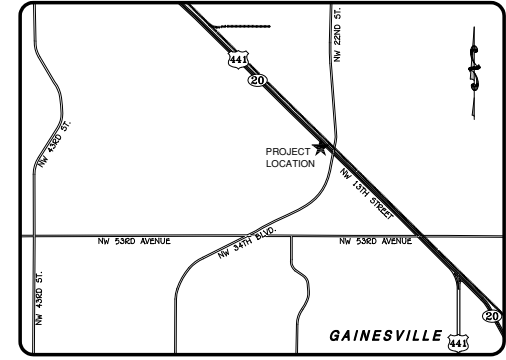
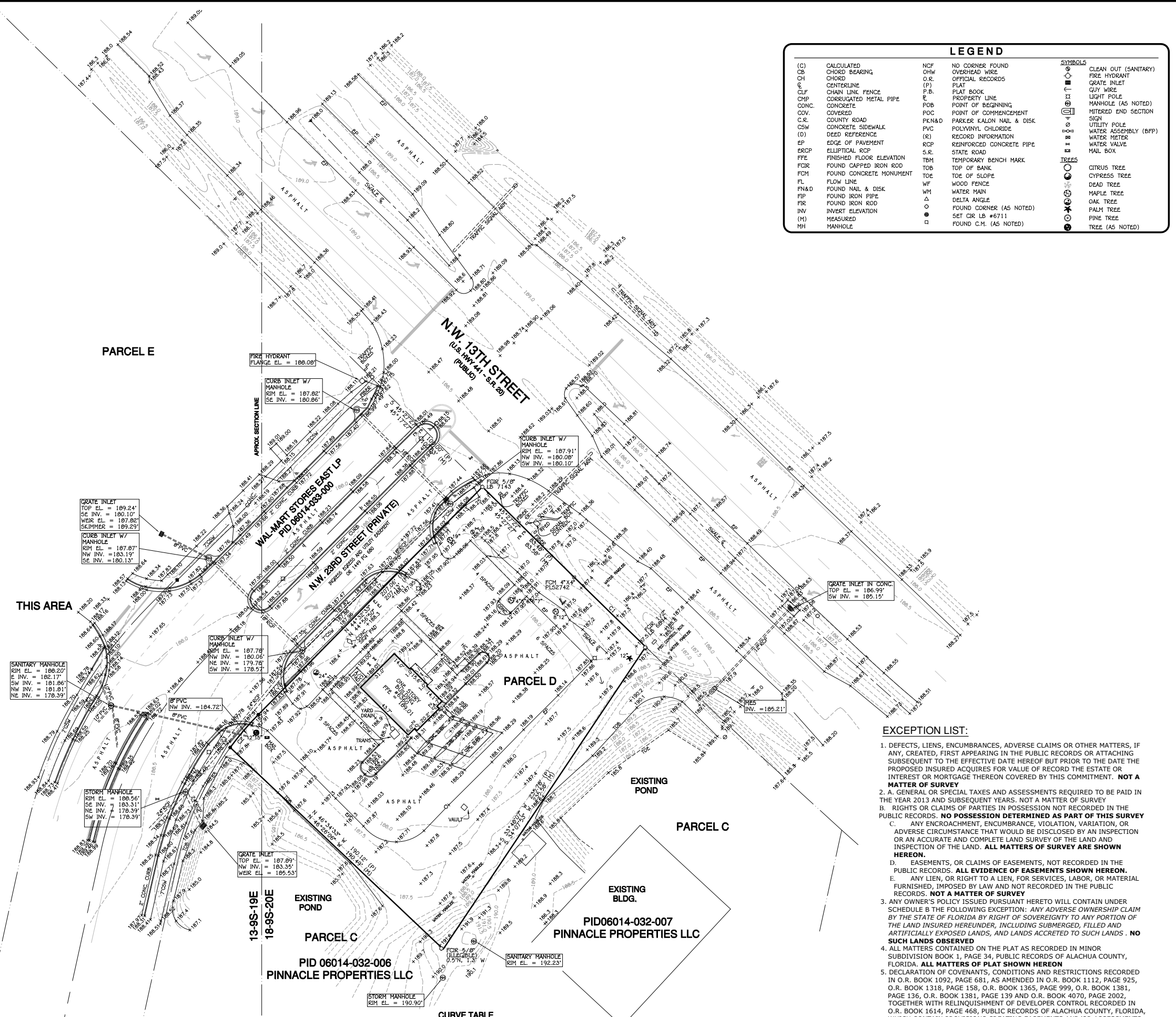
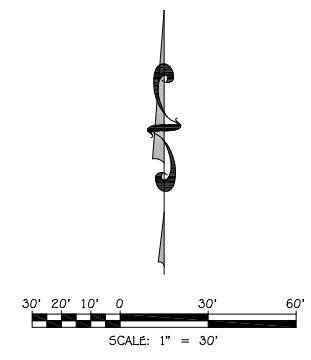


SECTION 13, TOWNSHIP 9 SOUTH, RANGE 19 EAST, ALACHUA COUNTY, FLORIDA
130398C Exhibit B

LEGEND	
(C) CALCULATED	NCF NO CORNER FOUND
CB CHORD BEARING	CHW OVERHEAD WIRE
CH CHORD	O.R. OFFICIAL RECORDS
CL CENTERLINE	(P) PLAT
CLF CHAIN LINK FENCE	P.B. PLAT BOOK
CHP CORRUGATED METAL PIPE	E PROPERTY LINE
CONC. CONCRETE	POB POINT OF BEGINNING
COV. COVERED	POC POINT OF COMMENCEMENT
C.R. COUNTY ROAD	PK&D PARKER KALON NAIL & DISK
CSW CONCRETE SIDEWALK	PVC POLYVINYL CHLORIDE
(D) DEED REFERENCE	(R) RECORD INFORMATION
EP EDGE OF PAVEMENT	RCP REINFORCED CONCRETE PIPE
ERCP ELLIPTICAL RCP	S.R. STATE ROAD
FFE FINISHED FLOOR ELEVATION	TBM TEMPORARY BENCH MARK
FCIR FOUND CAPPED IRON ROD	TOB TOP OF BANK
FCM FOUND CONCRETE MONUMENT	TOE TOE OF SLOPE
FL FLOW LINE	WF WOOD FENCE
FN&D FOUND NAIL & DISK	WM WATER MAIN
FIP FOUND IRON PIPE	Δ DELTA ANGLE
FIR FOUND IRON ROD	○ FOUND CORNER (AS NOTED)
INV INVERT ELEVATION	● SET CIR LB #6711
(M) MEASURED	○ FOUND C.M. (AS NOTED)
MH MANHOLE	
	SYMBOLS
	○ CLEAN OUT (SANITARY)
	□ FIRE HYDRANT
	□ GRATE INLET
	○ GUY WIRE
	□ LIGHT POLE
	○ MANHOLE (AS NOTED)
	□ MITERED END SECTION
	○ SIGN
	○ UTILITY POLE
	○ WATER ASSEMBLY (BFP)
	○ WATER METER
	○ WATER VALVE
	○ MAIL BOX
	TREES
	○ CITRUS TREE
	○ CYPRESS TREE
	○ DEAD TREE
	○ MAPLE TREE
	○ OAK TREE
	○ PALM TREE
	○ PINE TREE
	○ TREE (AS NOTED)



LOCATION MAP (NOT TO SCALE)



CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	584.658'	64.63'	64.63'	N 45°42'27" W	0°03'00"
C2	200.00'	28.03'	28.01'	N 40°31'58" E	08°01'50"

- EXCEPTION LIST:**
- DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT. **NOT A MATTER OF SURVEY**
 - A. GENERAL OR SPECIAL TAXES AND ASSESSMENTS REQUIRED TO BE PAID IN THE YEAR 2013 AND SUBSEQUENT YEARS. **NOT A MATTER OF SURVEY**
 B. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT RECORDED IN THE PUBLIC RECORDS. **NO POSSESSION DETERMINED AS PART OF THIS SURVEY**
 C. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE THAT WOULD BE DISCLOSED BY AN INSPECTION OR AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND AND INSPECTION OF THE LAND. **ALL MATTERS OF SURVEY ARE SHOWN HEREON.**
 D. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT RECORDED IN THE PUBLIC RECORDS. **ALL EVIDENCE OF EASEMENTS SHOWN HEREON.**
 E. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL FURNISHED, IMPOSED BY LAW AND NOT RECORDED IN THE PUBLIC RECORDS. **NOT A MATTER OF SURVEY**
 - ANY OWNER'S POLICY ISSUED PURSUANT HERETO WILL CONTAIN UNDER SCHEDULE B THE FOLLOWING EXCEPTION: **ANY ADVERSE OWNERSHIP CLAIM BY THE STATE OF FLORIDA BY RIGHT OF SOVEREIGNTY TO ANY PORTION OF THE LAND INSURED HEREUNDER, INCLUDING SUBMERGED, FILLED AND ARTIFICIALLY EXPOSED LANDS, AND LANDS ACCRETED TO SUCH LANDS. NO SUCH LANDS OBSERVED**
 - ALL MATTERS CONTAINED ON THE PLAT AS RECORDED IN MINOR SUBDIVISION BOOK 1, PAGE 34, PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA. **ALL MATTERS OF PLAT SHOWN HEREON**
 - DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED IN O.R. BOOK 1092, PAGE 681, AS AMENDED IN O.R. BOOK 1112, PAGE 925, O.R. BOOK 1318, PAGE 158, O.R. BOOK 1365, PAGE 999, O.R. BOOK 1381, PAGE 136, O.R. BOOK 1381, PAGE 139 AND O.R. BOOK 4070, PAGE 2002, TOGETHER WITH RELINQUISHMENT OF DEVELOPER CONTROL RECORDED IN O.R. BOOK 1614, PAGE 468, PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, WHICH CONTAIN PROVISIONS CREATING EASEMENTS AND/OR ASSESSMENTS. **NO PLOTTABLE MATTERS**
 - SUBJECT TO RIGHTS OF TENANTS UNDER UNRECORDED LEASES, IF ANY. **NOT A MATTER OF SURVEY.**

LEGAL DESCRIPTION:
 PARCEL D, A MINOR SUBDIVISION IN SECTION 13, TOWNSHIP 9 SOUTH, RANGE 19 EAST, AND SECTION 18, TOWNSHIP 9 SOUTH, RANGE 20 EAST, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN MINOR SUBDIVISION BOOK 1, PAGE 34, PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

SURVEYOR'S NOTES:

- BEARINGS SHOWN HEREON ARE BASED ON THE PLAT.
- UNDERGROUND IMPROVEMENTS, UTILITIES AND ENCROACHMENTS, IF ANY, HAVE NOT BEEN LOCATED.
- REPRODUCTIONS OF THIS SURVEY ARE NOT VALID UNLESS EMBOSSED WITH THE UNDERSIGNED SURVEYOR'S SEAL.
- FIELD WORK COMPLETED FEBRUARY 5, 2013.
- LEGAL DESCRIPTION SHOWN HEREON WAS PROVIDED BY THE CLIENT.
- THE SUBJECT PROPERTY HAS NOT BEEN ABSTRACTED BY THIS SURVEYOR FOR EASEMENTS, RIGHTS OF WAY OR OTHER MATTERS OF PUBLIC RECORD IN THE PREPARATION OF THIS SURVEY.
- THIS SURVEY HAS BEEN PREPARED IN CONJUNCTION WITH COMMITMENT FOR TITLE INSURANCE, ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, AGENT FILE REFERENCE NO. 9585-21800-0, DATED FEBRUARY 19, 2013 @ 11:00 PM AND IS INTENDED TO DEPICT ALL ITEMS IDENTIFIED IN SCHEDULE B, SECTION II. SEE EXCEPTION LIST HEREON.
- BASED ON AN INSPECTION OF FEMA FLOOD INSURANCE RATE MAP (F.I.R.M.) COMMUNITY PANEL NO. 12001C0303D, DATED JUNE 16, 2006, THE PROPERTY SHOWN HEREON APPEARS TO LIE IN FLOOD ZONE A & FLOOD ZONE X.
- ELEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 AND ARE BASED ON F.D.O.T. BENCHMARK DESIGNATION BM10, ELEVATION = 186.972'
- THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS. SITE IS VACANT.
- NO INFORMATION IS AVAILABLE FROM THE CONTROLLING JURISDICTION AS TO PROPOSED CHANGES IN STREET RIGHT-OF-WAY LINES.
- THERE IS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
- THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SLUMP OR SANITARY LANDFILL.
- NO WETLAND AREAS AS DELINEATED BY APPROPRIATE AUTHORITIES EXIST ON THE PROPERTY.

CERTIFIED TO:
 GAINESVILLE NW13 PROPERTY, LLC, A FLORIDA LIMITED LIABILITY COMPANY
 SILVER CAPITAL NET LEASE FUNDING, LLC, ITS SUCCESSORS AND/OR ASSIGNS
 CAPITAL CITY BANK, A FLORIDA BANKING CORPORATION, SUCCESSOR BY MERGER WITH FIRST NATIONAL BANK OF ALACHUA
 MURPHY OIL USA, INC., A DELAWARE CORPORATION
 NASON, YEAGER, GERSON, WHITE & LIOCE P.A.
 OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

SURVEYOR'S CERTIFICATE:
 THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA, ACSM AND NSPS IN 2005, AND INCLUDES ITEMS 1.2, 3.6, (a & b), 8.9, 10.11(a), 13.16, 17.18, AND 19 OF "TABLE A" THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA, NSPS, AND ACSM AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT PROPER FIELD PROCEDURES, INSTRUMENTATION, AND ADEQUATE SURVEY PERSONNEL WERE EMPLOYED IN ORDER TO ACHIEVE RESULTS COMPARABLE TO THOSE OUTLINED IN THE "MINIMUM ANGLE, DISTANCE, AND CLOSURE REQUIREMENTS FOR SURVEY MEASUREMENTS WHICH CONTROL LAND BOUNDARIES FOR ALTA/ACSM LAND TITLE SURVEYS."

DRAFT DATE: 3-15-13
 WILLIAM C. WARD PROFESSIONAL LAND SURVEYOR NO. 4815 STATE OF FLORIDA

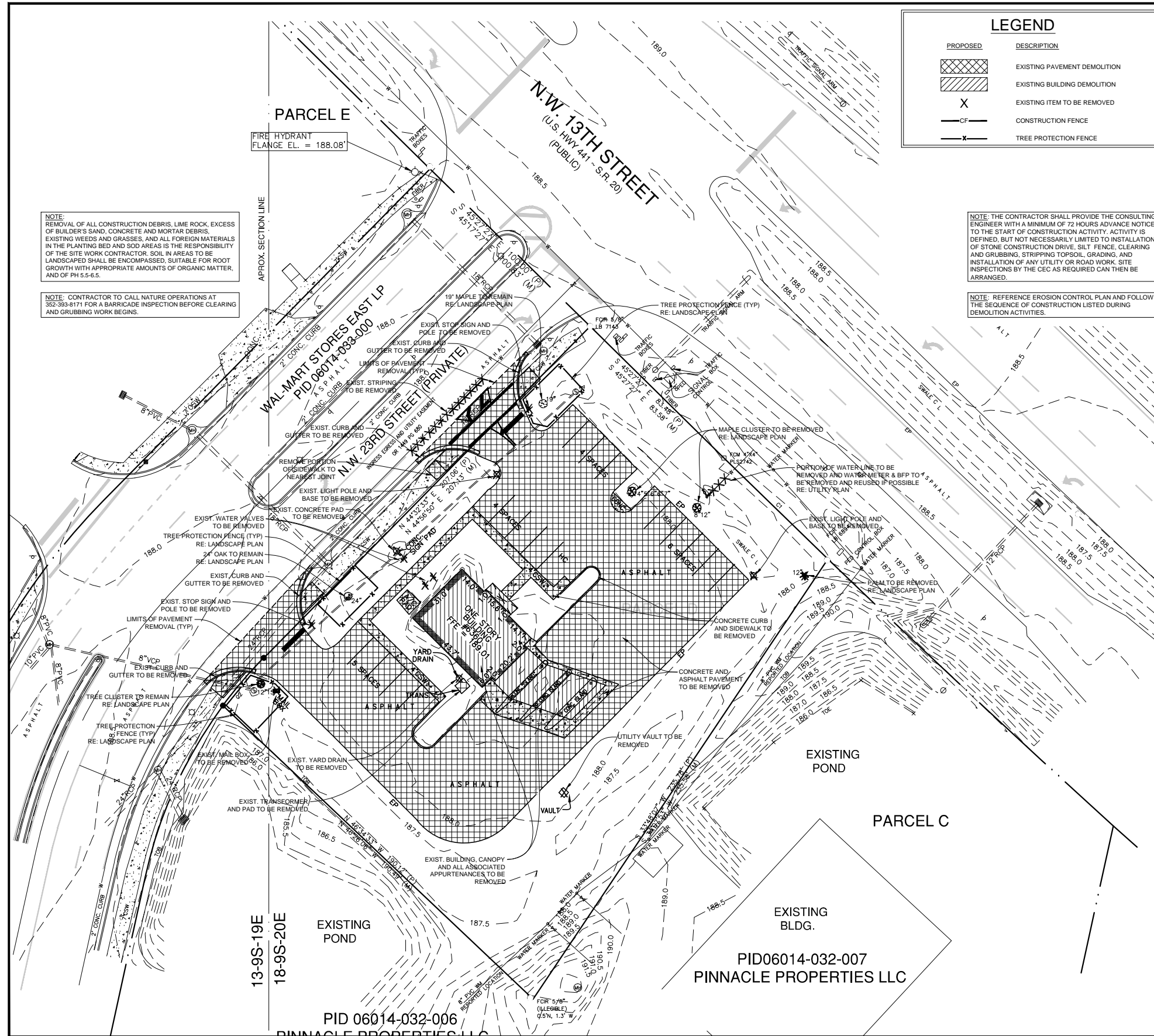
BY		DATE	
REVISION			
NO.			

WILLIAM C. WARD, PLS
 Professional Land Surveyor
 SURVEYOR - MAPPER - PLANNER
 60 PINELLAS BAYWAY, SUITE 200 - GAINESVILLE, FLORIDA 32609
 PHONE: 352-377-7415

DESIGN BY:	WCV
CHECKED BY:	WCV
DATE:	FEBRUARY 16, 2013
JOB NUMBER:	13016
FILE:	C:\WCW\2013\...13016-L.DWG

MURPHY OIL, USA
 6360 NW 13th Street ~ Gainesville, FL 32653
 ALTA/ACSM LAND TITLE SURVEY
 PREPARED FOR: COMMERCIAL SITE SOLUTIONS, INC.

SHEET NO. 1 OF 1



NOTE: REMOVAL OF ALL CONSTRUCTION DEBRIS, LIME ROCK, EXCESS OF BUILDER'S SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS IS THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR. SOIL IN AREAS TO BE LANDSCAPED SHALL BE ENCOMPASSED, SUITABLE FOR ROOT GROWTH WITH APPROPRIATE AMOUNTS OF ORGANIC MATTER, AND OF PH 5.5-6.5.

NOTE: CONTRACTOR TO CALL NATURE OPERATIONS AT 352-393-6171 FOR A BARRIAGE INSPECTION BEFORE CLEARING AND GRUBBING WORK BEGINS.

LEGEND	
PROPOSED	DESCRIPTION
	EXISTING PAVEMENT DEMOLITION
	EXISTING BUILDING DEMOLITION
X	EXISTING ITEM TO BE REMOVED
—CF—	CONSTRUCTION FENCE
—X—	TREE PROTECTION FENCE



GENERAL DEMOLITION NOTES

A. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED, SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED.

B. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.

C. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

D. 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 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IF CLEARANCES ARE LESS THAN SPECIFIED ON THE PLAN OR TWELVE INCHES (12"), WHICHEVER IS LESS, CONTACT THE DESIGN ENGINEER AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.

E. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING DOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.

F. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS.

G. INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.

H. THE CONTRACTOR SHALL MAINTAIN ALL SANITARY SEWER SERVICES TO ANY "UPSTREAM" FACILITIES AT ALL TIMES. SANITARY SEWER SERVICES SHALL NOT BE INTERRUPTED AT ANY TIME DURING CONSTRUCTION ACTIVITIES.

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO THE EXISTING BUILDINGS PRIOR TO DEMOLITION OF THE BUILDINGS.

J. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.

K. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND APPROVED BY OWNER/DEVELOPER CONSTRUCTION MANAGER.

L. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.

M. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE CITY OF GAINESVILLE TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT-OFFS WITH THE CITY OF GAINESVILLE DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT-OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.

N. CONTRACTOR IS TO ENSURE NO DISTURBANCE OCCURS BEYOND THE LIMITS SHOWN ON THIS PLAN.

NOTE: THE CONTRACTOR SHALL PROVIDE THE CONSULTING ENGINEER WITH A MINIMUM OF 72 HOURS ADVANCE NOTICE TO THE START OF CONSTRUCTION ACTIVITY. ACTIVITY IS DEFINED, BUT NOT NECESSARILY LIMITED TO INSTALLATION OF STONE CONSTRUCTION DRIVE, SILT FENCE, CLEARING AND GRUBBING, STRIPPING TOPSOIL, GRADING, AND INSTALLATION OF ANY UTILITY OR ROAD WORK. SITE INSPECTIONS BY THE CEC AS REQUIRED CAN THEN BE ARRANGED.

NOTE: REFERENCE EROSION CONTROL PLAN AND FOLLOW THE SEQUENCE OF CONSTRUCTION LISTED DURING DEMOLITION ACTIVITIES.

REVISIONS	
ISSUED	COMMENT
03/13	CITY/STP SUBMITTAL
04/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
FL PE NO. 50565

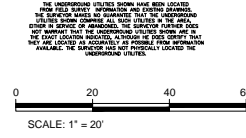
COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2375
1886 N. DALE MARBY HWY
LUTZ, FL 33548
813-882-2032

PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORA, AR 71730
PH: 870-875-7629

DEMOLITION PLAN
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
C-3
Sheet

CAUTION
3 DAYS BEFORE SIGGING CALL
TOLL FREE 1-800-432-4770
FL REG. # 130398C
A ONE CALL SYSTEM FOR CONCRETE AND JOB SAFETY.



SITE DATA

SITE IS LOCATED CITY OF GAINESVILLE JURISDICTION

PROPOSED OVERALL LOT SIZE: +/- 0.91 ACRES (39,640 SF)

MAXIMUM ALLOWABLE LOT COVERAGE (BUILDING): 50%

ACTUAL LOT COVERAGE (BUILDING/CANOPY): 18.8%

ZONING: MU-2

FLU CATEGORY: MIXED USE - MEDIUM (MUM)

ALLOWABLE USES: GAS /C-STORE ALLOWED WITHIN MU-2 ZONING

OPEN SPACE REQUIRED: 20% (6,185 SF)

OPEN SPACE PROVIDED: 40% (12,370 SF)

IMPERVIOUS AREA (BUILDING/CANOPY AND PAVEMENT): 60% (18,555 SF)

BUILDING SETBACKS (± 50,000 SF):
 FRONT - 15' (MIN); 80' (MAX); AVERAGE OF EXISTING BLDG
 SIDE - 25' (NEXT TO RESIDENTIAL)
 REAR - 25' (NEXT TO RESIDENTIAL)

PARKING REQUIREMENTS

1 / 200 SF OF FLOOR AREA = 6 SPACE PROVIDED = 6 SPACES

BICYCLE PARKING REQUIRED = 2 SPACES
 BICYCLE PARKING PROVIDED = 2 SPACES

STREET YARDS/BUFFERS:

STREET - 15' (3 SHADE TREES, 2 UNDERSTORY TREES, 5 LARGE SHRUBS, 6 SMALL SHRUBS PER 100 LF)
 9' (3 SHADE TREES, 2 UNDERSTORY TREES, 8 LARGE SHRUBS, 13 SMALL SHRUBS PER 100 LF)

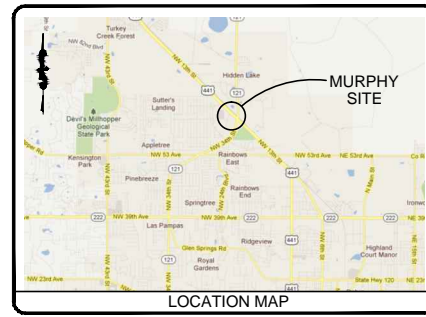
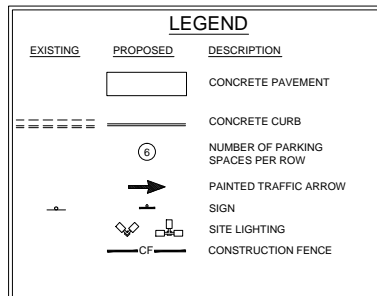
SIDE - 0' (ABUTS MU-2)
 REAR - 0' (ABUTS MU-2)

VEHICULAR USE BUFFER - 9' MIN. FROM PROPERTY LINE

MAX AREA FOR MONUMENT SIGN = 77 SF

FLOOD ZONE: SITE IS LOCATED IN FLOOD ZONE A

SITE DOES NOT LIE WITHIN AN HISTORIC PRESERVATION DISTRICT



NOTE: ALL AREAS WITHIN THE RIGHT-OF-WAY THAT ARE DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.

