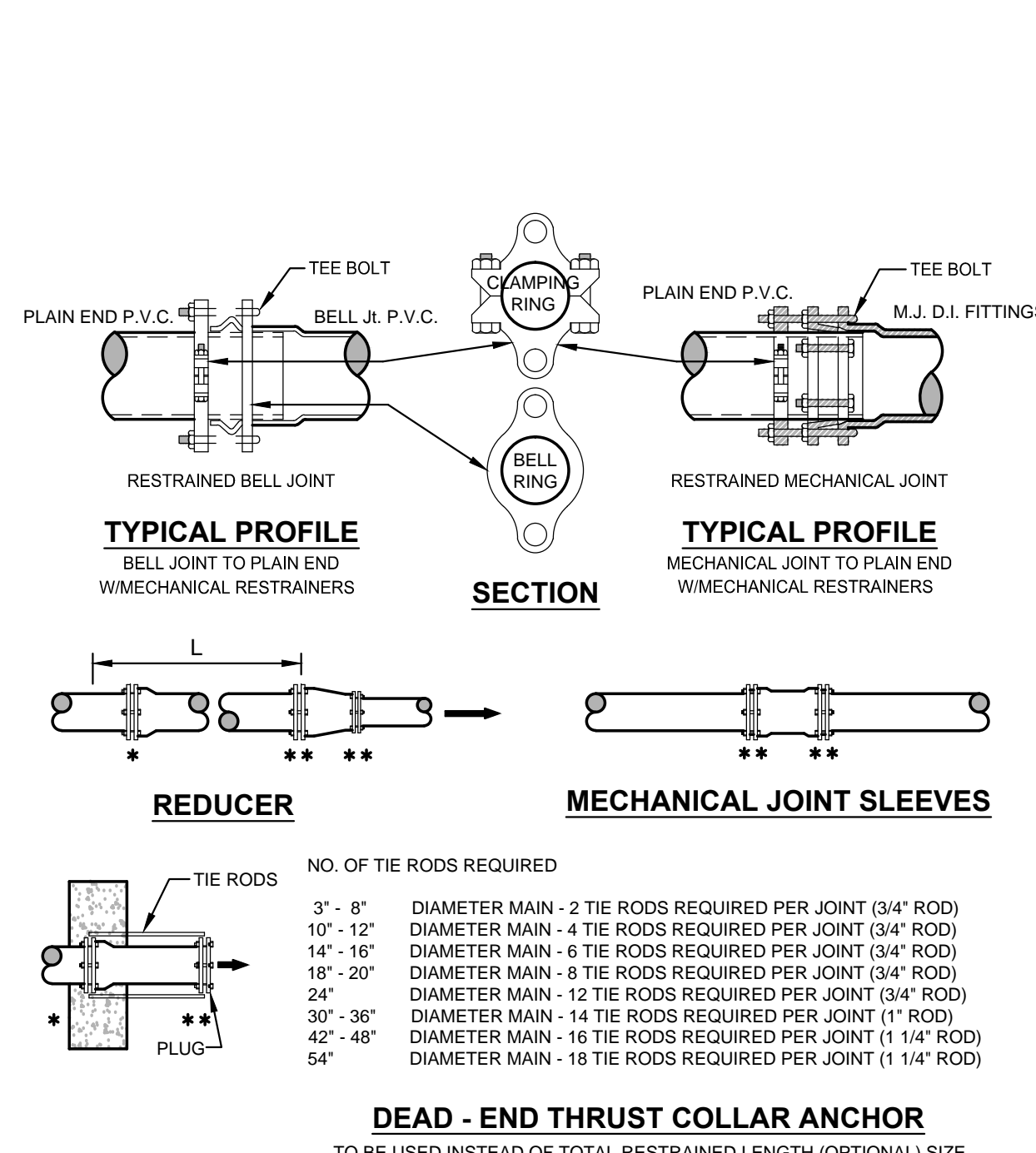
1. THE HORIZONTAL SEPARATION BETWEEN OTHER UTILITY MAINS NOT NOTED ABOVE SHALL BE 3 FEET MINIMUM.
2. THE PLANTING OF HARDWOOD TREES WITHIN 36 INCHES (HORIZONTAL CLEARANCE) OF THE MAIN SHALL BE PROHIBITED.