NOTE: CONTRACTOR SHALL OBTAIN COPY OF EASEMENT DOCUMENTS AND DRIVEWAY ENCROACHMENT PERMITS PRIOR TO BEGINNING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY OR ON ADJACENT PROPERTY.

NOTE: GENERAL CONTRACTOR TO COORDINATE LOCATION OF CANOPY SIGN AND MONUMENT SIGN WITH MURPHY'S CONSTRUCTION SUPERVISOR.

NOTE: ALL CONSTRUCTION STAGING SHALL TAKE PLACE WITHIN THE PROJECT LIMITS.

NOTES:

- FIRE HYDRANTS AND STABILIZED SURFACES MUST BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES ON SITE. (GAINESVILLE FIRE PREVENTION AND PROTECTION CODE SECTION 10-9, NFPA 1-16.4.3)
- PROPOSED FLAMMABLE LIQUID STORAGE TANKS MUST COMPLY WITH NFPA 30.
- PROPOSED FUEL DISPENSING FACILITIES MUST COMPLY WITH NFPA 30A.

SITE NOTES

A. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

B. UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON ALL CURB AND GUTTER ADJACENT TO ASPHALT PAVING SHALL BE INSTALLED PER DETAILS. SEE ASSOCIATED PLANS FOR CANOPY, COLUMN, PUMP ISLAND DETAILS AND LAYOUT.

C. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEMS AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.

D. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING DOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.

E. CONTRACTOR TO PROTECT EXISTING LANDSCAPE/IRRIGATION MATERIAL.

F. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED/SODDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

G. CONTRACTOR IS TO VERIFY LOCATION OF EXISTING IRRIGATION SYSTEM, VALVE BOXES, CONTROL BOXES, BACKFLOW PREVENTION DEVICES AND OTHER ITEMS WHICH ARE PART OF THE SYSTEM. IF DAMAGED THEY MUST BE REPAIRED AT CONTRACTOR'S COST.

H. THE LOCATION OF THE CONSTRUCTION FENCE ON THE DRAWINGS IS FOR GRAPHICAL REPRESENTATION ONLY. THE CONTRACTOR IS TO ENSURE THAT THE CONSTRUCTION FENCE ENCOMPASSES THE ENTIRE WORK AREA.

I. ALL DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO FACE OF CURB, FACE OF BUILDING (BLOCK), OR CENTERLINE OF PARKING BAY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF ALL ENTRY/EXIT PORCHES AND PRECISE BUILDING DIMENSIONS.

J. UNLESS OTHERWISE NOTED, PAVEMENT SHALL BE STANDARD DUTY ASPHALT.

K. ALL HANDICAP SPACES ARE TO RECEIVE A HANDICAP SIGN AND SYMBOL PAINTED ON THE ASPHALT. STALL(S) ADJACENT TO THE EIGHT (8) FOOT STRIPED AISLES ARE TO RECEIVE A "VAN ACCESSIBLE" SIGN IN ADDITION TO THE ABOVE. STRIPING TO BE BLUE.

L. UNLESS OTHERWISE NOTED, ALL ON-SITE CURB SHALL BE INTEGRAL CURB AS SHOWN ON THE DETAIL SHEET.

M. STOP SIGNS SHALL MEET THE CRITERIA OF THE FLORIDA DEPARTMENT OF TRANSPORTATION AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

N. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS.

O. THE GENERAL CONTRACTOR IS TO COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION, ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES AS DESIGNATED ON THE PLANS.

P. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING DAMAGE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. THE CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION START.

NOTE: MAX ALLOWABLE LIGHTING UNDER CANOPY WITHIN THE GAINESVILLE CITY LIMITS IS 10 FOOTCANDLES

BUILDING NOTES

- FOR BUILDING PLANS REFER TO DRAWINGS BY FREY MOSS STRUCTURES INC.
- BUILDING WILL BE TYPE IB CONSTRUCTION, NON FIRE SPRINKLED.
- BUILDING IS A PREFABRICATED UNIT WITH FLORIDA STATE APPROVAL.
- BUILDING OCCUPANCY TYPE IS "M"
- BUILDING WILL CONTAIN NO FOOD PREPARATION.

CURRENT LAND OWNER:
 CAPITAL CITY BANK
 P.O. BOX 900
 TALLAHASSEE, FL 32302

LEGAL DESCRIPTION

PARCEL D, A MINOR SUBDIVISION IN SECTION 13, TOWNSHIP 9 SOUTH, RANGE 19 EAST, AND SECTION 18, TOWNSHIP 9 SOUTH, RANGE 20 EAST, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN MINOR SUBDIVISION BOOK 1, PAGE 34, PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

Date: 4/29/13
 Drawn: SKS
 Checked: SKS

REVISIONS

ISSUED	COMMENT
03/13	CITY/STP SUBMITTAL
04/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
 FL PE NO. 50565

COMMERCIAL SITE SOLUTIONS, INC.
 SITE PLANNING & ENGINEERING
 FL COA. 2375
 1886 N. DALE MARBY HWY
 LUTZ, FL 33548
 813.882.2032

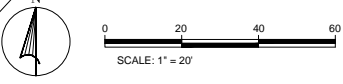
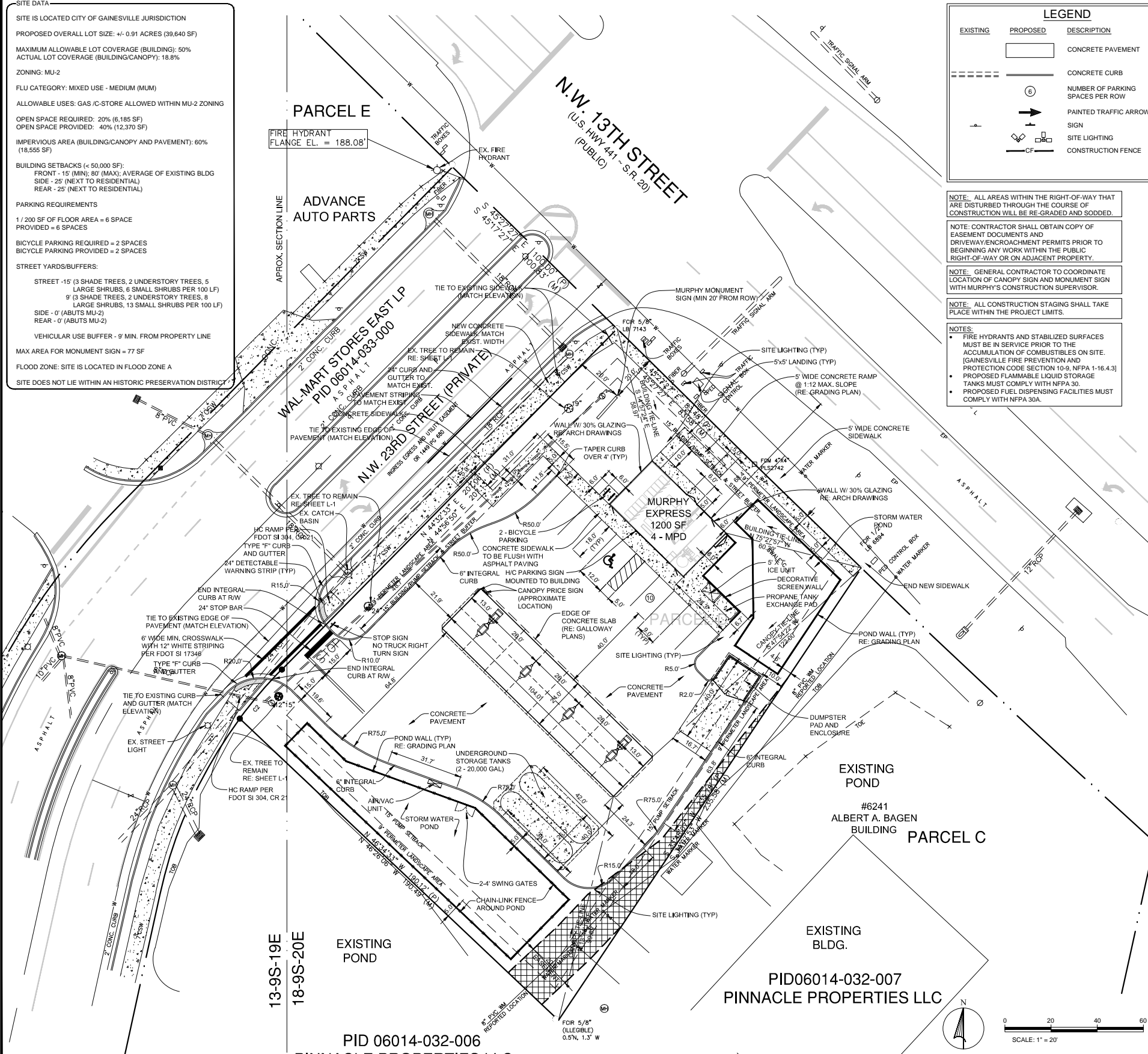
422 NORTH WASHINGTON AVENUE
 EL DORA, AR 71730
 LUTZ, FL 33548
 866.855.5200
 PH: 870.875.7629

PREPARED FOR:
MURPHY OIL USA, INC.
 422 NORTH WASHINGTON AVENUE
 EL DORA, AR 71730
 LUTZ, FL 33548
 PH: 870.875.7629

SITE PLAN
MURPHY OIL USA
GAINESVILLE, FL
 NW 23RD STREET AT US HWY 441
 GAINESVILLE, FL

Date: 4/29/13
 Drawn: SKS
 Checked: SKS

C-4
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CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.

NOTES:
1. SEED AND MULCH EXPOSED AREAS
2. ALL ROOF RUNOFF TO BE DIRECTED TO DETENTION AREA.

NOTE: CONTRACTOR TO REFER TO GEOTECHNICAL REPORT (MURPHY WEBSITE), PREPARED BY UNIVERSAL ENGINEERING SERVICES, FOR EXISTING SOIL AND SUBGRADE CONDITIONS AND SITE PREPARATION, PAVEMENT AND GRADING REQUIREMENTS.

NOTES: ALL EXCAVATION FOR UTILITIES OR STORM LINES WITHIN THE DRIP LINE OF ANY TREE TO REMAIN SHALL BE PERFORMED BY HAND EXCAVATION AND/OR ROOT PRUNING. ROOT PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST.

REFER TO LANDSCAPE PLAN FOR TREE REMOVAL AND TREE SAVE INFORMATION. INSTALL TREE PROTECTION FENCE AS INDICATED BY LANDSCAPE PLAN.

LIMB PRUNING MAY BE REQUIRED TO PERFORM WORK OF THIS PROJECT. ALL PRUNING TO BE PERFORMED BY A CERTIFIED ARBORIST.

GRATE INLET
TOP EL. = 189.24'
SE INV. = 180.10'
WEIR EL. = 187.82'
SKIMMER = 189.29'

CURB INLET W/
MANHOLE
RIM EL. = 187.87'
NW INV. = 183.11'
SW INV. = 180.13'

CURB INLET W/
MANHOLE
RIM EL. = 187.78'
NW INV. = 180.06'
NE INV. = 179.78'
SW INV. = 178.57'

STORM MANHOLE
RIM EL. = 188.56'
SE INV. = 183.31'
NE INV. = 178.39'
SW INV. = 178.39'

GRATE INLET
TOP EL. = 187.8'
NW INV. = 183.35'
WEIR EL. = 185.53'

GRATE INLET
TOP EL. = 187.8'
NW INV. = 183.35'
WEIR EL. = 185.53'

PARCEL E

FIRE HYDRANT
FLANGE EL. = 188.08'

CURB INLET W/
MANHOLE
RIM EL. = 187.82'
SE INV. = 180.96'

CURB INLET W/
MANHOLE
RIM EL. = 187.87'
NW INV. = 183.11'
SW INV. = 180.13'

CURB INLET W/
MANHOLE
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RIM EL. = 188.56'
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TOP EL. = 187.8'
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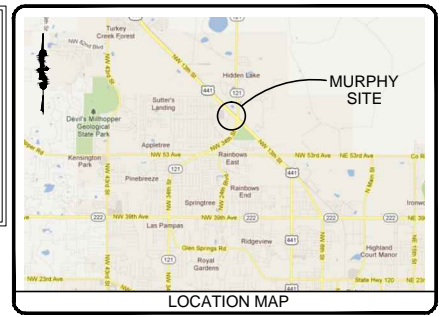
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OPERATION AND MAINTENANCE
ENTITY RESPONSIBLE FOR OPERATION AND MAINTENANCE OF FACILITY:
MURPHY OIL USA, INC.

- OPERATION AND MAINTENANCE PLAN:
- ON A MONTHLY AND QUARTERLY BASIS, AND FOLLOWING A STORM EVENT, THE ENTITY RESPONSIBLE FOR OPERATION AND MAINTENANCE SHOULD MAKE AN INSPECTION OF THE POND AND ITS OUTFALL STRUCTURE TO ENSURE THAT THE SYSTEM IS OPERATING PROPERLY. IF CONTROL STRUCTURE ORIFICE REMAINS SUBMERGED LONGER THAN 120 HOURS AFTER A NORMAL SUMMER RAIN EVENT, THE STORMWATER FACILITY MAY BE IN NEED OF REPAIR. REPAIRS MAY BE AS SIMPLE AS REMOVING THE SEDIMENT AND/OR DEBRIS FROM IN OR AROUND CONTROL STRUCTURE. ENTITY RESPONSIBLE SHALL CONTACT THE LOCAL WATER MANAGEMENT DISTRICT OFFICE WITH ANY QUESTIONS (850-683-5044).
 - LIMIT FERTILIZER USE AROUND THE POND.
 - RESOD ANY AREA ON-SITE WHERE GRASS OR SOD HAS BEEN REMOVED OR ERODED.
 - KEEP THE OUTFALL STRUCTURE CLEAR OF DEBRIS AND VEGETATION.
 - IN THE EVENT OF A SINK HOLE, ENTITY RESPONSIBLE SHALL GROUT SINK HOLE AND REGRADE AND RESOD POND AREA TO ORIGINAL ELEVATIONS.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
700.00	17	CONTOUR LINE
	+ 17.50	TOP OF ISLAND ELEVATION
		SPOT ELEVATION
		STORM DRAIN INLET
		STORM DRAIN MANHOLE
		STORM DRAIN PIPE
		WATER LINE
		UNDERGROUND ELEC. AND TEL.
		SANITARY SEWER



STORMDRAIN SCHEDULE

STRUCTURES	SIZE	LENGTH	TYPE	SLOPE	IE DOWN	IE UP
1 TO 2	15'	72'	RCP (CLASS III)	0.5%	183.39	183.75
3 TO 4	15'	25'	RCP (CLASS III)	0.5%	186.50	186.63
5 TO 6	15'	150'	RCP (CLASS III)	0.0%	186.50	186.50

STORMDRAIN STRUCTURE TABLE

STRUCTURE	TYPE	RIM/THROAT ELEV.
1	EX CURB INLET	187.78
2	FDOT TYPE C STRUCTURE	187.75
3	HEADWALL	-
4	FDOT TYPE D INLET	188.30
5	HEADWALL	-
6	HEADWALL	-

SITE GRADING NOTES

- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- 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 COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION.
- STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED: TYPE 1 RCP, CLASS III PER ASTM C-76, WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS, UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 0.5 FOOT INTERVALS.
- PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RINGS & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL NOTES & PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY WILLIAM C. WARD, PLS. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL MAKE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- ALL UNPAVED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STAKED SOD TO ALL SLOPES 3:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH STATE SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- CATCH BASINS, MANHOLES, FRAMES, GRATES, SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD DETAILS FOR CONSTRUCTION AND THE CITY OF GAINESVILLE REQUIREMENTS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT NUMBER, SIZE AND LOCATION OF ANY ROOF DRAINS.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THE PLAN OR TWELVE INCHES (12"), WHICHEVER IS LESS, CONTACT THE DESIGN ENGINEER AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- PRECAST DRAINAGE STRUCTURES HAVE BEEN SPECIFIED ON THE PLANS. THE OWNER AND THE ENGINEER, HOWEVER, ASSUME NO RESPONSIBILITY FOR THESE STRUCTURES, AS FIELD CONDITIONS OFTEN DICTATE MINOR ELEVATION ADJUSTMENTS. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY AND EXPENSE FOR MODIFYING THE PRECAST STRUCTURES TO ACCOMMODATE FIELD VISIONS.
- ALL SLOPES 3:1 AND STEEPER ARE TO RECEIVE STAKED SOD.
- ALL GRADING OPERATIONS, EXCAVATIONS, FILL, COMPACTION TESTING AND BACKFILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL BE DESIGNATED BY AND PAID FOR BY THE OWNER.
- NO FILL SHALL BE PLACED PRIOR TO APPROVAL OF THE SUBGRADE BY THE GEOTECHNICAL ENGINEER.
- COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE ON-SITE GEOTECHNICAL ENGINEERS RECOMMENDATIONS.
- COMPACTION TESTS SHALL BE DONE FOR EACH TWO FEET OF FILL, BUT NOT LESS THAN ONE TEST FOR EVERY 500 CUBIC YARDS, OR MORE FREQUENTLY IF REQUIRED BY THE GEOTECHNICAL ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS INCURRED FOR INSPECTION AND TESTING OF SOILS DUE TO FAILURE TO COMPLY WITH THE MINIMUM REQUIREMENTS OF THE SOILS REPORT.
- ALL GRADING OPERATIONS SHALL BE STAKED BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR APPROVED BY THE OWNER.
- UPON COMPLETION OF THE GRADING, THE SOILS ENGINEER SHALL PROVIDE OWNER WITH A LETTER INDICATING THAT THE SITE AND BUILDING PAD WERE PREPARED IN DIRECT CONFORMANCE WITH THE RECOMMENDATIONS AND CONCLUSIONS IN THE SOILS REPORT.
- CROSS-SLOPE THROUGH STRIPED AREA LEADING TO PUBLIC SIDEWALK SHALL NOT EXCEED 2.0%.

REVISIONS

ISSUED	COMMENT
03/13	CITY/UP SUBMITTAL
08/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
FL PE NO. 50665

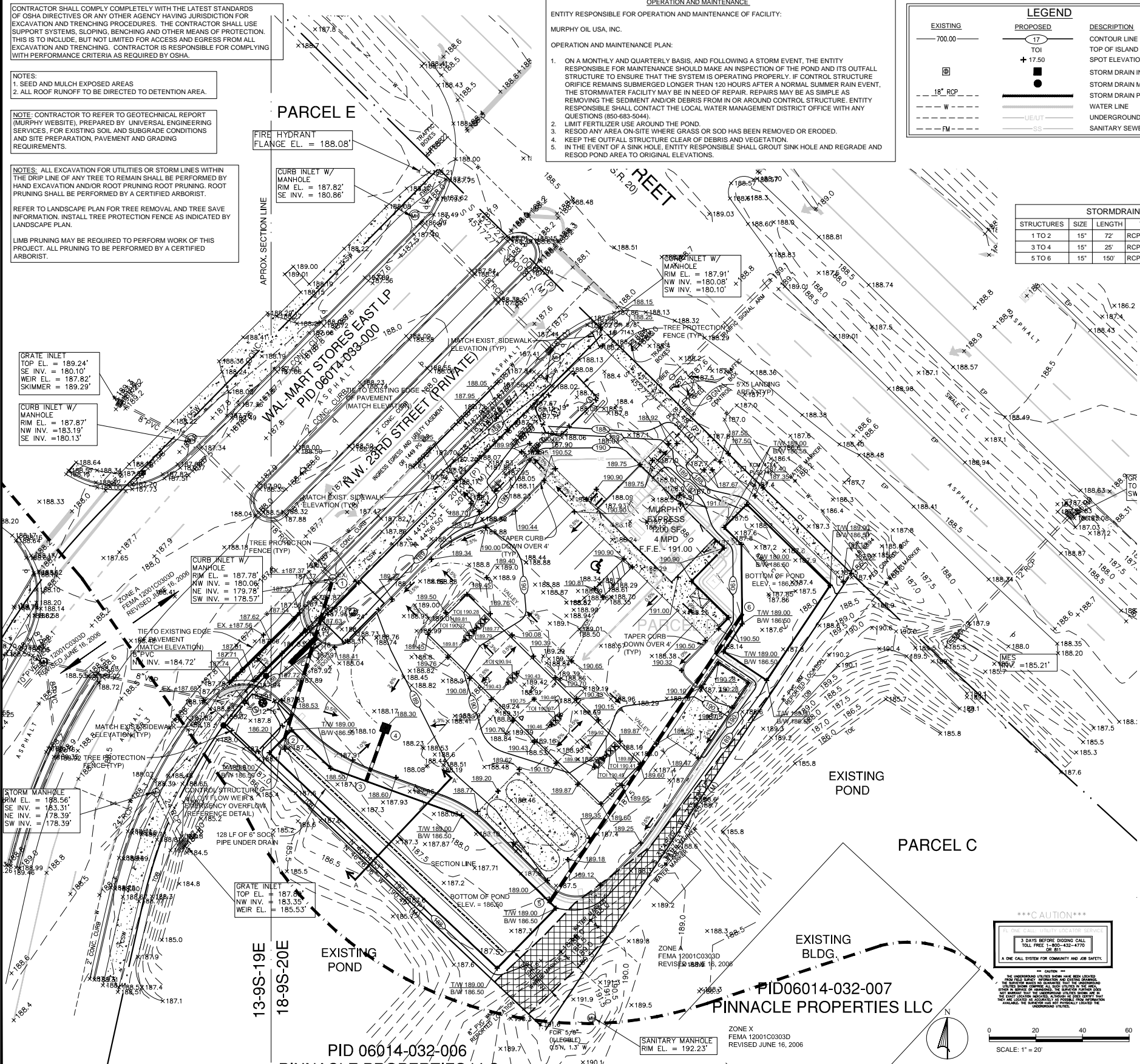
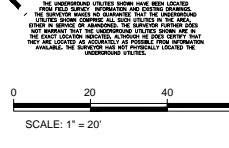
COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2375
1886 N. DALE MARBY HWY
LUTZ, FL 33548
813.882.2032

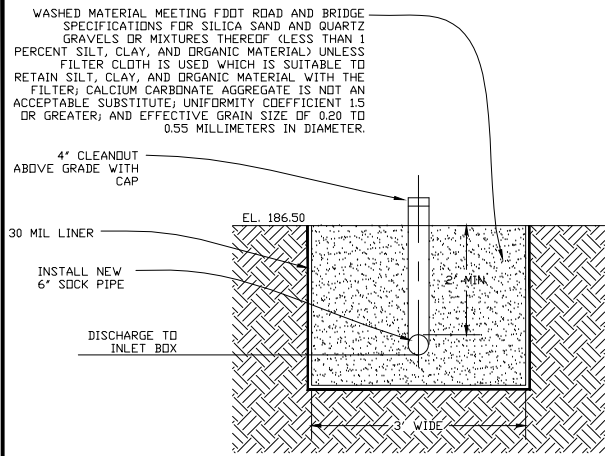
PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORA, AR 71730
PH: 870.875.7629

GRADING PLAN
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
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Sheet

*** CAUTION ***
3 DAYS BEFORE DIGGING CALL
TOLL FREE 1-800-432-4770
OR
A 811 CALL CENTER FOR COMMUNITY AND JOB SHEETS.





UNDERDRAIN DETAIL

N.T.S.

MAINTENANCE SIDEDRAIN OR UNDERDRAIN SYSTEMS

A SIDEDRAIN OR UNDERDRAIN FILTER SYSTEM OF ADEQUATE DESIGN AND PROPER INSTALLATION, USING GOOD MATERIAL, STILL REQUIRES MAINTENANCE TO KEEP IT OPERATING. INSPECTION OF THE DRAINS, ESPECIALLY AFTER HEAVY RAINS, SHOULD BE MADE TO SEE IF THEY ARE WORKING AND IF MAINTENANCE IS REQUIRED. PORE SPACES IN STORMDRAIN FILTERS CAN BE EXPECTED TO SEAL WITH TIME FOLLOWING THE BEGINNING OF OPERATION. THE DURATION OF A FILTER'S EFFECTIVENESS BEFORE THE HYDRAULIC CAPACITY IS REDUCED TO THE POINT THAT DRAWDOWN REQUIREMENTS CAN NO LONGER BE MET WILL DEPEND ON A NUMBER OF FACTORS INCLUDING THE INITIAL PERMEABILITY OF FILTER MATERIAL USED, THE DEGREE OF PRETREATMENT (SEDIMENTATION) PRIOR TO ENTERING THE FILTRATION FACILITY, AND THE NATURE OF THE POLLUTANTS BEING REMOVED.

PRELIMINARY INDICATIONS SHOW THAT THESE SYSTEMS CAN FUNCTION FOR UP TO ONE YEAR WITH ONLY MINOR MAINTENANCE. HOWEVER, PERIODIC DISCING OR SCRAPING THE SURFACE LAYERS OF THE SOIL MAY BE REQUIRED FOLLOWING HEAVY EVENTS THAT CARRY HEAVY SEDIMENT LOADS.

COURSE GRAINED SYSTEMS MAY REQUIRE COMPLETE REPLACEMENT OF THE FILTER MEDIA TO RESOLVE THEIR FUNCTION FOLLOWING CLOGGING SINCE POLLUTANTS WOULD BE EXPECTED TO FURTHER PENETRATE THESE SYSTEMS THAN THEIR MORE CLOSE-GRAINED COUNTERPARTS. MOST OF THE PARTICULATES WILL BE TRAPPED IN THE FIRST 2 OR 3 INCHES OF THE LATTER WHILE SUSPENDED SUBSTANCES CAN BE EXPECTED TO PENETRATE UP TO A FOOT OR MORE INTO THE COARSE GRAINED FILTER. SEMI-ANNUAL RESTORATION EFFORTS ARE LIKELY TO INVOLVE COMPLETE REMOVAL AND CLEANING AND/OR REPLACEMENT OF THE TOP 12 INCHES OR MORE OF THE FILTER MATERIAL. WHILE MAJOR MAINTENANCE OF THIS TYPE MAY NOT HAVE TO BE DONE AS OFTEN, WHEN IT IS REQUIRED, THE OPERATION WILL INVOLVE A SIGNIFICANT AMOUNT OF LABOR AND MATERIAL. HEAVY MACHINERY MAY BE NEEDED IF THE FACILITY IS LARGE AND CARE WILL BE NEEDED TO PREVENT DAMAGE TO THE SIDEDRAIN OR UNDERDRAIN PIPES. THERE MAY BE SOME PROBLEMS ASSOCIATED WITH THE ABILITY OF THESE MORE COURSE-GRAINED, EVENLY GRADED MATERIALS TO SUPPORT MACHINERY NEEDED TO PERFORM MAINTENANCE ACTIVITIES, SUCH AS SCRAPPING WITHOUT GETTING EQUIPMENT STUCK AND/OR DAMAGING THE FILTER BED.

COMMON CAUSES OF SUBSURFACE DRAINAGE SYSTEM FAILURES INCLUDE THE FOLLOWING:

1. DRAINS INSTALLED WITH INSUFFICIENT CAPACITY.
2. DRAINS PLACED TOO SHALLOW AND LACK OF AUXILIARY STRUCTURES NECESSARY FOR THE INSTALLATION.
3. DRAINS OF INSUFFICIENT STRENGTH OR LACKING IN OTHER QUALITIES NECESSARY FOR THE INSTALLATION.
4. LACK OF MAINTENANCE STRUCTURES, SUCH AS CLEANOUTS, INSTALLED AT PROPER LOCATIONS.
5. POOR CONSTRUCTION RESULTING IN SUCH INADEQUACIES AS TOO WIDE OR TOO SMALL A JOINT SPACING, IMPROPER BEDDING, POOR GRADE AND ALIGNMENT AND IMPROPER BACKFILLING.
6. FAILURE DUE TO MINERAL DEPOSITS SUCH AS IRON OXIDE. THESE DEPOSITS DO NOT SERIOUSLY AFFECT THE OPERATION OF THE DRAIN UNLESS THE PERFORATIONS OR JOINTS BECOME SEALED. USUALLY INDICATIONS OF DEPOSITS MAY BE OBSERVED AT THE OUTLETS, JUNCTION BOXES AND CLEANOUTS.

HYDRAULIC CLEANING - HIGH PRESSURE HYDRAULIC NOZZELS HAVE BEEN USED WITH SUCCESS TO CLEAN SIDEDRAIN OR UNDERDRAIN SYSTEMS IN THAT HAVE EVIDENCE OF IRON OXIDE.

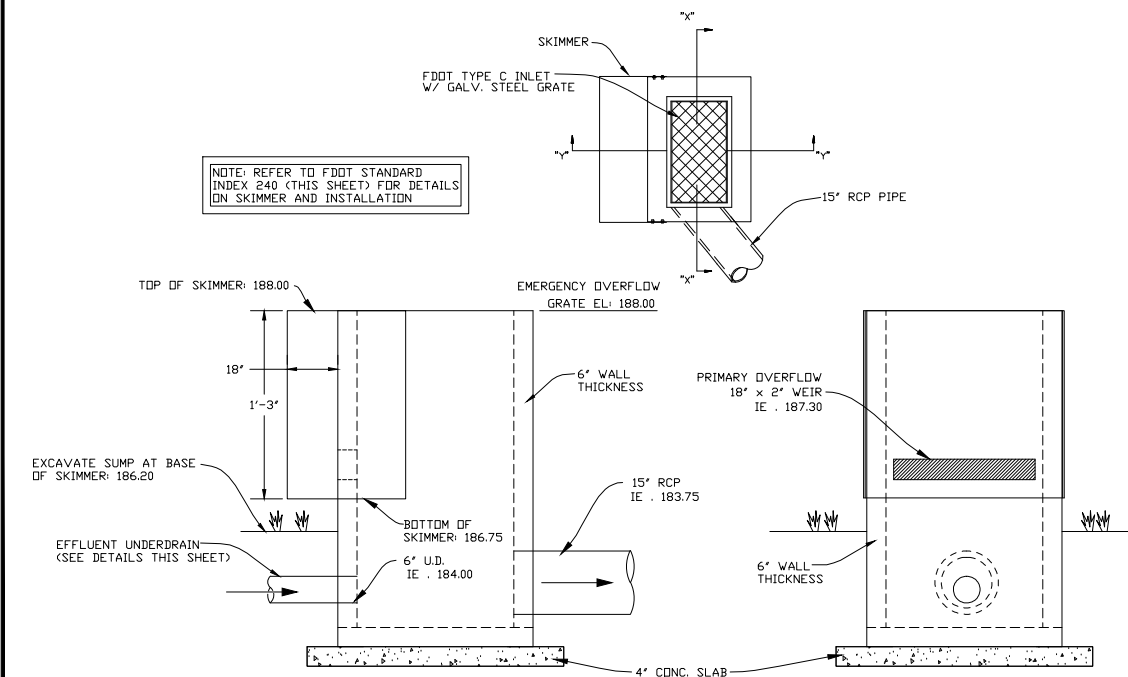
SILT AND VEGETATION - ONE OF THE MOST COMMON MAINTENANCE PROBLEMS THAT IS ENCOUNTERED WITH SIDEDRAIN AND UNDERDRAINS SYSTEMS IN FLORIDA IS TO GET LAND OWNERS TO KEEP OUTLETS FREE OF SILT AND VEGETATION WHERE THEY EMPTY INTO OPEN DITCHES OR CONTROL STRUCTURES. THE OUTLET END OF THE SYSTEM MUST BE KEPT CLEAN IF THE MAXIMUM BENEFITS FROM THE SIDEDRAIN OR UNDERDRAIN SYSTEMS ARE TO BE OBTAINED. SEDIMENT AND FAST GROWING AQUATIC VEGETATION MIGHT CAUSE THE OUTLETS TO BECOME ENTIRELY PLUGGED WITHIN ONE YEAR AFTER INSTALLATION, CONSEQUENTLY FREQUENT INSPECTIONS MUST BE MADE.

TREES - IF TREES NEAR THE DRAIN ARE NOT REMOVED AT THE TIME OF CONSTRUCTION, THE SIDEDRAIN OR UNDERDRAIN MAY BECOME PLUGGED BY ROOTS. IF IT IS FOUND THAT THE SIDEDRAIN OR UNDERDRAIN LINE IS NOT FUNCTIONING AND THE OUTLET IS OPEN, THE LINES SHOULD BE CHECKED NEAR TREES.

AUXILIARY STRUCTURES - THE LIFE AND VALUE OF A SIDEDRAIN OR UNDERDRAIN SYSTEM MANY TIMES DEPENDS ON THE REPAIR OF AUXILIARY STRUCTURES. THESE STRUCTURES ARE TO PROTECT THE SIDEDRAIN OR UNDERDRAIN SYSTEM AS WELL AS TO AID IN DETERMINING WHEN MAINTENANCE IS NEEDED. IF THEY ARE NOT MAINTAINED, THE VALUE OF THE INSTALLATION WILL DECREASE. REGULAR INSPECTION IS REQUIRED.

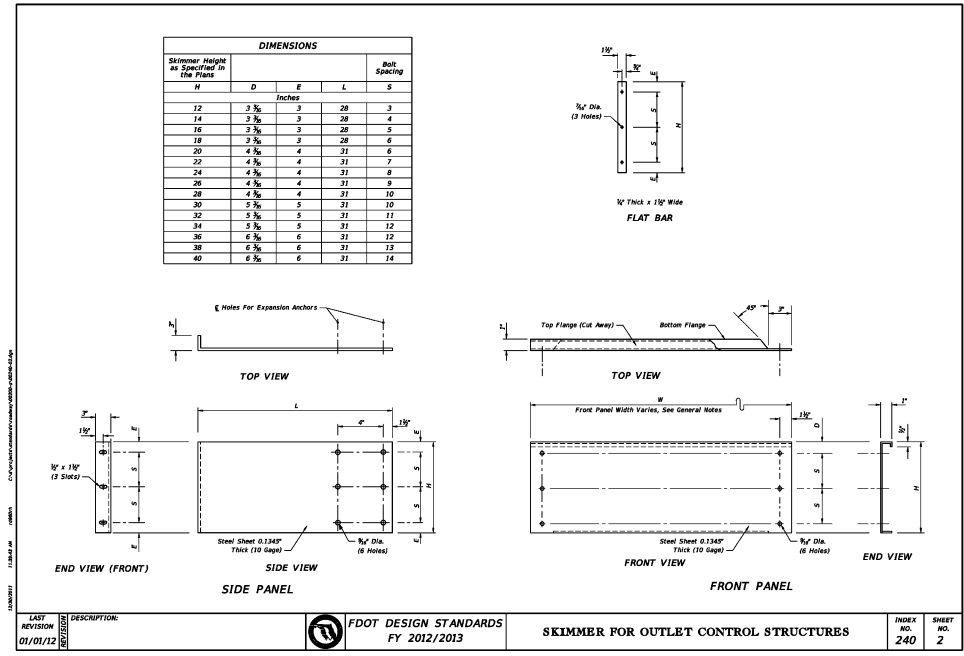
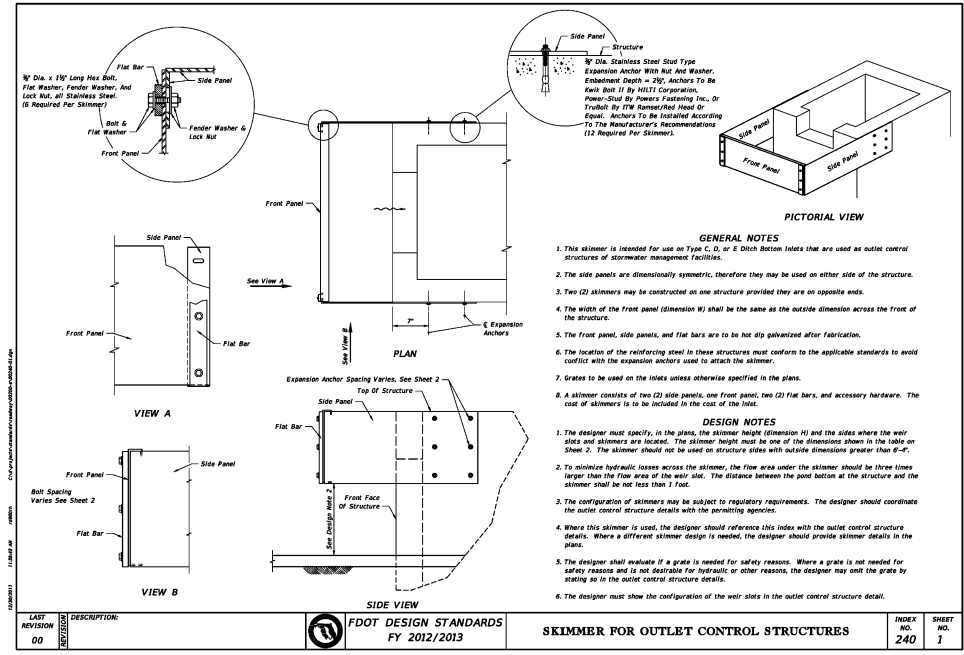
AS-BUILT PLANS - UPON COMPLETING A SUBSURFACE DRAINAGE INSTALLATION AND AFTER ALL CHECKS AND INSPECTIONS HAVE BEEN MADE, A SET OF AS-BUILT PLANS, SHOWING LOCATION, DEPTHS, AND SIZES OF ALL DRAINS SHOULD BE PRESERVED AND MADE AVAILABLE TO THOSE THAT WILL BE MAINTAINING THE SYSTEM.

(REF. DEPARTMENT OF ENVIRONMENTAL REGULATION, STATE OF FLORIDA, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT", JUNE, 1988)



FDOT TYPE 'C' INLET - POND STRUCTURE

N.T.S.



NOTE: ALL STORMDRAIN STRUCTURES MUST BE FDOT APPROVED

ISSUED	REVISIONS	COMMENT
8/3/13	CITY/STP SUBMITTAL	
8/6/13	CITY RESUBMITTAL (TRC)	

SCOTT K. STANNARD, P.E.
FL PE NO. 50565

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2578
1886 N. DALE MARBY HWY
LUTZ, FL 33548
813-882-2032
401 EAST 1ST AVENUE
SUITE 200
GAINESVILLE, FL 32601
888-855-5330

PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL PASO, TEXAS 75075
PH: 808-875-7629

STORM DRAIN DETAILS
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
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CONSTRUCTION SURFACE WATER MANAGEMENT PLAN INFORMATION

OPERATOR: MURPHY OIL USA, INC.
 422 N. WASHINGTON AVENUE
 EL DORADO, AR 71730
 (870) 875 - 7629
 MR. TOM BENTLEY

OPERATOR'S SIGNATURE

TOM BENTLEY

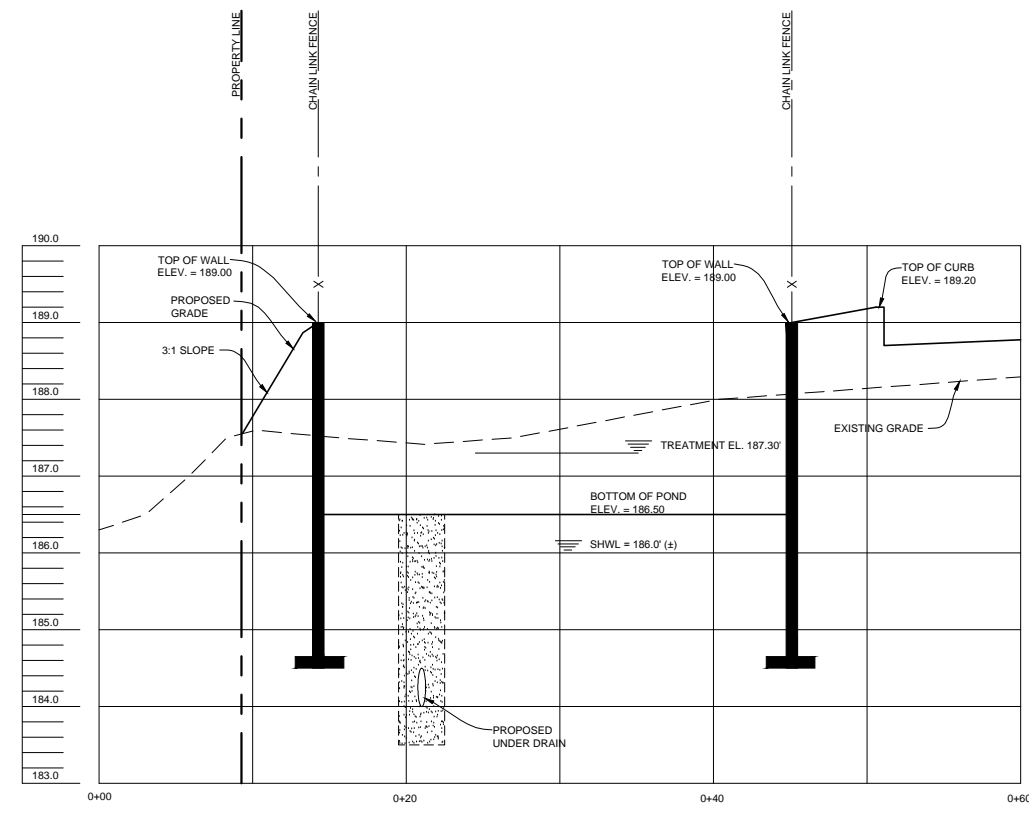
ENGINEER OF RECORD:
 COMMERCIAL SITE SOLUTIONS INC.
 813-885-2032

OPERATION AND MAINTENANCE

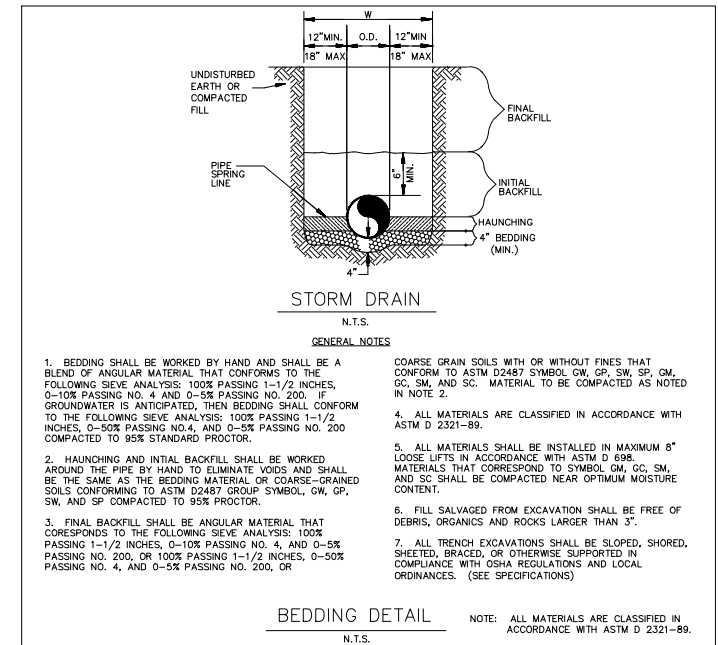
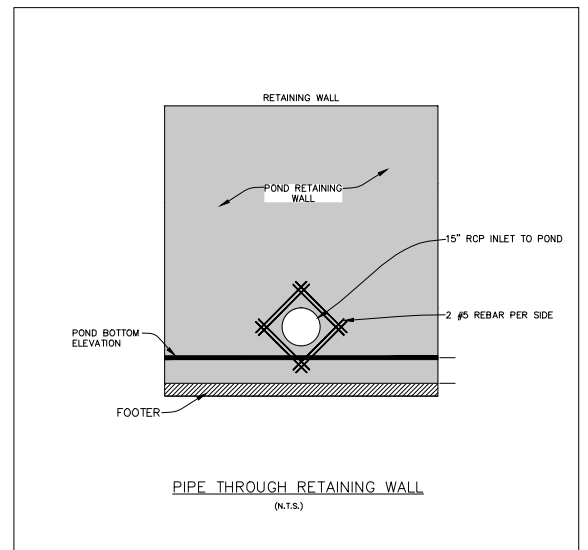
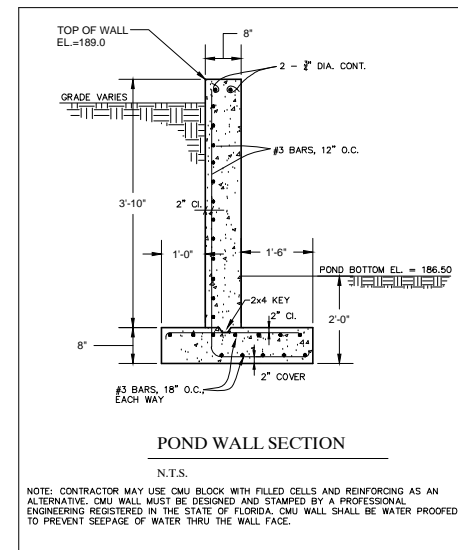
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 MURPHY OIL USA, INC.

OPERATION AND MAINTENANCE PLAN:

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- LIMIT FERTILIZER USE AROUND THE POND.
- RESOD ANY AREA ON-SITE WHERE GRASS OR SOD HAS BEEN REMOVED OR ERODED.
- KEEP THE OUTFALL STRUCTURE CLEAR OF DEBRIS AND VEGETATION.
- IN THE EVENT OF A SINK HOLE, ENTITY RESPONSIBLE SHALL GROUT SINK HOLE AND REGRADE AND RESOD POND AREA TO ORIGINAL ELEVATIONS.



POND CROSS SECTION 'A-A'
 SCALE: 1" = 5' HORIZ.
 1" = 0.5' VERT.



ISSUED	REVISIONS	COMMENT
8/3/13	CITY/UP SUBMITTAL	
8/6/13	CITY RESUBMITTAL (TRC)	

SCOTT K. STANNARD, P.E.
 FL PE NO. 50565

COMMERCIAL SITE SOLUTIONS, INC.
 SITE PLANNING & ENGINEERING
 FL COA. 2575
 1886 N DALE MARRY HWY
 LUTZ, FL 33548
 813-885-2032

401 EAST 1ST AVENUE
 SUITE 2000
 TAMPA, FL 33602
 813-885-2032

PREPARED FOR:
MURPHY OIL USA, INC.
 422 NORTH WASHINGTON AVENUE
 EL DORADO, AR 71730
 PH: 870-875-7629

M

STORM DRAIN DETAILS
MURPHY OIL USA
GAINESVILLE, FL
 NW 23RD STREET AT US HWY 441
 GAINESVILLE, FL

Date: 4/29/13
 Drawn: SKS
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 Sheet

MAINTENANCE:

ALL MEASURES STATED ON THIS EROSION AND SEDIMENTATION CONTROL PLAN, AND IN THE EROSION CONTROL SPECIFICATIONS, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF VEGETATION IS ESTABLISHED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES THE MAXIMUM HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY OR PRIVATE DRIVES. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
7. ALL SLOPES 3:1 AND STEEPER SHALL RECEIVE STAKED SOD PER SPECS.
8. SILT DIKE PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR SHALL BE REPLACED IF THEY SHOW SIGNS OF DETERIORATION.
9. IF THE STONES IN THE GRAVEL INLET SEDIMENT FILTERS BECOME CLOGGED WITH SEDIMENT, THE STONES MUST BE PULLED AWAY, CLEANED AND REPLACED.

NOTE: THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH CITY OF GAINESVILLE AND FDEP INSPECTORS SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION. INSPECTION SCHEDULE MUST BE CARRIED OUT IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.

NOTE: THE CONTRACTOR SHALL PROVIDE THE CONSULTING ENGINEER WITH A MINIMUM OF 72 HOURS ADVANCE NOTICE TO THE START OF CONSTRUCTION ACTIVITY. ACTIVITY IS DEFINED, BUT NOT NECESSARILY LIMITED TO INSTALLATION OF STONE CONSTRUCTION DRIVE, SILT FENCE, CLEARING AND GRUBBING, STRIPPING TOPSOIL, GRADING, AND INSTALLATION OF ANY UTILITY OR ROAD WORK. SITE INSPECTIONS BY THE CEC, AS REQUIRED, CAN THEN BE ARRANGED.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	CONTOUR LINE
---	---	INLET PROTECTION
---	---	STORM DRAIN INLET
---	---	STORM DRAIN MANHOLE
---	---	STORM DRAIN PIPE
---	---	CONSTRUCTION AND SILT FENCE
---	---	SILT FENCE
---	---	LIMITS OF DISTURBANCE
---	---	TEMPORARY STONE CONSTRUCTION EXIT

SEQUENCE OF CONSTRUCTION - PHASE 1:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL ALL TREE PROTECTION FENCING AROUND TREES TO BE RETAINED.
3. INSTALL SILT AND CONSTRUCTION FENCES ON THE SITE.
4. PERFORM NECESSARY DEMOLITION ACTIVITIES AND REMOVE ALL TREES (AS SHOWN ON THE TREE REMOVAL PLAN).
5. BEGIN CONSTRUCTION OF POND/SEDIMENT BASINS.
6. BEGIN GRADING ACTIVITIES ON SITE.
7. INSTALL UNDERGROUND GAS TANKS. BACKFILL UPON COMPLETION.
8. REFER TO PHASE 2 PLAN AND CONSTRUCTION SEQUENCE.