SEWER MAIN PIPE	OTHER PIPING TYPE	
	GRAVITY	FM
1. WATER MAIN (NOTE #1)	6-10	6-10
2. RECLAIMED WATER MAIN	3	3
3. WATER MAIN (SPECIAL CASE, NOTE #3 PLATE 27)	3	6-10

SEWER MAIN PIPE	OTHER PIPING TYPE	
	GRAVITY	FM
1. WATER MAIN (NOTE #1)	6-12	12
2. RECLAIMED WATER MAIN	12	12

MINIMUM VERTICAL SEPARATION REQUIREMENTS SEPARATION REQUIREMENTS FOR SEWER MAINS

REVISED: JANUARY 2014 PLATE S-26



- GENERAL NOTE:
1. PAY ITEM '***' DENOTES A RESTRAINT WHICH IS PAID FOR ON A PER EACH BASIS.
 2. PAY ITEM '***' DENOTES A RESTRAINT WHICH IS INCLUDED IN THE UNIT PRICE BID FOR FITTING OR VALVE.
 3. → INDICATES DIRECTION OF THRUST FORCE.

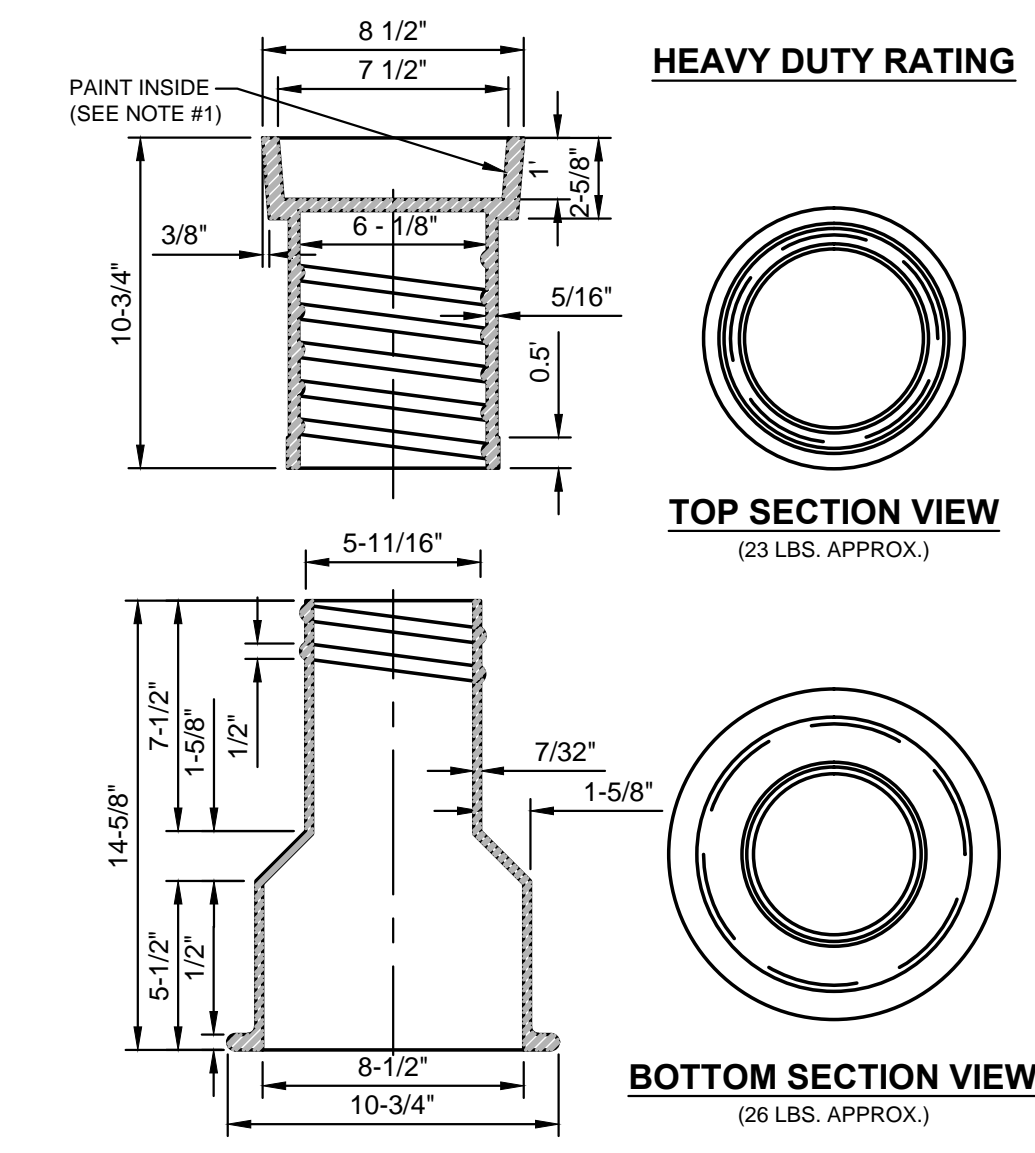
MECHANICAL RESTRAINT DETAILS - I

JANUARY 2014 PLATE S-38C

RUN SIZE (IN.)	BRANCH SIZE (IN.)													
	4	6	8	10	12	14	16	18	20	24	30	36	42	
4	29													
6	23	44												
8	18	41	61											
10	12	37	58	75										
12	6	33	55	73	91									
14	1	28	52	70	88	105								
16	1	24	48	68	86	103	116							
18	1	19	45	65	84	101	118	133						
20	1	15	41	62	82	99	116	132	147					
24	1	4	34	56	76	95	112	128	144	173				
30	1	1	21	46	68	88	106	123	139	169	209			
36	1	1	8	35	59	80	99	117	134	165	206	244		
42	1	1	1	23	49	71	92	111	128	160	202	241	276	
48	1	1	1	10	39	62	84	104	122	155	198	238	273	307

PVC PIPE RESTRAINT JOINT SCHEDULE

JANUARY 2014 PLATE S-38A



- NOTES:
1. PAINT THE INSIDE OF THE TOP SECTION OF THE BOX WITH GREEN COLOR.
 2. HEAVY DUTY RATING (TOTAL WEIGHT APPROX. 50 LBS.).

SEWER SYSTEM VALVE BOX

JANUARY 2014 PLATE S-32

REVISIONS

NO.	DATE	DESCRIPTION

DESIGN BY: RAM
DRAWN BY: CCS
CHECK BY: GEC
DATE: 08-22-14
JOB No.: 14033

MATTHEWS DESIGN GROUP, INC.
P.O. BOX 3126, 7 WALDO STREET
ST. AUGUSTINE, FLORIDA 32084
PHONE: 904.826.1334
FAX: 904.826.4547
INFO@MATTHEWSDSIGN.NET

JEA GENERAL SEWER DETAILS
United Landscapes
ST. JOHNS COUNTY, FLORIDA
PREPARED FOR: UNITED LANDSCAPES, INC.

SHEET No.: 15
OF 17

STORM WATER POLLUTION PREVENTION PLAN

OWNER'S REQUIREMENTS

Form containing site description, project name (UNITED LANDSCAPES), location (SOUTHSHORE RACETRACK RD), latitude/longitude, owner name (UNITED LANDSCAPES, INC.), description (CONSTRUCT 4800SF LANDSCAPE RETAIL BUILDING), soil disturbing activities, runoff curve numbers, existing soils type, site maps, site area, outfalls, controls, storm water management, BMPs, and certification of compliance.

CONTRACTOR'S REQUIREMENTS

Form containing general requirements, sequence of major activities, timing of controls, controls, erosion and sediment control measures, structural practices, spill prevention, and maintenance/inspection procedures.

CONTRACTOR'S REQUIREMENTS

Form containing hazardous products, waste disposal, hazardous waste, sanitary waste, off-site vehicle tracking, inventory for pollution prevention, spill prevention, and maintenance/inspection procedures.