DEVELOPER/OWNER:

MURPHY EXPRESS
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
870-875-7629

OWNER/AUTHORIZED AGENT:

MARN CHENG
MURPHY EXPRESS
870-875-7629

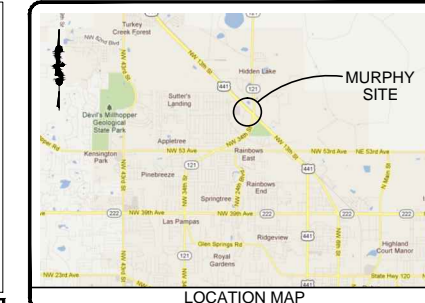
SITE OPERATOR/GENERAL CONTRACTOR:

SCOTT K. STANNARD, P.E.
FL PE NO. 50665

SUPERINTENDENT:

ACREAGE SUMMARY
in ACRES

TOTAL AREA OF PAVEMENT	0.40 AC±
TOTAL AREA ROOFED	0.08 AC±
TOTAL AREA SEEDED	0.13 AC±
TOTAL AREA SODDED	0.29 AC±
TOTAL DISTURBED	0.90 AC±



GENERAL EROSION NOTES

1. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH EROSION CONTROL SHALL OBTAIN A COPY OF THE EROSION CONTROL PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE EROSION CONTROL PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL ORDINANCES OR MANUALS OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
4. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICABLE OR AS REQUIRED BY THE GENERAL PERMIT.
5. GENERAL CONTRACTOR SHALL DEVELOP AND PLAN ANY TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, TRAILERS, AND PILET FACILITIES.
6. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN THESE MATERIALS AND STORM WATER THAT IS DISCHARGED FROM THE SITE.
7. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
8. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
9. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
10. ALL EROSION CONTROL MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
11. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS OR AS REQUIRED BY THE PERMIT.
12. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
13. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
14. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINAGE SHALL BE REMOVED IMMEDIATELY.
15. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN ANY POND/TRAP AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
16. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE FIELD-LOCATED AND NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
17. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
18. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES ETC.) TO PREVENT EROSION.
19. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
20. IF SOIL STOCKPILING IS EMPLOYED ON THE SITE, SILT FENCES SHALL BE USED TO HELP CONTAIN THE SEDIMENT.
21. SEDIMENT BASINS ARE ATTRACTIVE TO CHILDREN AND CAN BE VERY DANGEROUS. IN ALL CASES, LOCAL ORDINANCES AND REGULATIONS REGARDING HEALTH AND SAFETY MUST BE ADHERED TO.
22. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER FINAL STABILIZATION. FINISH AND STABILIZATION HAS OCCURRED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OF THE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN EMPLOYED.

NOTE: THE LOCATION OF THE SILT FENCE AND CONSTRUCTION TREE PROTECTION FENCING ON THE DRAWINGS IS FOR GRAPHICAL PURPOSES ONLY. THE CONTRACTOR IS TO INSURE THAT THE SILT FENCE AND CONSTRUCTION TREE PROTECTION FENCING ENCOMPASSES THE ENTIRE WORK AREA.

NOTE: DISPOSAL OF SEDIMENT REMOVED FROM SILT FENCE, INLET PROTECTION, SEDIMENT PONDS AND TRAPS, ETC. DURING THE COURSE OF CONSTRUCTION, SHALL BE PLACED ON THE TOPSOIL STOCKPILE AND RESPREAD AT THE END OF THE PROJECT. SEDIMENT REMOVED FROM THESE ITEMS AFTER THE SITE HAS BEEN SEEDED, SHALL BE HAULED OFF SITE AND DISPOSED OF AT AN APPROVED, LICENSED SPOIL AREA THAT IS IN FULL COMPLIANCE WITH THE NPDES REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY APPROVALS NECESSARY TO ALLOW FOR THE DISPOSAL OF THIS MATERIAL IF HAULED OFF-SITE.

ISSUED	REVISIONS	COMMENT
03/13		CITY/UP SUBMITTAL
08/13		CITY RESUBMITTAL (TRC)

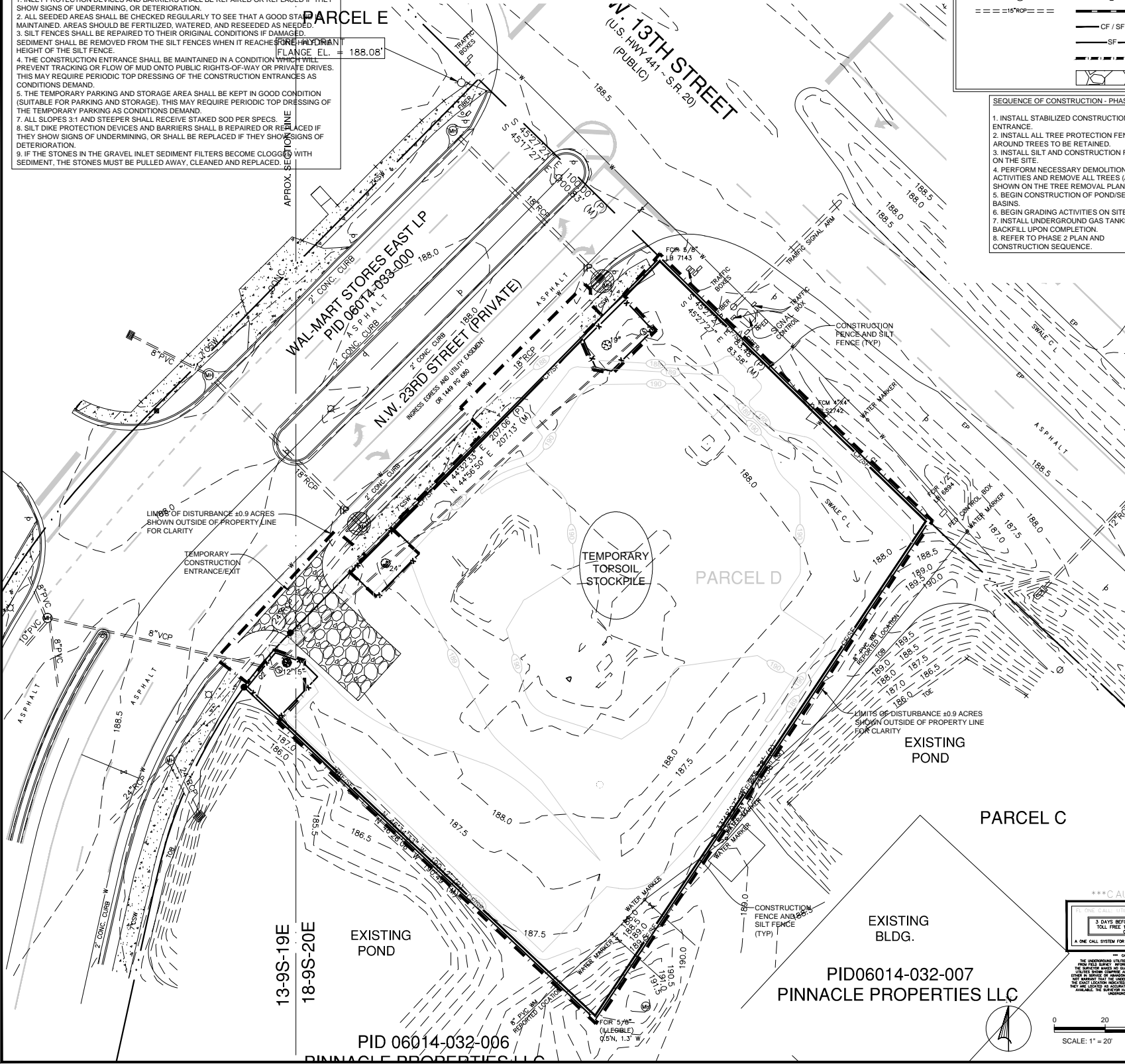
SCOTT K. STANNARD, P.E.
FL PE NO. 50665

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2375
1886 N. DALE MARBY HWY
LUTZ, FL 33548
813-882-2032

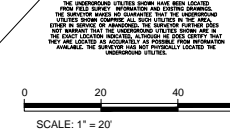
PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
PH: 870-875-7629

EROSION CONTROL PLAN PH 1
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
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CAUTION
3 DAYS BEFORE DIGGING CALL
TOLL FREE 1-800-432-4779
OR 813-949-1111
A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.



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---	---	LIMITS OF DISTURBANCE
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SEQUENCE OF CONSTRUCTION - PHASE 2:

1. MAINTAIN ALL BMP'S. CHECK ALL SILT FENCES AND REPAIR AS NECESSARY. ASSURE ANY ERODED AREAS ARE STABILIZED.
2. CONTINUE GRADING THE SITE.
3. BEGIN CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
4. TEMPORARILY SEED DENUDED AREAS AS NECESSARY.
5. INSTALL UTILITIES, UNDERDRAINS, STORMDRAIN, AND INTEGRAL CURBING ON SITE.
6. PREPARE SITE FOR PAVING AND PAVE THE SITE.
7. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.
8. REMOVE SILT AND SEDIMENT FROM PONDS TO ACHIEVE DESIGN DEPTH.
9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

DEVELOPER/OWNER:

MURPHY EXPRESS
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
870-875-7629

OWNER/AUTHORIZED AGENT:

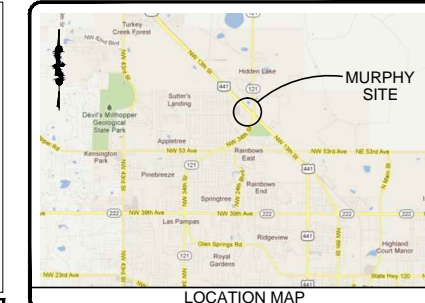
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ISSUED	REVISIONS	COMMENT
03/13		CITY/UP SUBMITTAL
08/13		CITY RESUBMITTAL (TRC)

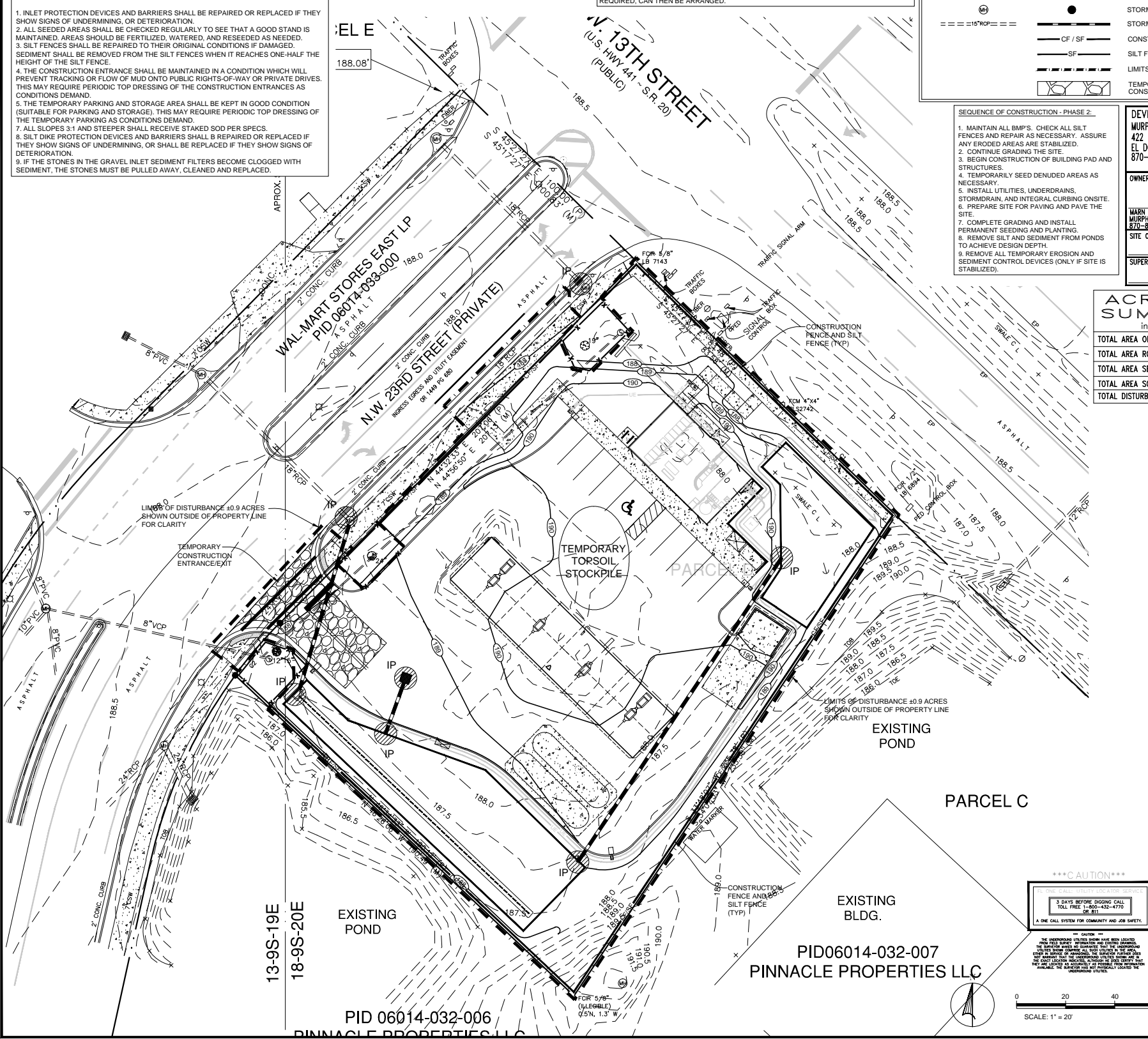
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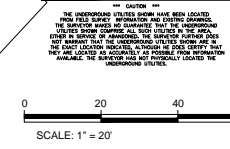
PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
PH: 870-875-7629

EROSION CONTROL PLAN PH 2
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
C-9
Sheet



CAUTION
3 DAYS BEFORE DIGGING CALL
TOLL FREE 1-800-432-4770
OR 811
A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.



PID06014-032-007
PINNACLE PROPERTIES LLC

PID 06014-032-006
PINNACLE PROPERTIES LLC

7.6 Sodding

Conditions Where Practice Applies

- Disturbed areas that require immediate vegetative covers, or where sodding is preferred to other means of grass establishment.
- The following locations are particularly suited to stabilization with sod:
 - Slopes and buffer strips.
 - Waterways and swales, especially around drop inlets.
 - Residential or commercial lawns where quick use or aesthetics are factors.

Specifications

Soil Preparation

- Prior to soil preparation, areas to be sodded shall be brought to final grade in accordance with the approved plan. These operations should leave as much topsoil as possible or replace the topsoil to a depth of 4 inches (10 cm) (see Figure 7.6a).
- Soil tests should be carried out to determine the exact requirements for lime. They may be conducted by the state Soil Testing Laboratory at the University of Florida or a reputable commercial laboratory. Information on state soil tests is available from county Cooperative Extension agents. When a soil test is not carried out, pulverized agricultural limestone may be added at a rate of 100 pounds per 1,000 square feet (2 tons/acre).
- Before sod is laid, the soil surface shall be clear of trash, debris, roots, branches, stones, and clods more than 2 inches (5 cm) in length or diameter. Sod shall not be applied to gravel or other non-soil surfaces.
- Any irregularities in the soil surface resulting from topsoil or other operations shall be filled or leveled to prevent the formation of depressions or water pockets.
- Areas to be topsoiled and the topsoil used shall fulfill the requirements of TOPSOILING (in this chapter). No sod shall be spread on soil that has been treated with soil sterilants until enough time has elapsed to permit the dissipation of toxic materials.

Sod Quality

- Sod should be free of weeds and undesirable coarse weedy grasses. If possible, Certified or Approved turfgrass sod should be used.
- Sod shall be machine cut at a uniform soil thickness of 3/4 inch (20 mm), plus or minus 1/8 inch (6 mm), at the time of cutting. This thickness shall exclude shoot growth and roots.
- Pieces of sod shall be cut to the supplier's standard width and length, with a maximum allowable deviation in any dimension of 5%. Torn or uneven pads are not acceptable.
- Standard-size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended from a firm grasp on one end of the section.
- Sod shall not be cut or laid in excessively wet or dry weather.
- Sod shall be harvested, delivered, and installed within 36 hours.

Installation

Solid Sodding

- Irrigate areas to be sodded with a minimum of 1/2 inch (13 mm) of water, unless recent rains have provided an equivalent amount of moisture (see Figure 7.6b).
- The first row of sod shall be laid in a straight line, with subsequent rows placed parallel to and butting tightly against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Care shall be exercised to ensure that the sod is not stretched or overlapped and that all joints are butted tightly to prevent voids that would dry out the roots.
- On slopes of 3:1 or greater, or wherever erosion may be a problem, sod shall be laid with staggered joints and secured by pegging or other approved methods. Sod shall be installed with the length perpendicular to the slope (on the contour). Begin laying sod at the bottom of the slope and work uphill. On very steep slopes, the use of ladders facilitates the work and prevents damage to the sod.
- Surface water flow cannot always be diverted from the face of the slope, but a capping strip of heavy jute or erosion netting, properly secured, along the crown of the slope provides extra protection against the lifting and undercutting of sod. The same technique is used to fortify soil in water-carrying channels and other critical areas. Use wire staples to anchor heavy jute or erosion netting in channels.
- As the sodding of clearly defined areas is completed, sod shall be rolled or tamped to provide firm contact between roots and soil.
- After rolling, sod shall be irrigated deeply enough that the underside of the sod pad and the soil 4 inches (10 cm) below the sod are thoroughly wet.
- During the first week, in the absence of adequate rainfall, watering shall be performed as often as necessary to maintain moist soil to a depth of at least 4 inches (10 cm).
- The first mowing shall not be attempted until the sod is firmly rooted, usually after 2 to 3 weeks. Not more than one-third of the grass leaf should be removed at any one cutting.
- Two to 4 weeks after sod is laid, fertilize at an application rate of 300 pounds per acre or 6.7 pounds per 1,000 square feet with 15-0-15 or 15-2-15 slow release.

Spot Sodding

- Spot sodding is the planting of plugs or blocks, a minimum of 4 inches (10 cm) in diameter or square, of sod at measured intervals. The plugs or blocks should be placed 1 foot (30 cm) apart.
- Sod spots in a row should be placed alternately and not directly opposite sod spots in adjacent rows.
- Fit the plugs or blocks tightly into the prepared holes and tamp them firmly into place.
- Irrigate deeply enough that the underside of the sod spot and the soil 4 inches (10 cm) below the sod are thoroughly wet.

Strip Sodding

- Areas to be strip sodded should be fertilized, limed, prepared, and smoothed as in solid sodding.
- Lay the strips end to end in rows 1 to 1 1/2 feet (30 to 45 cm) apart, with the strips a minimum of 2 to 4 inches (5 to 10 cm) wide.

- Roll or tamp the strips thoroughly to create firm contact between roots and soil.
- Irrigate deeply enough that the underside of the strips and the soil 4 inches (10 cm) below the strips are wet.

Sodded Swales and Waterways

- Care should be taken to prepare the soil adequately in accordance with this specification. The sod type shall consist of plant materials able to withstand the designed velocity (see STORMWATER CONVEYANCE CHANNEL (in Chapter 6)).
- Sod strips in swales and waterways shall be laid perpendicular to the direction of flow. Care should be taken to butt the ends of the strips tightly.
- After rolling or tamping, sod shall be pegged or stapled to resist washing during the establishment period. Chicken wire, jute, or other netting may be pegged over the sod for extra protection in critical areas.
- All other specifications for this practice shall be adhered to when sodding a swale or waterway.

Maintaining Established Sod

- After the first week, sod shall be watered as necessary to maintain adequate moisture in the root zone and prevent dormancy.
- Apply lime and fertilizer under a regular program based on soil tests and on the use and general appearance of the vegetative cover. In the absence of a soil test, apply 1 to 2 tons per acre (45 to 90 pounds/1,000 square feet) (2.24 to 4.48 t/ha) of finely ground agricultural limestone every 3 years. Apply 300 pounds per acre (6.7 pounds/1,000 square feet) of 15-0-15 or 15-2-15 slow-release fertilizer in the spring and fall.
- How to control weeds, improve the appearance of the vegetative cover, and reduce fire hazard, as necessary. In general, the coarser the leaf texture of the grass, the higher it should be cut. Continuous, close mowing results in a loss of vigor and reduced stand. No more than one-third of the grass leaf should be removed in any mowing.

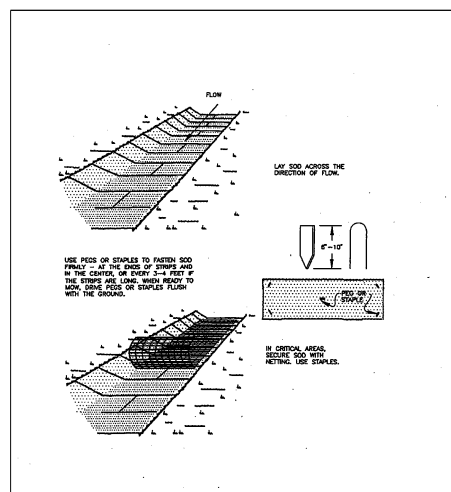


Figure 7.6b. Sodding Swales and Waterways

Source: Virginia DSWC

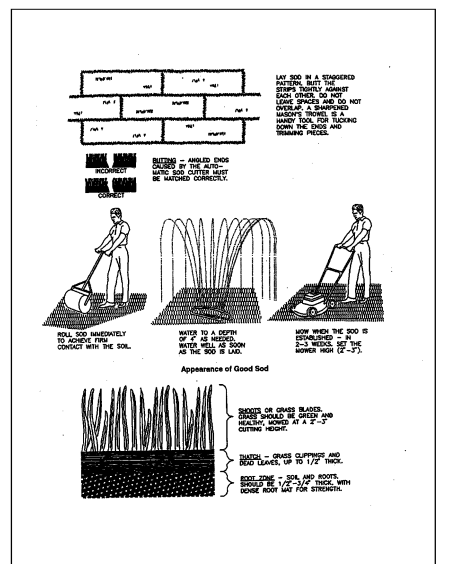


Figure 7.6a. Sodding

Source: Virginia DSWC

7.4 Temporary Seeding

Conditions Where Practice Applies

Where exposed soil surfaces are not to be fine graded for periods of 7 days or more. Such areas include denuded areas, soil stockpiles, berms, dams, the sides of sediment basins, and temporary road banks.

Specifications

Prior to seeding, install necessary erosion control practices such as berms, waterways, and basins.

Plant Selection

Select plants appropriate to the season, region, and site conditions. Consult with your local Agricultural Extension agent, county, FDEP, water management district, or FDOT office, or see Table 1.65a of the Florida Development Manual.

Seedbed Preparation

To control erosion on bare soil surfaces, plants must be able to germinate and grow. Seedbed preparation is essential. A soil test should be taken to determine liming and fertilization requirements. In the absence of a soil test, the following guidelines apply:

- Liming** - Where soils are known to be highly acid (pH 6.0 and lower), lime should be applied at the rate of 2 tons of pulverized agricultural limestone per acre.
- Fertilizer** - Shall be applied as 217.5 pounds per acre (5 pounds/1,000 square feet) (504 kg/ha) of 50% slow-release 10-20-20 or equivalent. Lime and fertilizer shall be incorporated into the top 2 to 4 inches (5 to 10 cm) of the soil. If quick-release nitrogen is used, apply 2 to 3 weeks after seed has sprouted.
- Surface Roughening** - If the area has been recently loosened or disturbed, no further roughening is required. When the area is compacted, crusted, or hardened, the soil surface shall be loosened by discing, raking, harrowing, or other acceptable means (see SURFACE ROUGHENING [in this chapter]).
- Tracking** - Tracking with bulldozer cleats is most effective on sandy soils. This practice often causes the undue compaction of the soil surface, especially in clayey soils, and does not aid plant growth as effectively as other methods of surface roughening.

Seeding

Seed shall be evenly applied with a cyclone seeder, drill, cultipacker-seeder, or hydroseeder. Small grains shall be planted no more than 1 inch deep. Grasses and legumes shall be planted no more than 1/4 inch (6 mm) deep.

Mulching

- Mulch should usually be applied to reduce damage from water runoff or wind erosion, and to improve moisture conditions for seedlings. Mulching without seeding should be considered for very short-term protection. The use of mulch is a judgment decision based on the time of seeding and conditions of individual sites. When used, mulch shall be applied according to MULCHING (in this chapter).
- Seedlings made on slopes in excess of 3:1, or on adverse soil conditions, or during excessively hot or dry weather, shall be mulched according to MULCHING (in this chapter).
- Seedings made during optimum spring and summer seeding dates, with favorable soil and site conditions, may not require mulch.

Reseeding

Areas that fail to establish enough vegetative cover to prevent rill erosion will be filled in with proper topsoil and reseeded as soon as they are identified.

recommended rate, and use 10 times the recommended rate of inoculant when hydroseeding.

Mulching

All permanent seeding must be mulched immediately upon the completion of seed application (refer to the extended discussion in MULCHING below).

Maintenance of New Seedlings

- Irrigation** - New seedlings should be supplied with adequate moisture. Supply water as needed, especially late in the season, in abnormally hot or dry weather, or on adverse sites. Water application rates should be controlled to prevent runoff. Inadequate amounts of water may be more harmful than no water.
- Reseeding** - Inspect seeded areas for failure and make necessary repairs and reseeding within the same season, if possible:
 - If vegetative cover is inadequate to prevent rill erosion, overseed and fertilize in accordance with soil test results.
 - If a stand has less than 40% cover, re-evaluate the choice of plant materials and quantities of lime and fertilizer. Re-establish the stand following seedbed preparation and seeding recommendations, omitting lime and fertilizer in the absence of soil test results. NOTE: If vegetation has failed to grow, the soil must be tested to determine if acidity or nutrient imbalances are responsible.
- Fertilization** - Seedlings should be fertilized 1 year after planting to ensure proper stand density:
 - To established all-grass stands, apply 300 pounds per acre of 15-0-15 or 15-2-15 slow release (6.7 pounds per 1,000 square feet) between August 15 and November 15 (the first fall following seeding).
 - To legume-and-grass stands or pure legume stands, apply 150 pounds per acre of 0-20-20 (3.5 pounds per 1,000 square feet) in early May, or between August 15 and October 15.

GENERALLY, A STAND OF VEGETATION IS NOT DETERMINED TO BE FULLY ESTABLISHED UNTIL SOIL COVER HAS BEEN MAINTAINED FOR 1 FULL YEAR FROM PLANTING. DISTURBED AREAS THAT ARE TO BE STABILIZED WITH PERMANENT VEGETATION MUST BE SEEDED OR PLANTED WITHIN 15 DAYS AFTER FINAL GRADE IS REACHED, UNLESS TEMPORARY STABILIZATION IS APPLIED.

7.5 Permanent Seeding

Conditions Where Practice Applies

- Disturbed areas where permanent, long-lived vegetative cover is needed to stabilize the soil.
- Graded areas that will not be brought to final grade for a year or more.

Specifications

Selection of Plant Materials

- The selection of plant materials is based on climate, topography, soils, land use, and planting season. To determine which plant materials are best adapted to a specific site, see Tables 1.66b and 1.66c of the Florida Development Manual, which describe plant characteristics and list recommended varieties.
- Table 1.66a of the Florida Development Manual lists appropriate seeding mixtures for various site conditions in Florida. These mixtures are designed for general use and are known to perform well on the sites described. Adhere to these mixtures whenever feasible. Check Tables 1.66b and 1.66c for recommended varieties.

Seeding Requirements

Vegetation should not be established on slopes that are unsuitable because of inappropriate soil texture, poor internal structure or internal drainage, a high volume of overland flow, or excessive steepness, until measures have been taken to correct these problems.

- Enough fine-grained material to maintain adequate moisture and nutrient supply.
- Sufficient pore space to permit root penetration. A bulk density of 1.2 to 1.5 indicates that sufficient pore space is present. A fine granular or crumb-like structure is also favorable.
- Sufficient depth to provide an adequate root zone. The depth to rock or impermeable layers such as hardpans shall be 12 inches (30 cm) or more, except on slopes steeper than 2:1, where the addition of soil is not feasible.
- A favorable pH range for plant growth. If the soil is so acid that a pH range of 6.0 to 7.0 cannot be attained by the addition of pH-modifying materials, then the soil is unsuitable for plant roots.
- Freedom from toxic amounts of materials harmful to plant growth.
- Freedom from excessive quantities of roots, branches, large stones, large clods of earth, or trash of any kind. Clods and stones may be left on slopes steeper than 3:1 if they are to be hydroseeded.

If any of the above criteria cannot be met—i.e., if the existing soil is too coarse, dense, shallow, acid, or contaminated to foster moisture—then topsoil should be applied in accordance with TOPSOILING (in this chapter). The necessary mechanical erosion and sediment control practices will be installed prior to seeding. Grading will be carried out according to the approved plan. Surfaces will be roughened in accordance with SURFACE ROUGHENING (in this chapter).

Soil Conditioners

To modify the texture, structure, or drainage characteristics of a soil, the following materials may be added to the soil:

- Peat shall be sphagnum moss peat, hyprum moss peat, reed-needle peat, or peat humus, from freshwater sources. Peat shall be shredded and conditioned in storage piles for at least 6 months after excavation.
- Sand shall be clean and free of toxic materials.
- Vermiculite shall be horizontal grade and free of toxic substances.
- Composted manure shall be stable or cattle manure not containing undue amounts of straw or other bedding materials or toxic chemicals. Phosphorus shall be limited to soil test recommendations.
- Thoroughly rotted sawdust shall be 6 pounds of nitrogen added to each cubic yard (3.5 kg/m³) and shall be free of stones, sticks, and toxic substances.
- Where local ordinances permit, treated sewage sludge may be used in accordance with local, state, and federal regulations. The use of treated sewage sludge shall be limited to soil test recommendations.

Lime and Fertilizer

Lime and fertilizer needs should be determined by soil tests. Soil tests may be performed by the Cooperative Extension Service Soil Testing Laboratory at the University of Florida, or by a reputable commercial laboratory. Information on the state's Soil Testing Laboratory is available from county extension agents. Under unusual conditions where it is not possible to obtain a soil test, the following soil amendments will be applied:

LIME: 2 tons per acre finely ground agricultural or dolomitic limestone (90 pounds per 1,000 square feet) (4.48 t/ha)

FERTILIZER: Mixed grasses and legumes: 150 pounds per acre of 5-25-10 (3.5 pounds per 1,000 square feet)

Legume stands only: 150 pounds per acre of 5-20-10 (3.5 pounds per 1,000 square feet)

Grass stands only: 870 pounds per acre of 5-5-10 (1.12 t/ha) and 57 pounds of 38-0-0 in spring (1.3 pounds per 1,000 square feet)

220 pounds per acre of 10-5-10 and 57 pounds of 38-0-0 in fall (1.3 pounds per 1,000 square feet)

Other fertilizer formulations may be used, provided they supply the same amounts and proportions of plant nutrients.

Lime and fertilizer shall be incorporated into the top 4 to 6 inches (10 to 15 cm) of the soil by discing or other means. When applying lime and fertilizer with a hydroseeder, apply to a rough, loose surface.

Seeding

- Certified seed should be used for all permanent seeding whenever possible.
 - Legume seed should be inoculated with the inoculant appropriate to the species. The seed of legumes, crown vetch, and clovers should be scarified to promote uniform germination.
 - Apply seed uniformly with a cyclone seeder, drill, cultipacker-seeder, or hydroseeder on a firm, friable seedbed. The maximum seeding depth should be 1/4 inch.
 - During hydroseeding, to avoid seed damage, it is recommended that if a machinery breakdown of 30 minutes to 2 hours occurs, 50% more seed be added to the tank, based on the proportion of the slurry remaining in the tank. Beyond 2 hours, a full rate of new seed may be necessary.
- Other hydroseeding contractors prefer not to apply lime in their rigs, as it is abrasive. In inaccessible areas, lime may have to be applied in pelletized or liquid form, separately. The rates of wood fiber should be at least 2,000 pounds per acre (2.24 t/ha). Surface roughening is particularly important when hydroseeding, as a roughened slope provides some natural coverage of lime, fertilizer, and seed.
- Legume inoculants should be used by the date indicated on the container. When dry seeding, use 4 times the manufacturer's

4.5 Storm Drain Inlet Protection

Condition Where Practice Applies

Where storm drain inlets are to be made operational before permanent stabilization of the disturbed drainage area. Different types of structures are applicable to different conditions (see Figures 4.5a through 4.5j).

Design Criteria

- The drainage area shall be no greater than 1 acre (0.4 ha).
- The inlet protection device shall be constructed to facilitate the cleanout and disposal of trapped sediment and to minimize interference with construction activities.
- The inlet protection devices shall be constructed so that any resultant ponding or stormwater will not cause excessive inconvenience or damage to adjacent areas or structures.
- Figures 4.5a through 4.5j provide specific design criteria for each particular inlet protection device.

Construction Specifications

Fabric Drop Inlet Sediment Filter

- Fabric shall be cut from a continuous roll to avoid joints.
- Stakes shall be 2 x 4 inches (5 x 10 cm) wood (pressure-treated or equivalent material) with a minimum length of 3 feet (90 cm) (see Figure 4.5a).
- Staples shall be of heavy duty wire at least 1/4 inch (3 mm) long.
- Stakes shall be spaced around the perimeter of the inlet a maximum of 3 feet (90 cm) apart and securely driven into the ground a minimum of 8 inches (20 cm). A frame of 2 x 4 inches (5 x 10 cm) of wood shall be constructed around the top of the stakes for proper stability.
- A trench shall be excavated approximately 4 inches (10 cm) wide and 4 inches (10 cm) deep around the outside perimeter of the stakes (see Figure 4.5b).
- The fabric shall be stapled to the wooden stakes, and 8 inches (20 cm) of the fabric shall be extended into the trench. The height of the filter barrier shall be a minimum of 15 inches (38 cm) and shall not exceed 18 inches (45 cm).
- The trench shall be backfilled and the soil compacted over the fabric.

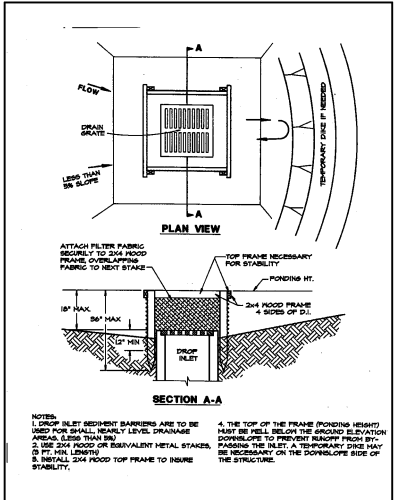


Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier

Source: Erosion Desk

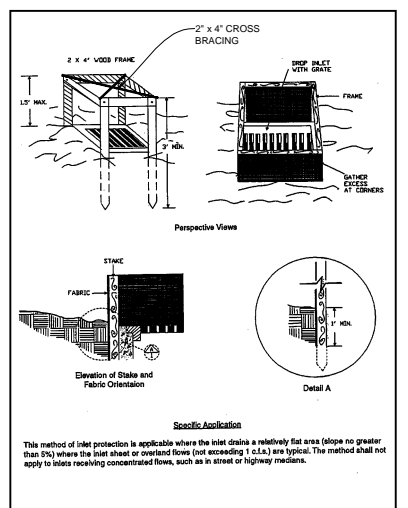


Figure 4.5b. Filter Fabric Drop Inlet Sediment Filter

Source: North Carolina Erosion and Sediment Control Manual

REVISIONS	ISSUED	COMMENT
	03/13	CITY/SUP SUBMITTAL
	08/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
FL PE NO. 50665

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL CO. 2275
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LUTZ, FL 33548
813.882.3032
401 EAST 1ST AVENUE
SUITE 200
GAINESVILLE, FL 32601
888.855.5200

PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
PH: 870.875.7629

MURPHY OIL USA
GAINESVILLE, FL
NEW 23RD STREET AT US HWY 441
GAINESVILLE, FL

EROSION CONTROL DETAILS
MURPHY OIL USA
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS
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NOTE: ANY UTILITY WORK THAT REQUIRES WORKING WITHIN THE DRIP LINE OF ANY TREE THAT IS TO REMAIN SHALL BE DONE BY ROOT PRUNING AND HAND INSTALLATION. ALL ROOT PRUNING TO BE PERFORMED BY A CERTIFIED ARBORIST.

NOTE: CONTRACTOR TO FORWARD ALL MATERIAL SUBMITTALS TO GAINESVILLE REGIONAL UTILITIES FOR APPROVAL.

UTILITY CONTACTS

WATER, SEWER AND ELECTRIC:
GAINESVILLE REGIONAL UTILITIES
301 SE 3rd AVENUE
GAINESVILLE, FL 32601
CONTACT: DAVID KVALTNE
PHONE: 352-334-6072
FAX: 352-334-2554
EMAIL: kvaltinedj@gru.com

TELEPHONE:
AT&T
400 SW 2nd AVENUE
GAINESVILLE, FL 32601
CONTACT: STUART NOLAN
PHONE: 352-371-5278
EMAIL: sn5728@att.com

NOTES:

- FIRE HYDRANTS AND STABILIZED SURFACES MUST BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES ON SITE. (GAINESVILLE FIRE PREVENTION AND PROTECTION CODE SECTION 10-9, NFPA 1-16.4.3)
- PROPOSED FLAMMABLE LIQUID STORAGE TANKS MUST COMPLY WITH NFPA 30.
- PROPOSED FUEL DISPENSING FACILITIES MUST COMPLY WITH NFPA 30A.

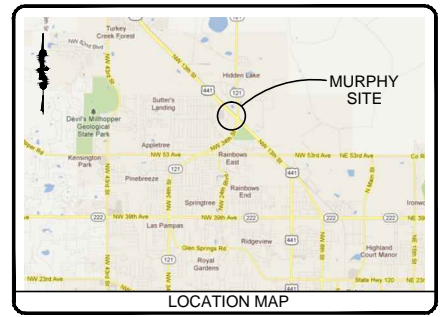
UTILITY KEY

①	4" PVC - SANITARY SEWER TIE IN - REFER TO ARCH. PLANS
②	1" DOMESTIC WATER TIE IN - REFER TO ARCH. PLANS
③	SECONDARY ELEC. FEED AND TELEPHONE LINE(S), REFER TO ARCH. PLANS
④	ELEC. FEED FROM MURPHY EXPRESS ELEC. PANEL TO MONUMENT SIGN AND AIR/VAC UNIT
⑤	AIR/VACUUM UNIT. REFER TO ARCH. MECH. PLANS FOR CONDUIT SIZE
⑥	ELEC. FEED FROM MURPHY EXPRESS ELEC. PANEL TO LIGHT POLES

SERVICE LINE ENTRY AND EXIT POINTS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL REFER TO PLANS BY ARCHITECT AND MECHANICAL ENGINEER FOR EXACT LOCATIONS AND DEPTHS.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	WATER LINE
---	---	FIBER OPTIC CABLE
---	---	UNDERGROUND ELEC./TELE.
---	---	OVERHEAD ELEC./TELE.
---	---	STORM DRAIN
⊙	●	SANITARY SEWER MANHOLE
○	○	CLEAN OUT
---	---	SANITARY SEWER LINE
---	---	SITE LIGHTING



- UTILITY NOTES:**
- ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE STATE OF FLORIDA, GAINESVILLE REGIONAL UTILITIES AND THE CITY OF GAINESVILLE.
 - WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 36" OF COVER UNLESS OTHERWISE NOTED. ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF GAINESVILLE.
 - VALVES SHALL BE RESILIENT SEAT GATE VALVES, DIRECT BURY WITH A VALVE BOX (AWWA C509).
 - ALL WATER MAINS 3" AND GREATER IN DIAMETER SHALL BE CLASS 350 DIP AND ALL SERVICE LINES LESS THAN 3" IN DIAMETER SHALL BE HDPE. SEWER LINES SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D-3034.
 - SEWER CLEANOUTS SHALL BE IN ACCORDANCE WITH THE CITY OF GAINESVILLE DETAILS AND SPECIFICATIONS.
 - THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT UTILITY EXIT POINTS, EXIT PORCHES, ETC.
 - INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THE PLAN OR 12" WHICHEVER IS LESS, CONTACT THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND/OR FINAL CONNECTION OF SERVICES.
 - A MINIMUM OF 10 FEET HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN WATER AND SEWER LINES. THE VERTICAL SEPARATION IS TO BE A MINIMUM OF 18".
 - REFER TO THE PHOTOMETRIC AND ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL DESIGN AND LAYOUT.
 - ALL SITEWORK SHALL MEET OR EXCEED THE CITY OF GAINESVILLE STANDARDS AND THE SITEWORK SPECIFICATIONS.
 - GENERAL CONTRACTOR SHALL PROVIDE ALL TRENCHING, BACKFILLING, & INSTALL ALL ELECTRICAL CONDUITS TO UTILITY COMPANY SPECIFICATIONS.
 - LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY GENERAL CONTRACTOR & THE PROPER UTILITY COMPANY PROVIDING SERVICE.
 - GENERAL CONTRACTOR SHALL PROVIDE 2' x 2' x 6" THICK CONCRETE APRON AT ALL CLEANOUTS OUTSIDE OF BUILDING.
 - GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
 - ELECTRICAL SERVICE TO POLE MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO BUILDING. ASSOCIATED MATERIALS AND COST BY GENERAL CONTRACTOR.
 - ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINE SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
 - DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
 - ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
 - GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.

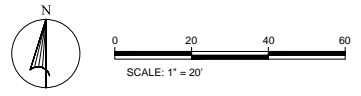
ALL MATERIALS, EQUIPMENT, LABOR, AND WORKMANSHIP IS TO BE IN ACCORDANCE WITH AND SUBJECT TO THE CITY OF GAINESVILLE ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, AND THE FLORIDA ADMINISTRATIVE CODE FOR WASTEWATER COLLECTION AND WATER DISTRIBUTION SYSTEMS. IN THE EVENT OF CONFLICT BETWEEN THE CITY OF GAINESVILLE ORDINANCES AND STANDARD SPECIFICATIONS AND THE FLORIDA ADMINISTRATIVE CODE, THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY.

NOTE: ALL PULL BOXES LOCATED IN PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE "H-20" LOAD RATED. THE TYPICAL PULL BOX SIZE SHALL BE 18"x24"x24" OR DEEPER WHEN THE CONDUIT ALIGNMENT IS AFFECTED BY OTHER UTILITIES. ACCEPTABLE FOR MOST LOCATIONS IS A "QUAZITE" PG1730B24 BOX WITH PG1730HA00 LID OR APPROVED EQUAL. THE PULL BOX SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATION WITH A CONCRETE COLLAR AND A MINIMUM OF 8" OF GRAVEL COMPACTED PER PROJECT SPECIFICATIONS. IF USING A PULL BOX TO CHANGE DIRECTION, THE MINIMUM BOX SIZE SHALL BE 48"x48"x24" PRECAST CONCRETE WITH SEPARATE MANHOLE LID AND COLLAR.

*****CAUTION*****

3 DAYS BEFORE DIGGING CALL
TOLL FREE: 1-800-432-4770
OR 352-334-6072

A ONE CALL SYSTEM FOR COMMUNITY AND JOB SAFETY.



REVISIONS

ISSUED	COMMENT
03/13	CITY/UP SUBMITTAL
04/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
FL PE NO. 50565

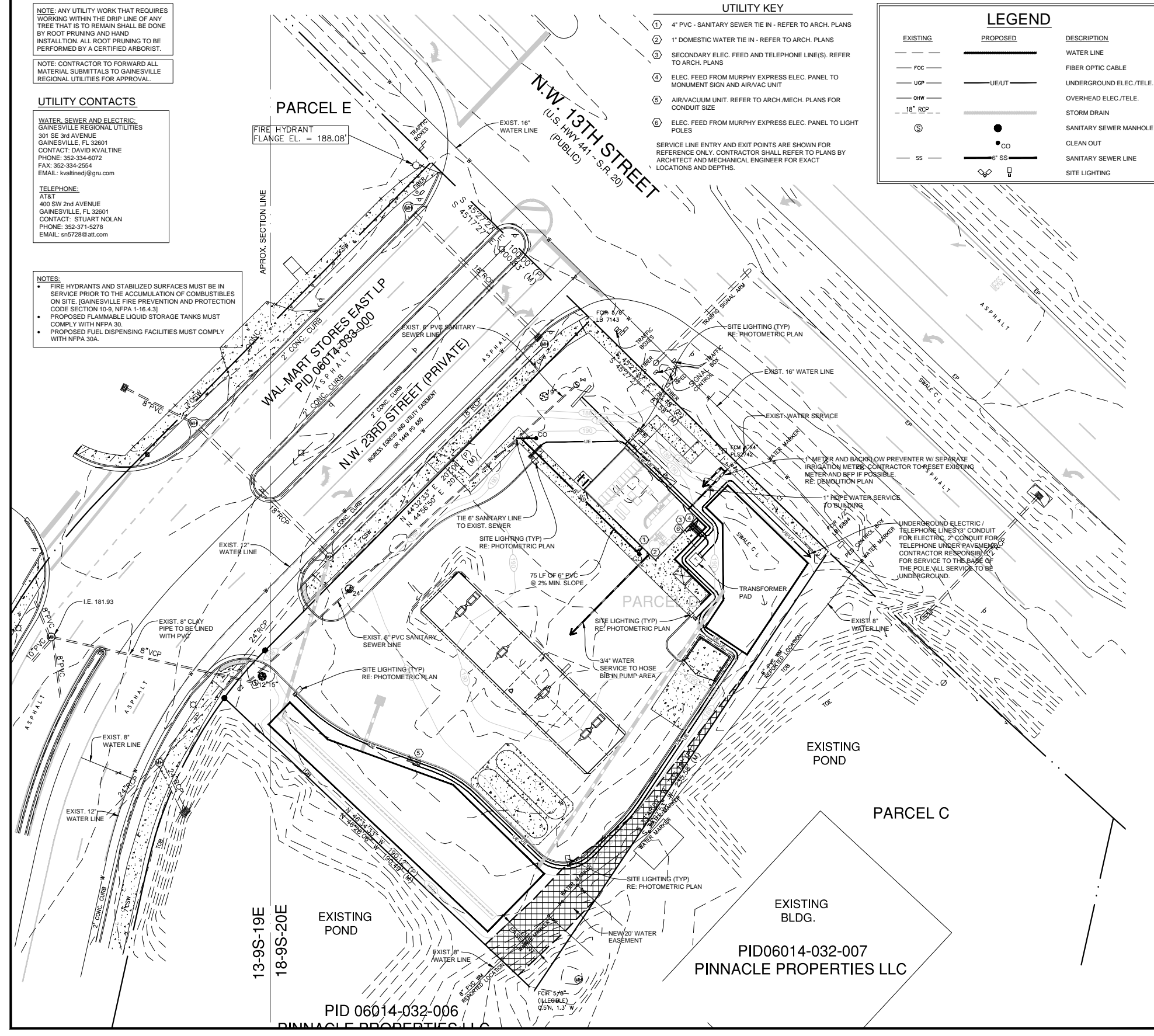
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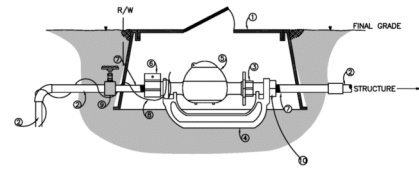
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UTILITY PLAN
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GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
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Sheet

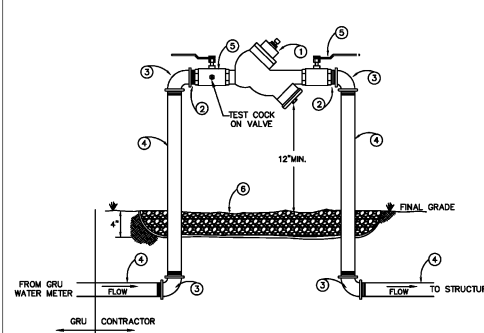




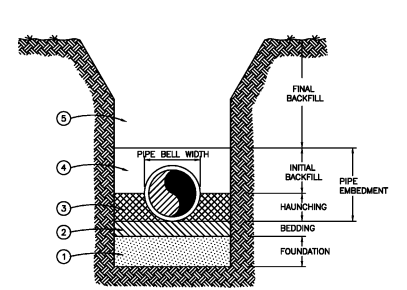
ITEM	DESCRIPTION
1	METER BOX - 5/8" x 3/4" OR 1" (BY CONTRACTOR, CARSON PART NO. 1419-12-6-H-K-WOK-070)
2	SOH 40 PVC PIPE (BY GRU)
3	YOKE EXPANSION (BY GRU)
4	YOKE BAR - 5/8" x 3/4" (BY CONTRACTOR, FORD METER PART NO. 1-502)
5	YOKE BAR - 1" (BY CONTRACTOR, FORD METER PART NO. 1-504)
6	WATER METER - 5/8" x 3/4" (BY GRU)
7	METER BALL VALVE - 5/8" x 3/4" (BY CONTRACTOR, FORD METER PART NO. 8-91-223-W)
8	METER BALL VALVE - 1" (BY CONTRACTOR, FORD METER PART NO. 8-91-344-W)
9	6" SCH 80 PVC THREADED NIPPLE
10	TRACER WIRE, COPPER, BLUE INSULATED, #10 AWG (BY GRU)
11	METER END CONNECTOR - 5/8" x 3/4" (BY CONTRACTOR, FORD METER PART NO. 8-91-223-W)
12	METER END CONNECTOR - 1" (BY CONTRACTOR, FORD METER PART NO. 8-91-44)

- NOTES:
- POTABLE WATER SERVICES, REQUIRING A SEPARATE WATER METER, SHALL BE PROVIDED TO EACH LOT, BUILDING OR PARCEL, EFFECTIVE OCTOBER 1, 2007, FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, AND MULTI-FAMILY RESIDENTIAL. THE DEVELOPER SHALL BE RESPONSIBLE FOR INSTALLING POTABLE WATER SERVICES AND YOKE ASSEMBLY PACKAGE UP TO AND INCLUDING THE METER YOSE BOX (INSTALLED AT FINAL GRADE) AND ASSOCIATED APPURTENANCES WITH A ONE-YEAR WARRANTY. THE INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:
 - SERVICE LATERAL SHALL BE INSTALLED FOR POTABLE WATER DETAIL W-7.0 OR W-7.1.
 - AFTER INSPECTOR AND ACCEPTANCE FOR OAK BY GRU, GRU WILL INSERT A PLUG LOCK INTO EACH 1" GATE VALVE AND CONTRACTOR SHALL BACKFILL. NOTE: CARE SHOULD BE TAKEN THAT TRACER WIRE IS INSTALLED UP TO AND AROUND THE TEE.
 - WHEN THE TIME COMES TO INSTALL THE YOKE ASSEMBLY, THE DEVELOPER'S PLUMBER WILL BE RESPONSIBLE FOR ACQUIRING THE YOKE ASSEMBLY PACKAGE, WHICH WILL BE AVAILABLE FROM LOCAL MATERIALS DISTRIBUTORS.
 - THE PLUMBER SHALL EXCAVATE AND EXPOSE THE WATER SERVICE ISOLATION VALVES, AND GRU WILL REMOVE THE PLUG LOCK.
 - THE PLUMBER SHALL INSTALL BLUE POLY TUBING OR SCHEDULE 40 PVC AS NECESSARY TO CONNECT TO THE METER YOKE.
 - THE PLUMBER SHALL INSTALL THE YOKE ASSEMBLY AND METER BOX SECURED PREVIOUSLY, THEN CALL (252) 393-1616 TO REQUEST THAT THE METERS BE SET.
 - GRU SHALL INSPECT THE YOKE INSTALLATION AND IF ACCEPTABLE, SET METERS AND BACKFILL.