CONTRACTOR'S REQUIREMENTS

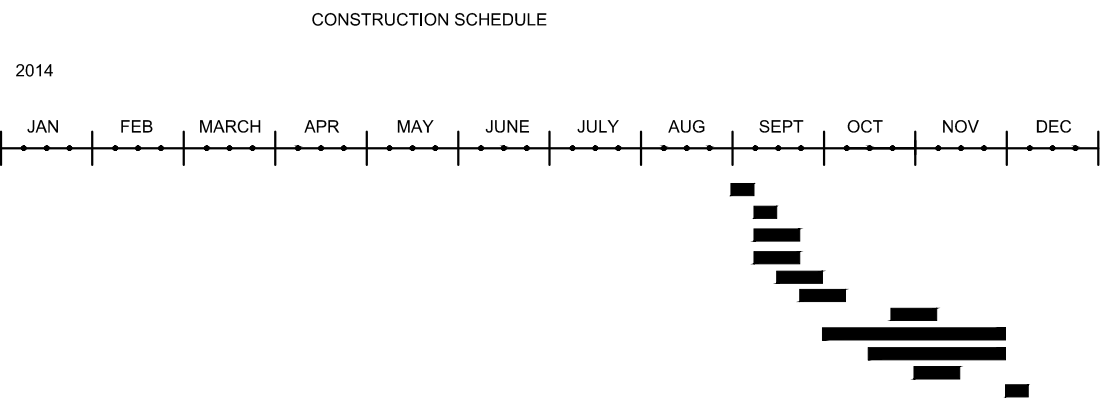
Form containing hazardous products, waste disposal, hazardous waste, sanitary waste, off-site vehicle tracking, inventory for pollution prevention, spill prevention, and maintenance/inspection procedures.

CONTRACTOR'S REQUIREMENTS

Form containing hazardous products, waste disposal, hazardous waste, sanitary waste, off-site vehicle tracking, inventory for pollution prevention, spill prevention, and maintenance/inspection procedures.

CONTRACTOR'S REQUIREMENTS

Form containing hazardous products, waste disposal, hazardous waste, sanitary waste, off-site vehicle tracking, inventory for pollution prevention, spill prevention, and maintenance/inspection procedures.



SIGNED: _____
DATED: _____

Vertical sidebar containing project information, revision table, contractor details (MATTHEWS DESIGN GROUP, INC.), and contact information.

PROJECTS: 14003-14003 - UNITED LANDSCAPES/DRAINAGE/CONSTRUCTION DOCUMENTS: 14003 - SWPPP: 02/20/14 11:38 AM: Owner: Elin, MATTHEWS DESIGN GROUP, INC.

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF
A RAINFALL EVENT OF 0.50 INCHES OR MORE

INSPECTOR: _____ DATE: _____

INSPECTOR'S QUALIFICATIONS:

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF STABILIZED ? NEXT DISTURBANCE	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 1 OF 4

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
STRUCTURAL CONTROLS

DATE: _____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGS/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 2 OF 4

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

OTHER CONTROLS
STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT MIXED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 3 OF 4

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

REASONS FOR CHANGES:

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE AND CORRECT. I AM NOT PROVIDING ANY INFORMATION THAT I KNOW TO BE FALSE OR MISLEADING FOR THE PURPOSES OF SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE: _____
DATE: _____

PAGE 4 OF 4

NOTE TO CONTRACTOR:
THIS IS THE CONTRACTOR'S CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES). STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.50 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

NO.	DATE	RAM	REVISIONS
1	07/15/14	CCS	REVISED PER SOC 1ST REVIEW COMMENTS
2	08/08/14	GEC	REVISED PER COSA AND FOOT 1ST REVIEW COMMENTS
3	08/22/14		REVISED PER SOC 2ND REVIEW COMMENTS

DESIGNED BY: RAM
DRAWN BY: CCS
CHECKED BY: GEC
DATE: 08-22-14
JOB NO.: 14033