Revision Date: 9/8/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 WATER METER ASSEMBLY: 5/8" x 3/4", 3/4", AND 1"
 W-8.0

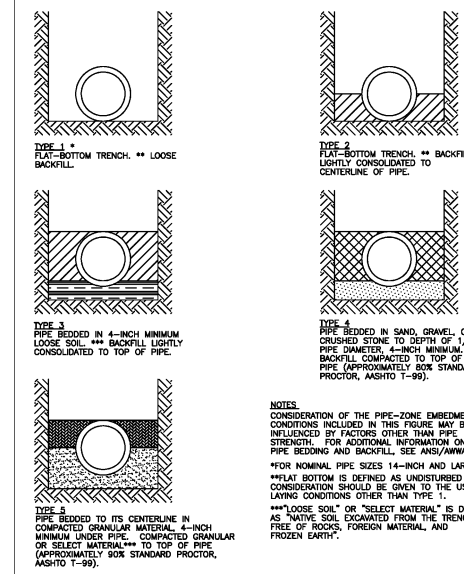


ITEM	DESCRIPTION
1	3/4", 1", 1-1/4", 1-1/2", 2" REDUCED PRESSURE ZONE BACKFLOW PREVENTER
2	3/4", 1", 1-1/4", 1-1/2", 2" BRASS NIPPLE
3	3/4", 1", 1-1/4", 1-1/2", 2" GALVANIZED 90 DEG ELBOW
4	3/4", 1", 1-1/4", 1-1/2", 2" GALVANIZED PIPE
5	3/4", 1", 1-1/4", 1-1/2", 2" 1/4 TURN BRASS BALL VALVE
6	GRAVEL BED (NO. 57 STONE)



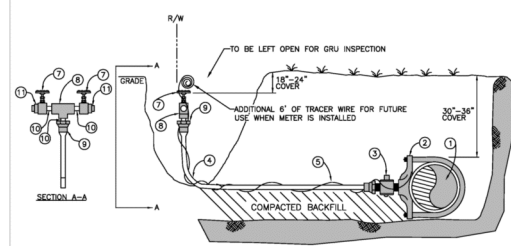
- NOTES:
- A FOUNDATION MAY BE REQUIRED IN VERY POOR SOIL (CLASS IV & V MATERIAL) CONDITIONS. FIELD DETERMINATION WILL BE PROVIDED BY GRU INSPECTOR. TYPICAL FOUNDATION THICKNESS SHALL BE 12", BUT MAY VARY ACCORDING TO NATURAL MATERIAL.
 - BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE IN DRY SOIL CONDITIONS CLASS II OR CLASS III MATERIAL SHALL BE HAND PLACED 4" TO 6", LIGHTLY COMPACTED, UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. IN WET SOIL CONDITIONS CLASS I, CLASS II OR CLASS III SHALL BE HAND PLACED, 4" TO 6" UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. WHEN UTILIZING CLASS I MATERIAL, SUFFICIENT AMOUNTS OF CLASS II OR CLASS III MATERIAL SHALL BE ADDED TO FILL ALL Voids CREATED BY THE CLASS I MATERIAL.
 - HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE CLASS II OR CLASS III MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
 - INITIAL BACKFILL MATERIAL SHALL BE CLASS II OR CLASS III. IT SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF THE PIPE. THE SOIL SHALL BE CONSOLIDATED BY HAND TAMPING OR WALKING THE SOIL IN PLACE.
 - FINAL BACKFILL MATERIAL MAY BE MACHINE PLACED. THE MATERIAL SHALL BE CLASS II OR CLASS III MATERIAL. CLASS II MATERIAL MAY BE INSTALLED OUTSIDE OF THE ROADWAY. FINAL BACKFILL UNDER ROADWAYS MAY REQUIRE SPECIAL COMPACTION AND DENSITY TESTS.

Revision Date: 2/20/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 BACKFILLING REQUIREMENTS
 W-2.0



- NOTES:
- CONSIDERATION OF THE PIPE-ZONE EMBEDMENT CONDITIONS INCLUDED IN THIS FIGURE MAY BE INFLUENCED BY FACTORS OTHER THAN PIPE STRENGTH. FOR ADDITIONAL INFORMATION ON PIPE BEDDING AND BACKFILL, SEE ANSI/AWWA C900.
 - *FOR NOMINAL PIPE SIZES 14-INCH AND LARGER, **LIFT BOTTOM IS DEFINED AS UNDISTURBED EARTH. CONSIDERATION SHOULD BE GIVEN TO THE USE OF LIVING CONDITIONS OTHER THAN TYPE 1.
 - ***"LOOSE SOIL" OR "SELECT MATERIAL" IS DEFINED AS "NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH".

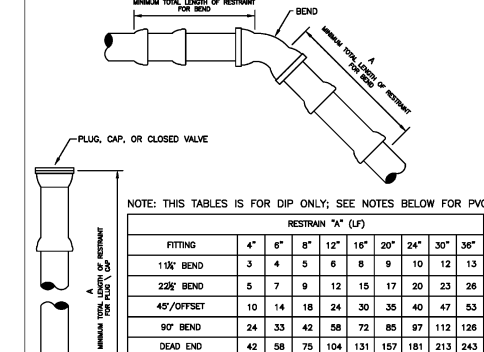
Revision Date: 2/20/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 PIPE LAYING CONDITIONS
 W-3.0



ITEM	DESCRIPTION
1	4", 6", 8", 12" WATER MAIN
2	4", 6", 8", 12" SERVICE SADDLE W/1" OD (TAPERED THREADS)
3	1" CORPORATION VALVE
4	1" POLYETHYLENE TUBING OR SCH 40 PVC (SOLVENT WELD)
5	1" TRACER WIRE, BLUE, # 10 AWG
6	1" COMPRESSION X NPT
7	1" BRASS GATE VALVE WITH HAND WHEEL
8	1" PVC TEE, SOLVENT WELD
9	1" PE (COMPRESSION) X PVC (SOLVENT WELD) ADAPTER
10	1" SCH 80/40 PVC NIPPLE, SOLVENT WELD X NPT
11	1" BRASS PLUG

- NOTES:
- ALL FITTINGS FOR POLYETHYLENE TUBING ARE COMPRESSION TYPE.
 - TRACER WIRE SHALL BE SPIRALLED AROUND THE TUBING, TAPPED EVERY TEN FEET AND CONNECTED TO THE MAIN LINE TRACER WIRE USING SLEEVE FILLED CONNECTORS.
 - 1" GATE VALVE PROVIDED TO BE TEMPORARY UNTIL WATER METER ASSEMBLY IS INSTALLED.
 - SEE W-8.0 FOR WATER METER ASSEMBLY INSTALLATION.

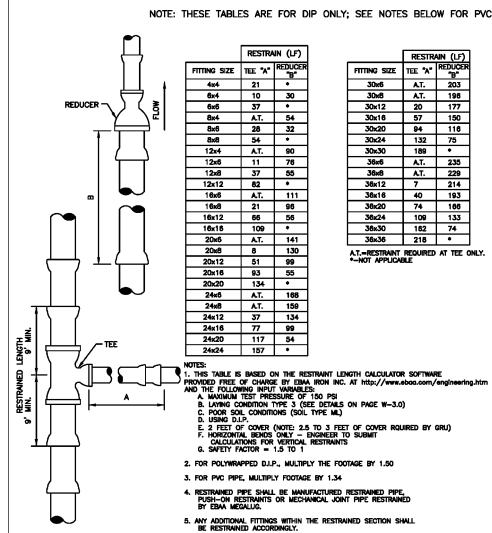
Revision Date: 2/20/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 POLYETHYLENE TUBING WATER SERVICE MAIN SIDE
 W-7.0



FITTING	RESTRAIN "X" (LF)							
	4"	6"	8"	12"	16"	20"	24"	36"
1 1/2" BEND	3	4	5	6	8	9	10	12
22 1/2" BEND	5	7	9	12	15	17	20	23
45/OFFSET	10	14	18	24	30	35	40	47
90° BEND	24	33	42	58	72	85	97	112
DEAD END	42	58	75	104	131	157	181	213

- MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED.
- NOTES: 1. THIS TABLE IS BASED ON THE RESTRAINT CALCULATION SOFTWARE PROVIDED FREE OF CHARGE BY EIMA IRON INC. AT <http://www.eimainc.com/engineering.htm> AND THE FOLLOWING INPUT VARIABLES:
 A. MAXIMUM TEST PRESSURE OF 150 PS
 B. LAYING CONDITION TYPE 3 (SEE DETAILS ON PAGE W-3.0)
 C. POOR SOIL CONDITIONS (SOIL TYPE M)
 D. USING D.I.P.
 E. 2 FEET OF COVER (NOTE: 2.5 TO 3 FEET OF COVER REQUIRED BY GRU)
 F. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
 G. SAFETY FACTOR = 1.5 TO 1
- FOR POLYWRAPPED D.I.P., MULTIPLY THE FOOTAGE BY 1.50
 - FOR PVC PIPE, MULTIPLY FOOTAGE BY 1.34
 - RESTRAINED PIPE SHALL BE MANUFACTURED RESTRAINED PIPE, PUSH-ON RESTRAINTS OR MECHANICAL JOINT PIPE RESTRAINED BY EIMA METALS.
 - ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.
 - IF OTHER OR BOTH ENDS OF A TEE USE A VALVE, TEE OR OTHER RUN AND THE BRANCH OF THE TEE SHALL BE TREATED AS AN END, AND RESTRAINED ACCORDING TO THE TABLE ON DETAIL W-2.8.

Revision Date: 9/8/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 RESTRAINED JOINT STANDARD FOR TEES, BENDS, PLUGS, AND CAPS
 W-2.8

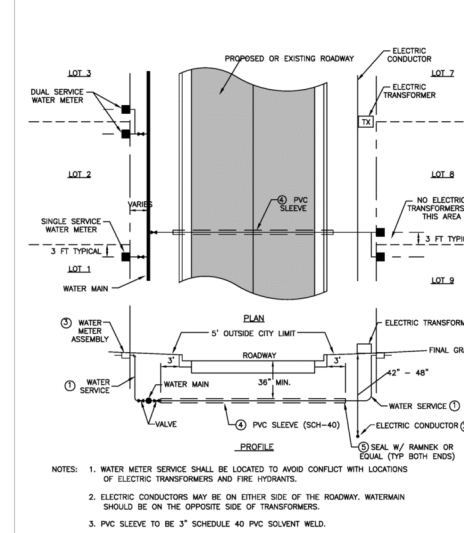


NOTE: THESE TABLES ARE FOR DIP ONLY; SEE NOTES BELOW FOR PVC

FITTING SIZE	RESTRAIN (LF)	
	TEE "X"	REDUCER "X"
4x4	21	7
6x6	10	30
8x8	27	177
8x6	A.T., 54	30x18 93
8x5	30	30x20 84
8x4	58	30x24 122
12x4	A.T., 90	30x30 189
12x6	11	36x6 A.T., 230
12x8	27	36x8 A.T., 228
12x12	82	36x12 71
18x8	A.T., 111	36x18 40
18x10	21	36x20 74
18x12	68	36x24 109
18x16	109	36x30 182
24x8	A.T., 141	36x36 278
24x6	8	36x40 130
24x12	57	36x48 A.T., 188
24x16	A.T., 159	36x54 A.T., 188
24x18	77	36x60 117
24x24	117	36x72 107

- NOTES:
- THIS TABLE IS BASED ON THE RESTRAINT LENGTH CALCULATOR SOFTWARE PROVIDED FREE OF CHARGE BY EIMA IRON INC. AT <http://www.eimainc.com/engineering.htm> AND THE FOLLOWING INPUT VARIABLES:
 A. MAXIMUM TEST PRESSURE OF 150 PS
 B. LAYING CONDITION TYPE 3 (SEE DETAILS ON PAGE W-3.0)
 C. POOR SOIL CONDITIONS (SOIL TYPE M)
 D. USING D.I.P.
 E. 2 FEET OF COVER (NOTE: 2.5 TO 3 FEET OF COVER REQUIRED BY GRU)
 F. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
 G. SAFETY FACTOR = 1.5 TO 1
 - FOR POLYWRAPPED D.I.P., MULTIPLY THE FOOTAGE BY 1.50
 - FOR PVC PIPE, MULTIPLY FOOTAGE BY 1.34
 - RESTRAINED PIPE SHALL BE MANUFACTURED RESTRAINED PIPE, PUSH-ON RESTRAINTS OR MECHANICAL JOINT PIPE RESTRAINED BY EIMA METALS.
 - ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.
 - IF OTHER OR BOTH ENDS OF A TEE USE A VALVE, TEE OR OTHER RUN AND THE BRANCH OF THE TEE SHALL BE TREATED AS AN END, AND RESTRAINED ACCORDING TO THE TABLE ON DETAIL W-2.8.

Revision Date: 9/8/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS
 W-2.9



- NOTES:
- WATER METER SERVICE SHALL BE LOCATED TO AVOID CONFLICT WITH LOCATIONS OF ELECTRIC TRANSFORMERS AND FIRE HYDRANTS.
 - ELECTRIC CONDUCTORS MAY BE ON EITHER SIDE OF THE ROADWAY. WATERMAIN SHOULD BE ON THE OPPOSITE SIDE OF TRANSFORMERS.
 - PVC SLEEVE TO BE 3" SCHEDULE 40 PVC SOLVENT WELD.
 - SEAL BOTH ENDS OF 3" SLEEVE WITH RAINEX OR EQUAL.

Revision Date: 9/8/08
GRU More than Energy
 Gainesville Regional Utilities
 Potable Water Construction Details
 SINGLE & DUAL WATER SERVICE
 W-6.0

REVISIONS

ISSUED	COMMENT
8/3/13	CITY/CLIP SUBMITTAL
8/9/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
 FL PE NO. 50565

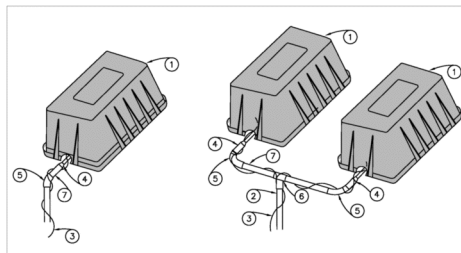
COMMERCIAL SITE SOLUTIONS, INC.
 SITE PLANNING & ENGINEERING
 FL COA. 2375
 1886 N. DALE MARBY HWY
 LUTZ, FL 33548
 813.882.3032

PREPARED FOR:
MURPHY OIL USA, INC.
 422 NORTH WASHINGTON AVENUE
 EL DORADO, AR 71730
 P.O. BOX 575-7629
 P.O. BOX 575-7629

UTILITY DETAILS
MURPHY OIL USA
GAINESVILLE, FL
 NW 23RD STREET AT US HWY 441
 GAINESVILLE, FL

Date: 4/29/13
 Drawn: SKS
 Checked: SKS

C-12
 Sheet



SINGLE SERVICE DUAL SERVICE

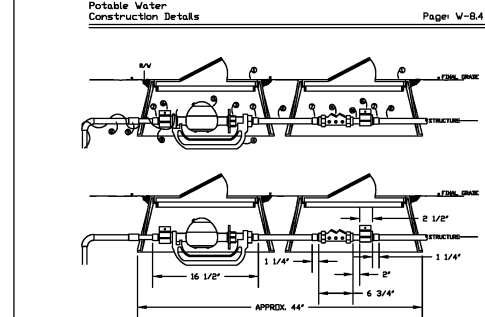
MATERIALS	
ITEM	DESCRIPTION
1	METER BOX
2	2" PVC PIPE
3	TRACER WIRE, COPPER, BLUE INSULATED, #10 AWG
4	1" x 3/4" PVC REDUCER
5	1" 90° BEND
6	1" x 1" x 2" PVC TEE
7	1" PVC PIPE

- NOTES:
- GAINESVILLE REGIONAL UTILITIES WILL INSTALL WATER METERS.
 - CONTRACTOR IS RESPONSIBLE FOR 1 YEAR WARRANTY PERIOD OF INSTALLATION OF WATER METER BOX AND FITTINGS, EXCLUDING ITEMS PROVIDED BY GRU. (EFFECTIVE OCTOBER 1, 2007)

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Potable Water Construction Details
SINGLE & DUAL WATER METER ASSEMBLY CONSTRUCTION
W-8.1



DRAWINGS NOT TO SCALE MEASUREMENTS ARE APPROXIMATE

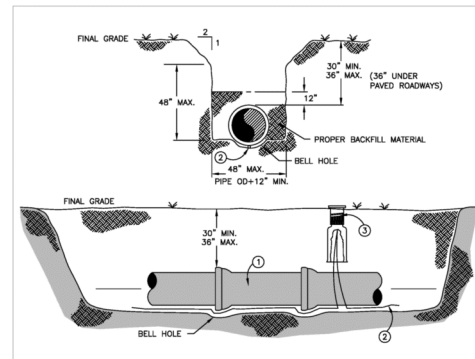
MATERIALS	
ITEM	DESCRIPTION
1	METER BOX (BY CONTRACTOR)
2	BOX 48 PVC PIPE (BY GRU)
3	YORK EXPANDER (BY CONTRACTOR - EFFECTIVE OCTOBER 1, 2007)
4	YORK SMO (BY CONTRACTOR - EFFECTIVE OCTOBER 1, 2007)
5	WATER METER - 3/4" x 3/4" (BY CONTRACTOR - EFFECTIVE OCTOBER 1, 2007)
6	METER GASKET STOP (BY CONTRACTOR - EFFECTIVE OCTOBER 1, 2007)
7	2" x 3/4" PVC REDUCER (BY CONTRACTOR)
8	TRACER WIRE, COPPER, BLUE INSULATED, #10 AWG (BY CONTRACTOR)
9	2" BRASS SUPPLE
10	NON-TOXIC BULK GROUND PREVENTER WHITE TUBING WITH GASKET IN BUILT AND BUILT IN

- NOTES:
- CONTRACTOR TO BE RESPONSIBLE FOR 1 YR. WARRANTY PERIOD FOR INSTALLATION OF WATER METER BOX AND FITTINGS, EXCLUDING ITEMS PROVIDED BY GRU EFFECTIVE OCTOBER 1, 2007.
 - APPLIES TO RESIDENTIAL POTABLE WATER SERVICE WITHIN RECLAIMED WATER SERVICE AREA.

Revision Date: 4/17/09

GRU Gainesville Regional Utilities
More than Energy

Potable Water Construction Details
UNDERGROUND BACKFLOW PREVENTER
W-8.4



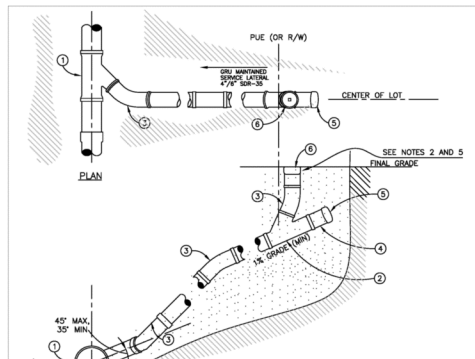
MATERIALS	
ITEM	DESCRIPTION
1	WATER MAIN PIPE
2	TRACER WIRE, BLUE, #10 AWG
3	VALVE BOX

- NOTES:
- PVC PLASTIC PIPE SHALL REQUIRE AN INSULATED COPPER WIRE TAPED EVERY 10 FEET ON THE BOTTOM OF THE PIPE AND WRAPPED AROUND EACH FIRE HYDRANT AT FINAL GRADE. THE WIRE SHALL BE CONTINUOUS AND ALL SPLICES REQUIRE SILICON FILLED CONNECTORS. TRACER WIRE SHALL CONTINUE ACROSS DIP SECTIONS OF PIPE, SUCH AS AT ROAD CROSSINGS.
 - DEPTH OF PIPE MAY BE FIELD ADJUSTED TO MEET SPECIAL CONDITIONS AS DETERMINED BY GRU ENGINEER OR INSPECTOR. PIPE INSTALLED WITH LESS THAN 30" OR GREATER THAN 36" OF COVER SHALL BE DIP.
 - VALVE BOX SHALL BE INSTALLED AT MAXIMUM 500 FT. INTERVALS FOR TESTING OF TRACER WIRE.

Revision Date: 9/8/08

GRU Gainesville Regional Utilities
More than Energy

Potable Water Construction Details
WATER MAIN CONSTRUCTION
W-3.1



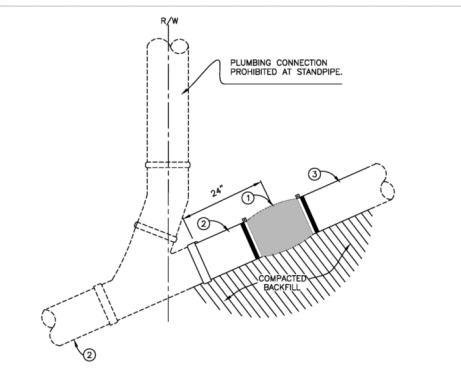
MATERIALS	
ITEM	DESCRIPTION
1	6" or 8" x 4" or 6" GRAVITY MAIN WYE
2	4" or 6" CLEANOUT WYE
3	4" or 6" 45° BEND
4	4" or 6" SERVICE LATERAL PIPE CONNECTION
5	4" or 6" PVC CAP, PLUMBING CONNECTION
6	4" or 6" CLEANOUT ADAPTER W/ THREADED PLUG

- NOTES:
- PVC (SDR-35) WYES ARE ACCEPTABLE. PVC (SDR-35) T-WYE & STANDARD TEES ARE UNACCEPTABLE.
 - CLEAN-OUT SHALL BE ADJUSTED TO FINAL GRADE BY CONTRACTOR AFTER GRU SMOKE TEST.
 - WHERE CLEAN-OUT IS WITHIN PARKING LOT AND/OR PAVING OR SIDEWALK ADJACENT TO PAVEMENT, CLEAN-OUT MUST BE INSTALLED FLUSH WITH FINAL GRADES WITH TRAFFIC BEARING COVER.
 - WHERE CLEAN-OUT IS WITHIN SIDEWALK, IT MUST BE INSTALLED FLUSH WITH SURFACE OF SIDEWALK WITH A BRASS PLUG WITH SQUARE RECESS.
 - PLUMBER SHALL NOT CONNECT TO CLEANOUT STANDPIPE.

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Wastewater Construction Details
DEEP WASTEWATER SERVICE LATERAL
WW-5.0.1



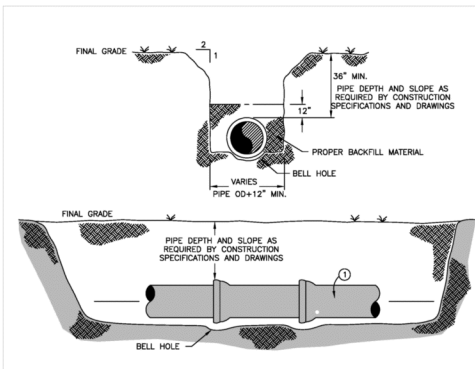
MATERIALS	
ITEM	DESCRIPTION
1	4"x4" FERROD COUPLING
2	4" PVC SERVICE LATERAL PIPE
3	CUSTOMER'S SERVICE LATERAL PIPE (4" PVC)

- NOTES:
- OPEN TRENCH INSPECTION REQUIRED BY THE CITY OF GAINESVILLE BUILDING DEPT., CODE ENFORCEMENT DIVISION, FOR ALL PLUMBERS WITHIN THE CITY LIMITS.
 - NO OPEN TRENCH INSPECTION REQUIRED BY ALACHUA COUNTY CODE ENFORCEMENT DEPT. GRU INSPECTOR NOTIFICATION REQUIRED.
 - PLUMBER SHALL NOT CONNECT TO STANDPIPE.

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Wastewater Construction Details
WASTEWATER SERVICE LATERAL CONNECTION BY PLUMBER
WW-5.2



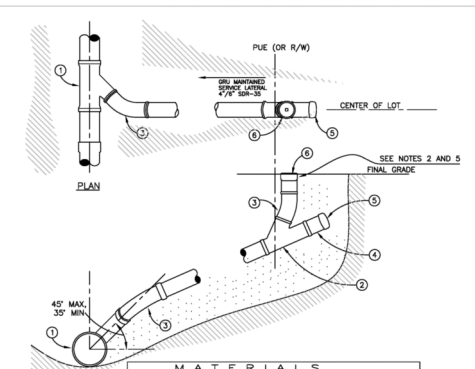
MATERIALS	
ITEM	DESCRIPTION
1	GRAVITY SEWER MAIN PIPE

- NOTES:
- GRAVITY MAIN PIPE SHALL BE INSTALLED AT THE LINE AND GRADE AS SHOWN ON THE GRU APPROVED CONSTRUCTION DRAWINGS.
 - PIPE MATERIAL SHALL CONFORM TO WW-2.0.

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Wastewater Construction Details
WASTEWATER GRAVITY MAIN CONSTRUCTION
WW-4.1



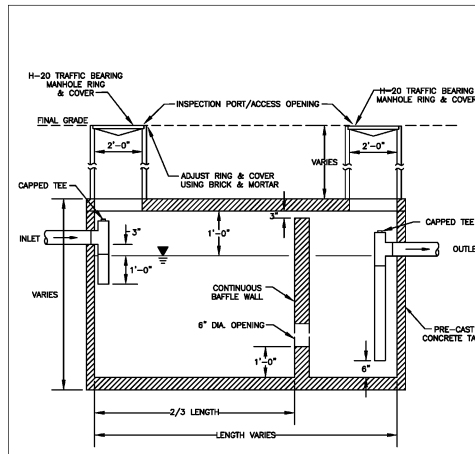
MATERIALS	
ITEM	DESCRIPTION
1	4" or 6" x 4" or 6" GRAVITY MAIN WYE
2	4" or 6" CLEANOUT WYE
3	4" or 6" 45° BEND
4	4" or 6" SERVICE LATERAL PIPE CONNECTION
5	4" or 6" PVC CAP, PLUMBING CONNECTION
6	4" or 6" CLEANOUT ADAPTER W/ THREADED PLUG

- NOTES:
- PVC (SDR-35) WYES ARE ACCEPTABLE. PVC (SDR-35) T-WYE & STANDARD TEES ARE UNACCEPTABLE.
 - CLEAN-OUT SHALL BE ADJUSTED TO FINAL GRADE BY CONTRACTOR AFTER GRU SMOKE TEST.
 - WHERE CLEAN-OUT IS WITHIN PARKING LOT AND/OR PAVING OR SIDEWALK ADJACENT TO PAVEMENT, CLEAN-OUT MUST BE INSTALLED FLUSH WITH FINAL GRADES WITH TRAFFIC BEARING COVER.
 - WHERE CLEAN-OUT IS WITHIN SIDEWALK, IT MUST BE INSTALLED FLUSH WITH SURFACE OF SIDEWALK WITH A BRASS PLUG WITH SQUARE RECESS.
 - PLUMBER SHALL NOT CONNECT TO CLEANOUT STANDPIPE.

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Wastewater Construction Details
WASTEWATER SERVICE LATERAL
WW-5.0



- NOTES:
- TANK VOLUME TO BE DETERMINED BY GRU UPON APPLICATION BY OWNER. STRUCTURAL DESIGN SHALL BE THE RESPONSIBILITY OF THE TANK MANUFACTURER.
 - ONLY KITCHEN WASTE SHALL BE DISCHARGED INTO THE GREASE TRAP. ALL DOMESTIC WASTE (I.E. RESTROOMS) SHALL BE CONNECTED DOWNSTREAM OF THE GREASE TRAP.

Revision Date: 2/20/08

GRU Gainesville Regional Utilities
More than Energy

Wastewater Construction Details
GREASE TRAP
WW-9.0

REVISIONS	
ISSUED	COMMENT
03/13	CITY/UP SUBMITTAL
08/13	CITY RESUBMITTAL (TRC)

SCOTT K. STANNARD, P.E.
FL PE NO. 50565

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2575
1886 N DALE MARBY HWY
LUTZ, FL 33548
813-882-2032

48 EAST 1ST AVENUE
SUITE 2000
TAMPA, FL 33604
813-885-5300

PREPARED FOR:

MURPHY OIL USA, INC.

422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
PH: 870-875-7629

UTILITY DETAILS

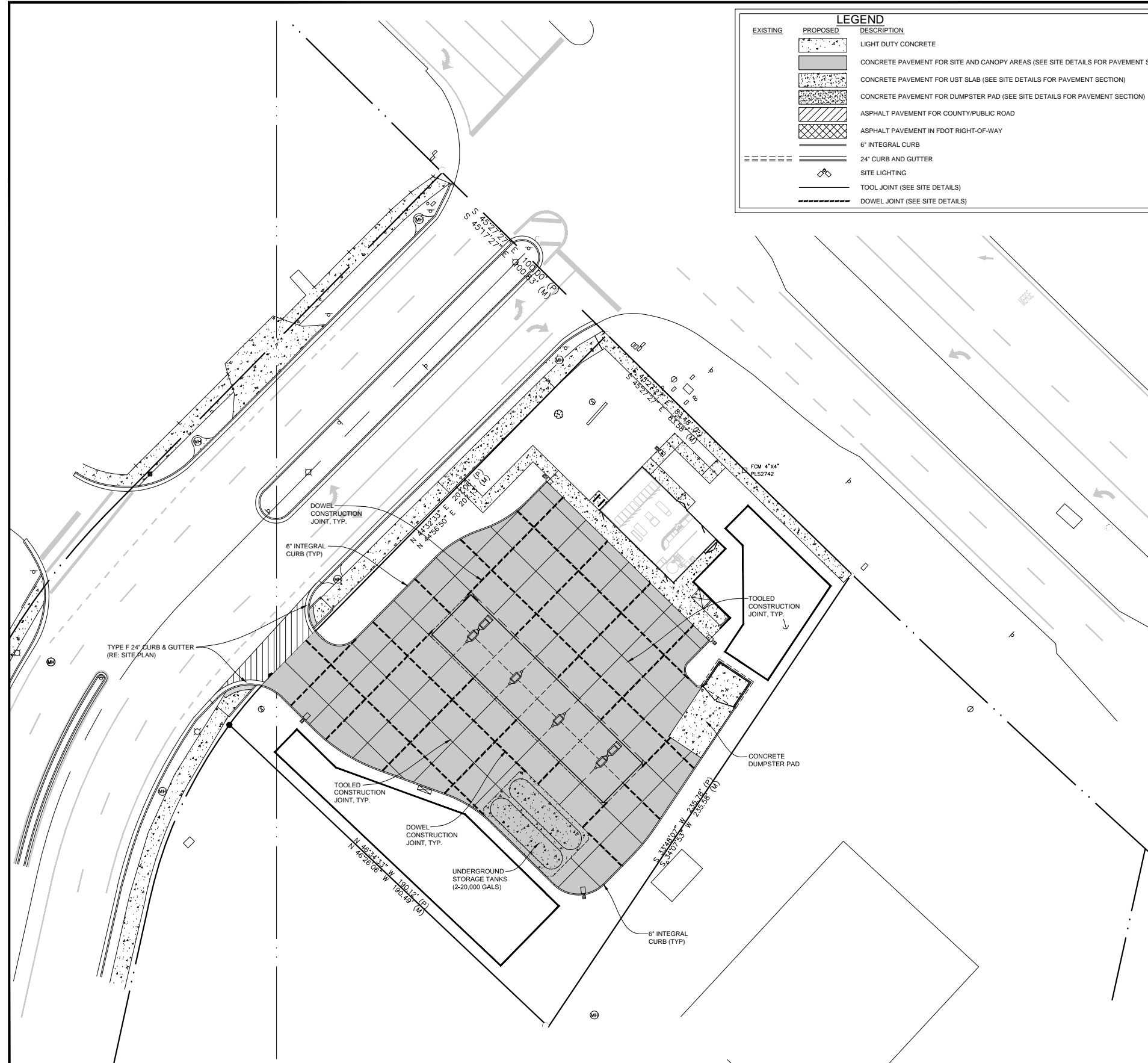
MURPHY OIL USA

GAINESVILLE, FL

NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS

C-12A
Sheet



EXISTING	PROPOSED	DESCRIPTION
		LIGHT DUTY CONCRETE
		CONCRETE PAVEMENT FOR SITE AND CANOPY AREAS (SEE SITE DETAILS FOR PAVEMENT SECTION)
		CONCRETE PAVEMENT FOR UST SLAB (SEE SITE DETAILS FOR PAVEMENT SECTION)
		CONCRETE PAVEMENT FOR DUMPSTER PAD (SEE SITE DETAILS FOR PAVEMENT SECTION)
		ASPHALT PAVEMENT FOR COUNTY/PUBLIC ROAD
		ASPHALT PAVEMENT IN FDOT RIGHT-OF-WAY
		6" INTEGRAL CURB
		24" CURB AND GUTTER
		SITE LIGHTING
		TOOL JOINT (SEE SITE DETAILS)
		DOWEL JOINT (SEE SITE DETAILS)



- GENERAL PAVING NOTES**
- UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON ALL CURB AND GUTTER ADJACENT TO ASPHALT PAVING SHALL BE INSTALLED PER PROVIDED DETAILS. SEE GALLOWAY PLANS FOR ASSOCIATED PLANS FOR CANOPY, COLUMN, PUMP ISLAND DETAILS AND LAYOUT.
 - THE LOCATION OF THE CONSTRUCTION FENCE ON THE DRAWINGS IS FOR GRAPHICAL REPRESENTATION ONLY. THE CONTRACTOR IS TO ENSURE THAT THE CONSTRUCTION FENCE ENCOMPASSES THE ENTIRE WORK AREA.
 - UNLESS OTHERWISE NOTED, ALL ON-SITE CURB SHALL BE INTEGRAL CURB AS SHOWN ON THE DETAIL SHEET.
 - CONTRACTOR TO DYE CONCRETE ON ASPHALT REPAIRS AND UTILITY CUT REPAIRS TO MATCH SURROUNDING ASPHALT.
 - UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON ALL CURB ADJACENT TO PAVEMENT SHALL BE INSTALLED PER PAVING PLAN AND DETAILS. PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE PAVING PLAN OVER THE ENTIRE SITE AND ALL ACCESS DRIVES. SEE ASSOCIATED PLANS FOR CANOPY, COLUMN, PUMP ISLAND DETAILS AND LAYOUT.
 - SAWCUT SPACING IS TO BE AS SPECIFIED IN THE MOST CURRENT GEOTECHNICAL REPORT.

ISSUED	REVISIONS	COMMENT
8/3/13	CITY/UP SUBMITTAL	
8/9/13	CITY RESUBMITTAL (TRC)	

SCOTT K. STANNARD, P.E.
FL PE NO. 50565

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2575
1886 N DALE MARBY HWY
LUTZ, FL 33548
813-882-2032

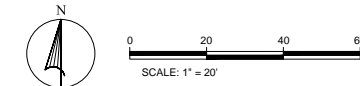
481 EAST 1ST AVENUE
SUITE 2000
ORLANDO, FL 32801
888-855-5200

PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORA, AR 71730
PH: 870-875-7629

PAVING PLAN
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS

C-13
Sheet



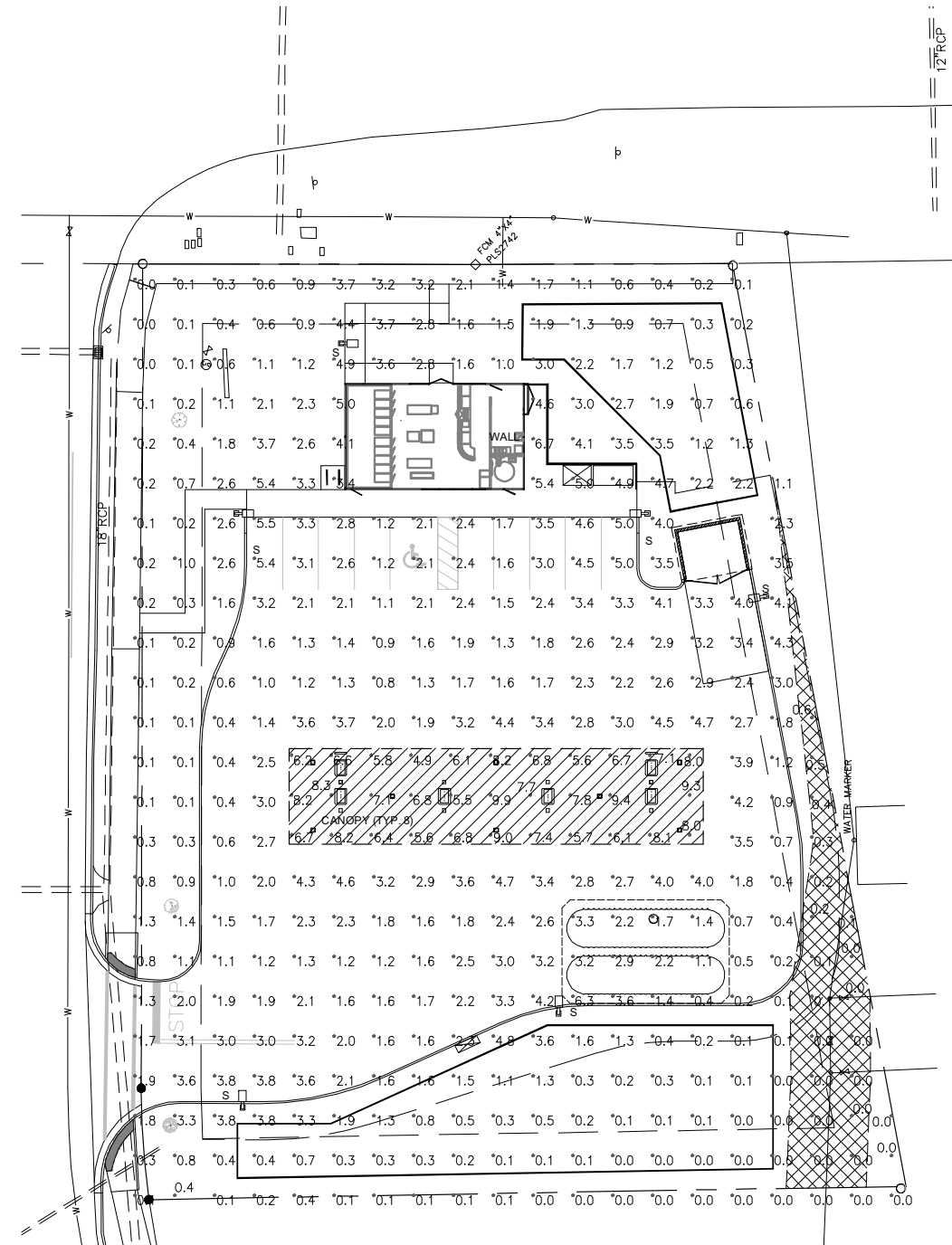
LUMINAIRE SCHEDULE

SYMBOL	QTY	MIN. MOUNTING HEIGHT	POLE HEIGHT	LUMENS	TOTAL WATTS	MODEL NUMBER	DESCRIPTION
S	6	24'-6"	22'-0"	12,350	184	XAM3-F1-LED-119-450-CW-UE-BRZ	LSI LIGHTING, CROSSOVER 3 LED SERIES, 119 DIODE LED, SINGLE HEAD FLAT LENS FIXTURE, FORWARD THROW, FULL CUTOFF
CANOPY	8	15'-0"	N/A	4,115	76	CRO-S-LED-50-CW-UE-WHT	LSI LIGHTING, CROSSOVER SERIES, 50 DIODE, FLAT LENS LED CANOPY FIXTURE
WALL	1	SEE ELEVATIONS	N/A	2,400	33	XPWS3-F1-LED-28-350-CW-UE-BRZ-BB	LSI LIGHTING, CROSSOVER GOLD SERIES, LED PATRIOT WALL SCONCE, 28 DIODE, 350 mA, FULL CUTOFF WALL FIXTURE WITH BATTERY BACKUP

NOTES: ALL AREA SITE LIGHT FIXTURES AND POLES TO BE MOUNTED ON 2'-6" CONCRETE BASE PER MURPHY OIL USA CIVIL STANDARDS
ALL ANCHOR BOLTS TO BE ORIENTED IN THE SAME DIRECTION (SQUARE) AT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.
ALL FIXTURES ARE CLASSIFIED AS FULL CUT-OFF PER IESNA

CALCULATION SUMMARY

LABEL	UNITS	AVG	ALLOWED	MAX	ALLOWED	MIN	ALLOWED	AVG/MIN	ALLOWED	MAX/MIN	ALLOWED
SEC. 30-93(e)(2)-UNDER CANOPY	FC	7.19	10.0	9.9	N.A.	4.2	2.0	1.47:1	5:1	2.02:1	N.A.
SEC. 30-330(a)(4) & SEC. 30-93(e)(1)-REMOTE AREAS	FC	2.47	2.50	6.7	N.A.	0.5	0.5	4.94:1	5:1	13.4:1	15:1



1 PHOTOMETRIC SITE PLAN
SCALE: 1"=20'-0"

City of Gainesville Codes

Sec. 30-93

- (e) Lighting. The requirements for lighting are as follows:
 - (1) Remote Areas. Areas on the apron away from the gasoline pumps, used for parking or vehicle storage, shall be illuminated in accordance with the requirements for parking as set forth in Section 30-330(a)(4).
 - (2) Areas around pump islands. Areas within six feet of a pump island or under canopies shall be designed to maintain a minimum average horizontal illuminance of at least 2.0 footcandles and a maximum average of no more than ten footcandles. The uniformity ratio (ratio of average to minimum illuminance) shall be no greater than 5:1. The above lighting must be delineated on a photometric plan.

Sec. 30-330

- (a) Off-street parking. The requirements for lighting are as follows:
 - (4) Lighting. All off-street parking facilities shall be continuously lighted after dark throughout the hours that they are in use by the public. Such lighting shall be designed to maintain an average horizontal illuminance not to exceed 2.5 footcandles, and a minimum horizontal illuminance of 0.5 footcandles. The uniformity ratio (ratio of average to minimum illuminance) shall be no greater than 5:1, and the maximum to minimum uniformity ratio shall be no greater than 15:1...

GENERATION 3 LED PATRIOT WALL SCONCE (XPWS)

DESIGNED AND MANUFACTURED IN THE U.S.

UL LISTED AND APPROVED FOR THE U.S.

EMERGENCY OPTION: -40°C to +125°F (40°F to +257°F)

EXPECTED LIFE: - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See L81 table for specific guidance.

PHOTOMETRICS: Application layouts are available upon request. Contact LSI Applications Group at lighting@lsilighting.com

LISTING: - ETL, listed to U.S. and Canadian safety standards. Suitable for wet locations.

MANUFACTURER SPECIFICATION SHEET FOR WALL FIXTURES

LED AREA LIGHT - MEDIUM (XAM)

DESIGNED AND MANUFACTURED IN THE U.S.

UL LISTED AND APPROVED FOR THE U.S.

EMERGENCY OPTION: -40°C to +125°F (40°F to +257°F)

EXPECTED LIFE: - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See L81 table for specific guidance.

PHOTOMETRICS: Application layouts are available upon request. Contact LSI Applications Group at lighting@lsilighting.com

LISTING: - ETL, listed to U.S. and Canadian safety standards. Suitable for wet locations.

MANUFACTURER SPECIFICATION SHEET FOR SITE FIXTURES

LED AMBIENT CANOPY LIGHT - CRO2

DESIGNED AND MANUFACTURED IN THE U.S.

UL LISTED AND APPROVED FOR THE U.S.

EMERGENCY OPTION: -40°C to +125°F (40°F to +257°F)

EXPECTED LIFE: - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See L81 table for specific guidance.

PHOTOMETRICS: Application layouts are available upon request. Contact LSI Applications Group at lighting@lsilighting.com

LISTING: - ETL, listed to U.S. and Canadian safety standards. Suitable for wet locations.

MANUFACTURER SPECIFICATION SHEET FOR CANOPY FIXTURE

NOTES:

PLAN WAS BASED ON THE INFORMATION PROVIDED. ALL DIMENSIONS, LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THE PHOTOMETRIC PLAN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY (IES) APPROVED METHODS. LABORATORY TESTS ARE MADE UNDER OPTIMUM CONDITION, WITH LAMP OUTPUT AT RATED VALUE, AND IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS.

ACTUAL ILLUMINANCE LEVELS MAY DIFFER DUE TO VARIABLE FIELD CONDITIONS SUCH AS (BUT NOT LIMITED TO): VARIANCE IN LAMP OUTPUT; LAMP TILT FACTOR; BALLAST WATTAGE OUTPUT; LINE VOLTAGE AT BALLAST; REFLECTOR SPECULARITY; LAMP LUMEN DEPRECIATION; AND LUMINAIRE DIRT DEPRECIATION.

THIS PLAN IS FOR RELATIVE LAYOUT AND SCOPE OF WORK PURPOSES ONLY. REFER TO SITE PLAN PREPARED BY LOCAL CONSULTANT FOR RELATIONSHIP OF THESE LUMINAIRES AND THEIR LOCATIONS TO EXISTING STRUCTURES AND REFERENCE.

LED AREA LIGHT - MEDIUM (XAM)

DESIGNED AND MANUFACTURED IN THE U.S.

UL LISTED AND APPROVED FOR THE U.S.

EMERGENCY OPTION: -40°C to +125°F (40°F to +257°F)

EXPECTED LIFE: - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See L81 table for specific guidance.

PHOTOMETRICS: Application layouts are available upon request. Contact LSI Applications Group at lighting@lsilighting.com

LISTING: - ETL, listed to U.S. and Canadian safety standards. Suitable for wet locations.

LED AMBIENT CANOPY LIGHT - CRO2

DESIGNED AND MANUFACTURED IN THE U.S.

UL LISTED AND APPROVED FOR THE U.S.

EMERGENCY OPTION: -40°C to +125°F (40°F to +257°F)

EXPECTED LIFE: - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See L81 table for specific guidance.

PHOTOMETRICS: Application layouts are available upon request. Contact LSI Applications Group at lighting@lsilighting.com

LISTING: - ETL, listed to U.S. and Canadian safety standards. Suitable for wet locations.

MANUFACTURER SPECIFICATION SHEET FOR CANOPY FIXTURE

DATE: 8/02/2013

DESIGNED BY: JMG

DRAWN BY: JMG

CHECKED BY: JMG

REVISION: 1 PER SITE REVISIONS

PROJECT NO: MOC9183

SHEET SCALE: 1"=20'-0"

DESIGNED BY: JMG

DRAWN BY: JMG

DATE: JUNE, 2013

PHOTOMETRIC SITE PLAN

1 of 1

PROPOSED TREE CREDIT LIST

No.	SIZE	DESCRIPTION	CREDIT TREES	CATEGORY
1	12", 15"	ELM CLUSTER	5	SHADE TREE
2	24"	LIVE OAK	4	SHADE TREE
3	19"	MAPLE	3	SHADE TREE

TOT. 12

BUFFER TYPE E' PER 100 LINEAR FEET

OPTION Y

- WIDTH: 9 FEET
- SHADE TREES: 3
- UNDERSTORY TREES: 2
- LARGE SHRUBS: 8
- SMALL SHRUBS: 13

OPTION Z

- WIDTH: 15 FEET
- SHADE TREES: 3
- UNDERSTORY TREES: 2
- LARGE SHRUBS: 5
- SMALL SHRUBS: 6

PLANT LIST

SYMB.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
Ab	3	Acer barbatum	FLORIDA MAPLE	2" CAL. MIN. - 12'-14' AVG. HT.	PER PLAN S/N
laE	5	Ilex x attenuata 'Eagleston'	EAGLESTON HOLLY	2" CAL. MIN. - 12'-14' AVG. HT.	PER PLAN U/N
Ns	16	Nyssa sylvatica	BLACKGUM	2" CAL. MIN. - 12'-14' AVG. HT.	PER PLAN S/N
Lj	3	Lagerstroemia indica 'Muskogee'	MUSKOGEE CRAPE MYRTLE	2" COMB. CAL. (3-5 STEM) - 12'-14' AVG. HT.	PER PLAN U
Up	2	Ulmus parvifolia 'Drake'	DRAKE CHINESE ELM	2" CAL. MIN. - 12'-14' AVG. HT.	PER PLAN S
Qg	8	Quercus geminata	SAND LIVE OAK	2" CAL. MIN. - 12'-14' AVG. HT.	PER PLAN S/N

SHRUBS/GROUND COVER

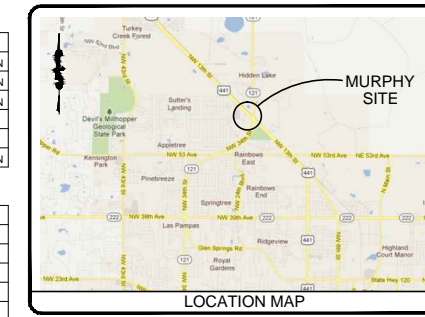
SYMB.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
Fs	36	Forestiera segregata	FLORIDA PRIVET	3 GAL. MIN. - 24" MIN. HT.	60" O.C. MIN. N
laN	6	Ilex x attenuata 'Nellie Stevens'	NELLIE STEVENS HOLLY	7 GAL. MIN. - 48" MIN. HT.	60" O.C. MIN. N
lp	26	Illicium parviflorum	ANISE	3 GAL. MIN. - 24" MIN. HT.	60" O.C. MIN. N
lv	40	Ilex vomitoria 'Nana'	DWARF YAUPON HOLLY	3 GAL. MIN. - 24" MIN. HT.	48" O.C. MIN. N
Lm	82	Liriope muscari 'Evergreen Giant'	EVERGREEN GIANT LIRIOPE	1 GAL. MIN.	24" O.C. MIN. N
Mc	66	Muhlenbergia capillaris	PINK MUHLY GRASS	3 GAL. MIN. - 24" MIN. HT.	36" O.C. MIN. N

S=SHADE U=UNDERSTORY N=NATIVE

SOD

SOD SHALL BE 'ARGENTINE' BAHIA GRASS - PAPSALUM NOTATUM 'ARGENTINE'. QUANTITY SHALL BE DETERMINED BY CONTRACTOR SOD SHALL BE STAKED ON ALL SLOPES 3:1 OR GREATER.

- IF SPECIFIED PLANTS ARE UNAVAILABLE AT THE TIME OF CONSTRUCTION, CONTRACTOR MAY REPLACE SPECIFIED PLANTS WITH PLANTS APPROVED BY LANDSCAPE ARCHITECT AND CITY STAFF. ALTERATION TO LANDSCAPE PLAN REQUIRES WRITTEN APPROVAL.
- ALL OPEN SPACE AREAS WITHIN THE PROPERTY SHALL BE SODDED UNLESS PAVED, SEEDED AND MULCHED OR PLANTED WITH SHRUBS AND GROUND COVER. ALL LANDSCAPED AREAS NOT SODDED SHALL BE COVERED IN MULCH UNLESS OTHERWISE NOTED. PLANT BEDS SHALL BE TOP DRESSED WITH A MAXIMUM OF 3" SETTLED SHREDDED ORGANIC MULCH.



SITE DATA

PROPERTY AREA: ±0.91 ACRES (±39,640 SF)
 NORTHEAST PROPERTY LINE LENGTH: 148.1 LF
 SOUTHWEST PROPERTY LINE LENGTH: 235.78 LF
 NORTHWEST PROPERTY LINE LENGTH: 190.12 LF
 ZONING: MU-2
 ADJACENT PROPERTY ZONING:
 • NORTH - R/W
 • EAST - MU-2
 • SOUTH - MU-2
 • WEST - R/W
 PROPOSED LAND USE: GAS STATION & C-STORE
 PARKING REQUIREMENTS: 6 SPACES (10 PROVIDED)

CITY OF GAINESVILLE LANDSCAPE REQUIREMENTS

LANDSCAPE BUFFER REQUIREMENTS:

- NORTHEAST - TYPE E BUFFER
- SOUTHWEST - NONE REQUIRED
- SOUTH - NONE REQUIRED
- NORTHWEST (RIGHT-OF-WAY) - TYPE E BUFFER

VUA LANDSCAPE REQUIREMENTS:

- 9 FT. WIDE PERIMETER LANDSCAPE AREA CONTAINING:
 - SHRUBS TO PROVIDE 75% OPACITY AND 3 FT. HEIGHT
 - 1 SHADE TREE EVERY 50 LINEAR FT. OF VUA BOUNDARY
- TERMINAL LANDSCAPE ISLANDS CONTAINING 1 TREE

NORTHEAST PROPERTY LINE BUFFER:

- REQUIRED SHADE TREES: 148.1 x 3/100 = 5 TREES
- PROVIDED SHADE TREES: 5 TREES
- REQUIRED UNDERSTORY TREES: 148.1 x 2/100 = 3 TREES
- PROVIDED UNDERSTORY TREES: 3 TREES
- REQUIRED LARGE SHRUBS: 148.1 x 8/100 = 12 SHRUBS
- PROVIDED LARGE SHRUBS: 15 SHRUBS
- REQUIRED SMALL SHRUBS: 148.1 x 13/100 = 20 SHRUBS
- PROVIDED SMALL SHRUBS: 20 SHRUBS

NORTHWEST PROPERTY LINE BUFFER:

- REQUIRED SHADE TREES: 235 x 3/100 = 7 TREES
- PROVIDED SHADE TREES: 7 TREES (INCLUDING 3 EXIST. TREES)
- REQUIRED UNDERSTORY TREES: 235 x 2/100 = 5 TREES
- PROVIDED UNDERSTORY TREES: 5 TREES
- REQUIRED LARGE SHRUBS: 235 x 8/100 = 19 SHRUBS
- PROVIDED LARGE SHRUBS: 19 SHRUBS
- REQUIRED SMALL SHRUBS: 235 x 13/100 = 31 SHRUBS
- PROVIDED SMALL SHRUBS: 31 SHRUBS

VUA LANDSCAPE:

- VUA PERIMETER LENGTH: 475 LF (SE AND SW)
- REQUIRED SHADE TREES: 475/50 = 10 TREES
- PROVIDED SHADE TREES: 10 TREES

NORTHEAST CORNER RETENTION POND LANDSCAPE:

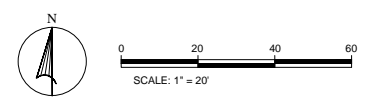
- POND PERIMETER LENGTH: 205 LF
- REQUIRED SHADE TREES: 205/35 = 6 TREES
- PROVIDED SHADE TREES: 6 TREES

SOUTHWEST CORNER RETENTION POND LANDSCAPE:

- POND PERIMETER LENGTH: 205 LF
- REQUIRED SHADE TREES: 324/35 = 10 TREES
- PROVIDED SHADE TREES: 10 TREES

NOTES PER TRC COMMENTS:

- REMOVAL OF ALL CONSTRUCTION DEBRIS, LIME ROCK, EXCESS OF BUILDER'S SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS IS THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR. SOIL IN AREAS TO BE LANDSCAPED SHALL BE ENCOMPASSED, SUITABLE FOR ROOT GROWTH WITH APPROPRIATE AMOUNTS OF ORGANIC MATTER, AND OF PH 5.5-6.5.
- MULCH ALL DISTURBED AREAS WITH THREE- (3) INCH MINIMUM LAYER OF PINE BARK NUGGETS.
- RETENTION (BASINS) SHALL BE MULCHED WITH PINE STRAW NOT PINE NUGGETS.
- ALL PLANT MATERIAL SHALL BE GUARANTEED ONE YEAR AFTER ACCEPTANCE BY OWNER.
- THE SOD SHALL BE TSA-FREE, (WEED-FREE)
- ALL TREES PLANTED IN SOD TO HAVE (10) INCH PLASTIC PROTECTOR AROUND TRUNK BASE TO PROTECT FROM MOWING DAMAGE.
- TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED AND TOPMOST ROOT IN THE ROOTBALL ORIGINATING FROM THE TRUNK IS AT SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL ON THE ROOTBALL.
- CONTRACTOR TO CALL NATURE OPERATIONS AT 352-393-8171 FOR A BARRICADE INSPECTION BEFORE CLEARING AND GRUBBING WORK BEGINS.
- LANDSCAPE CONTRACTOR SHALL CALL NATURE OPERATIONS AT (352 393-8171) TO SCHEDULE AN ON-SITE MEETING PRIOR TO PURCHASING ANY PLANT MATERIAL.



REVISIONS

ISSUED	COMMENT
03/13	CITY/SUP SUBMITTAL
08/13	CITY RESUBMITTAL (TRC)

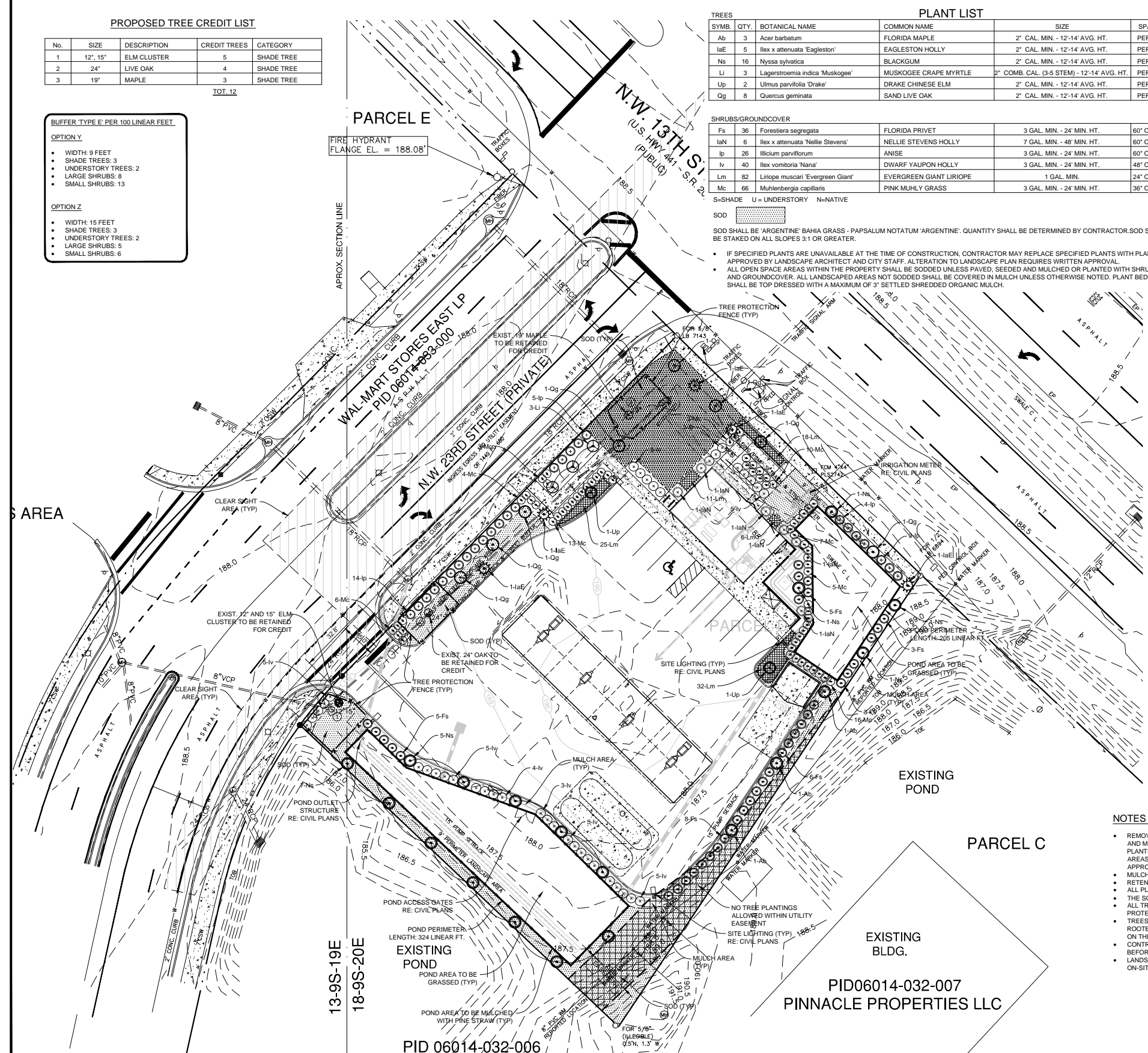
TIMOTHY W. LARSON, RLA
 FL LIC. LA6867115

COMMERCIAL SITE SOLUTIONS, INC.
 SITE PLANNING & ENGINEERING
 FL COA. 2575
 1886 N DALE MARBY HWY
 LUTZ, FL 33548
 813.882.3032

PREPARED FOR:
MURPHY OIL USA, INC.
 422 NORTH WASHINGTON AVENUE
 EL DORA, AR 71730
 PH: 870.975.7629

LANDSCAPE PLAN
MURPHY OIL USA
GAINESVILLE, FL
 NW 23RD STREET AT US HWY 441
 GAINESVILLE, FL

Date: 4/29/13
 Drawn: SKS
 Checked: SKS
L-1
 Sheet



PARCEL E

FIRE HYDRANT FLANGE EL. = 188.08'

N.W. 13TH ST (P.B.L.K.)
 (U.S. HWY 441 - S.R. 2)

APPROX. SECTION LINE

WAL-MART STORES EAST LP
 PID 06014-032-000

N.W. 23RD STREET (PRIVATE)

PARCEL C

EXISTING BLDG.

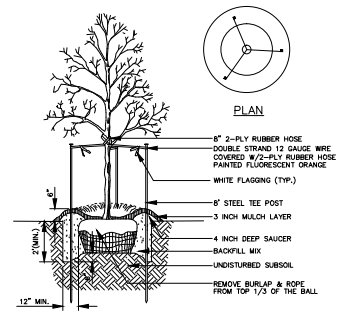
PID06014-032-007
 PINNACLE PROPERTIES LLC

13-9S-19E
 18-9S-20E

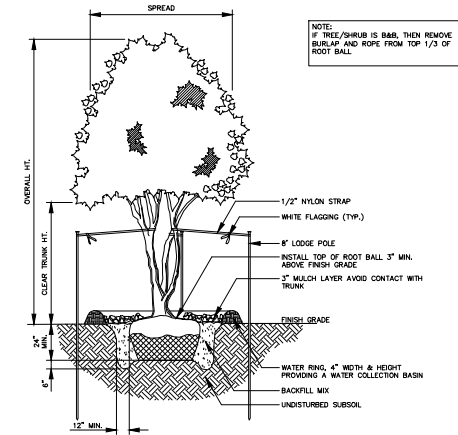
EXISTING POND

POND PERIMETER LENGTH: 324 LINEAR FT.

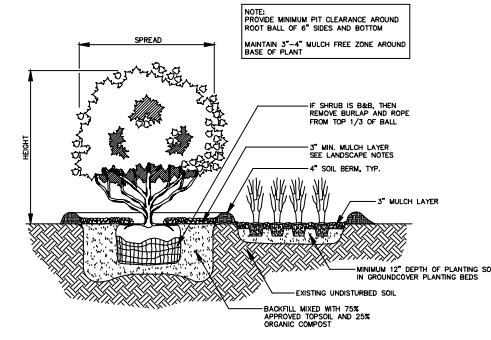
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TREE PLANTING DETAIL
N.T.S.



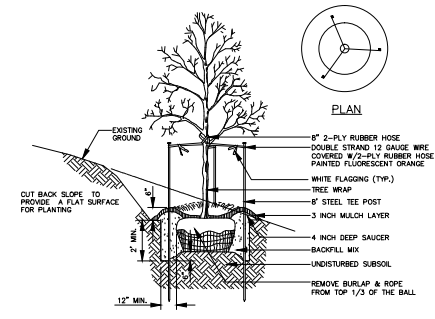
MULTI-STEM TREE/LARGE SHRUB PLANTING DETAIL
N.T.S.



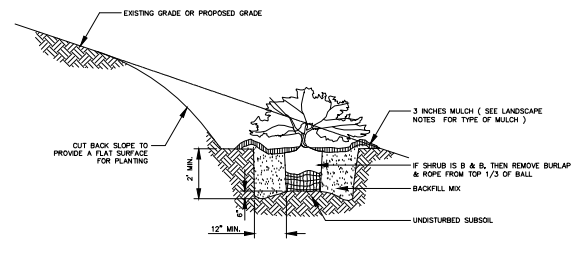
SHRUB & GROUNDCOVER PLANTING DETAIL
N.T.S.

GENERAL LANDSCAPE NOTES

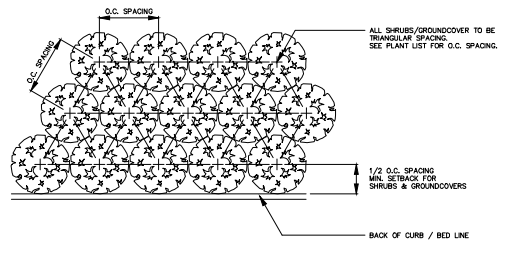
- LANDSCAPE CONTRACTOR SHALL REVIEW ARCHITECTURAL/ENGINEERING DRAWINGS AND BECOME THOROUGHLY FAMILIAR WITH ALL SURFACE AND SUBSURFACE UTILITIES.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE THE PLANTING WITH THE IRRIGATION WORK TO ASSURE AVAILABILITY AND PROPER LOCATION OF IRRIGATION ITEMS AND PLANTS.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL WORK AS CALLED FOR ON THE LANDSCAPE PLANS AND IN THE LANDSCAPE SPECIFICATIONS. IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT THE TIME OF BIDDING.
- EXCEPT AS OTHERWISE SPECIFIED, THE REQUIRED LANDSCAPING SHALL BE INSTALLED ACCORDING TO ACCEPTED COMMERCIAL PLANTING PROCEDURES AS SET FORTH IN 'GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, 1998', AND ANY AMENDMENTS THERETO.
- EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT AND FURNISHINGS. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF NEGLIGENCE IN THE EXECUTION OF THE WORK.
- ALL PLANTING SHALL BE PERFORMED BY PERSONS FAMILIAR WITH PLANTING PROCEDURE AND UNDER THE SUPERVISION OF A QUALIFIED FOREMAN.
- ALL PLANT MATERIAL SHALL EQUAL OR EXCEED THE STANDARDS FOR FLORIDA NO. 1 AS GIVEN IN 'GRADES AND STANDARDS FOR NURSERY PLANTS 1998', STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, AND ANY AMENDMENTS THERETO. GRASS SOD SHALL BE CLEAN AND REASONABLY FREE OF WEEDS AND NOXIOUS PESTS OR DISEASES.
- THE MINIMUM ACCEPTABLE SIZE OF ALL PLANTS, MEASURED AFTER PRUNING WITH BRANCHES IN NORMAL POSITIONS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED ON THE PLANT LIST OR AS INDICATED ON THE LANDSCAPE PLAN. HEIGHT AND SPREAD DIMENSIONS REFER TO THE MAIN BODY OF THE PLANT AND NOT EXTREME BRANCH TIP TO TIP. TRUNK DIAMETER SHALL BE MEASURED 6\"/>
- PLANTS SHALL BE PROTECTED UPON ARRIVAL AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. NO PLANTS OR PLANTING MATERIAL SHALL BE STORED IN STREET RIGHT-OF-WAY.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER WATERING OF ALL PLANTS. ALL PLANTS SHALL BE THOROUGHLY WATERED AT TIME OF PLANTING AND KEPT ADEQUATELY WATERED UNTIL TIME OF ACCEPTANCE. IT SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PLANTS ARE NOT OVER WATERED.
- IT SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER. TO STRAIGHTEN AND REPLANT ALL PLANTS WHICH LEAN OR FALL AND TO REPLACE ALL PLANTS WHICH ARE DAMAGED DUE TO LACK OF PROPER GUYING OR STAKING. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIAL.
- ALL TREES AND PALMS SHALL BE GUYED, STAKED OR BRACED. LANDSCAPE CONTRACTOR SHALL DETERMINE WHICH SMALL OR MULTI-STEM TREES AND SHRUBS NEED TO BE GUYED AND STAKED TO MAINTAIN PLUMB. STAKING OF TREE AND SHRUBS, IF REQUIRED, SHALL BE DONE AS PER STAKING AND GUYING DETAIL PREPARED BY THE LANDSCAPE ARCHITECT. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL GUYS AND STAKES FROM THE TREES AND JOB SITE AFTER A PERIOD OF 1 YEAR.
- PLANTS BLOWN OVER BY HIGH WINDS, WITHIN THE GUARANTEED PERIOD, SHALL NOT BE CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. DAMAGED PLANTS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- LANDSCAPE CONTRACTOR SHALL PRUNE, SHAPE AND REMOVE DEAD FOLIAGE/LIMBS FROM EXISTING PLANT MATERIAL TO REMAIN. CONFIRM WITH THE LANDSCAPE ARCHITECT OR OWNER THE EXTENT OF WORK REQUIRED AT TIME OF BIDDING.
- SOD SHALL BE CERTIFIED TO BE FREE OF THE IMPORTED FIRE ANT. SOD SHALL HAVE A CLEAN GROWTH OF ACCEPTABLE GRASS, REASONABLY FREE OF WEEDS WITH NOT LESS THAN 1-1/2\"/>
- ALL PLANT BEDS SHALL BE TOP DRESSED WITH A MINIMUM OF 3\"/>
- LANDSCAPE CONTRACTOR SHALL ENSURE THAT HIS/HER WORK DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
- LANDSCAPE CONTRACTOR SHALL ENSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS, PLANTERS AND SOD AREAS. VERTICAL DRAINING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO ENSURE ADEQUATE DRAINAGE. IF WELL DRAINED FILL IS NECESSARY TO ENSURE POSITIVE DRAINAGE, THIS ISSUE SHALL BE BROUGHT UP BY THE LANDSCAPE CONTRACTOR AT TIME OF BIDDING.
- ALL TREE PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USDA STANDARD FOR NURSERY STOCK Z80.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE SPECIFIED PLANTING SOIL. LANDSCAPE CONTRACTOR SHALL TEST FILL ALL TREE PITS WITH WATER BEFORE PLANTING TO ENSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND EVALUATING WHICH PLANT MATERIALS ARE SUITABLE FOR TRANSPLANTING AND SHALL VERIFY THIS WITH THE LANDSCAPE ARCHITECT OR OWNER. LANDSCAPE CONTRACTOR SHALL TAKE ALL REASONABLE AND ACCEPTABLE HORTICULTURAL MEASURES TO ENSURE THE SUCCESSFUL TRANSPLANTING OF DETERMINED PLANT MATERIALS. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY RELOCATED PLANT MATERIALS WHICH DIE IF SUCH MEASURES ARE NOT TAKEN, AS DETERMINED BY THE LANDSCAPE ARCHITECT OR OWNER. REPLACEMENT PLANTS SHALL BE OF IDENTICAL SPECIES AND SIZE IF REQUIRED.
- MAINTENANCE SHALL COMMENCE AFTER EACH PLANT IS PLANTED AND THE MAINTENANCE PERIOD SHALL CONTINUE UNTIL THE JOB OR SPECIFIC PHASE OF THE JOB IS ACCEPTED BY THE LANDSCAPE ARCHITECT OR OWNER. EXTREME CARE SHALL BE TAKEN TO INSTRUCT THE OWNER OR OWNER REPRESENTATIVES IN GENERAL MAINTENANCE PROCEDURES.
- PLANT MAINTENANCE SHALL INCLUDE WATERING, PRUNING, WEEDING, CULTIVATING, MULCHING, TIGHTENING AND REPAIRING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTling PLANTS TO PROPER GRADES OR UPRIGHT POSITIONS AND RESTORATION OF THE PLANTING SAUCER AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.
- DURING THE MAINTENANCE PERIOD AND UP TO THE DATE OF FINAL ACCEPTANCE, THE LANDSCAPE CONTRACTOR SHALL PERFORM ALL SEASONAL SPRAYING AND/OR DUSTING OF TREES AND SHRUBS. UPON COMPLETION OF ALL PLANTING, AN INSPECTION FOR ACCEPTANCE OF WORK WILL BE HELD. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER FOR SCHEDULING THE INSPECTION 10 DAYS PRIOR TO THE ANTICIPATED DATE. AT THE TIME OF THE INSPECTION, IF ALL THE MATERIALS ARE ACCEPTABLE, A WRITTEN NOTICE WILL BE GIVEN BY THE LANDSCAPE ARCHITECT OR OWNER TO THE LANDSCAPE CONTRACTOR STATING THE DATE WHEN THE MAINTENANCE PERIOD ENDS.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE (1) YEAR FROM THE TIME OF FINAL INSPECTION AND PLANT MATERIAL SHALL BE ALIVE AND IN SATISFACTORY GROWTH FOR EACH SPECIFIC KIND OF PLANT AT THE END OF THE GUARANTEE PERIOD.
- AT THE END OF THE GUARANTEE PERIOD, ANY PLANT REQUIRED UNDER THIS CONTRACT WHICH IS DEAD OR NOT IN SATISFACTORY GROWTH, AS DETERMINED BY THE OWNER OR LANDSCAPE ARCHITECT, SHALL BE REMOVED AND REPLACED. REPLACEMENT PLANTS SHALL HAVE AN EXTENDED GUARANTEE, AS NOTED ABOVE, FROM TIME OF REPLACEMENT. ALL REPLACEMENTS SHALL BE PLANTED OF THE SAME KIND AND SIZE AS SPECIFIED ON THE PLANT LIST AND SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- TOPSOIL SHALL BE ASTM D 5288, NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH. TOPSOIL SHALL HAVE A pH RANGE OF 6.5 TO 7.4 PERCENT, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, SODS, STIFF CLAY, STONES LARGER THAN 1 INCH IN DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS. TOP SOIL SHALL CONTAIN A MINIMUM OF THREE PERCENT ORGANIC MATERIAL.



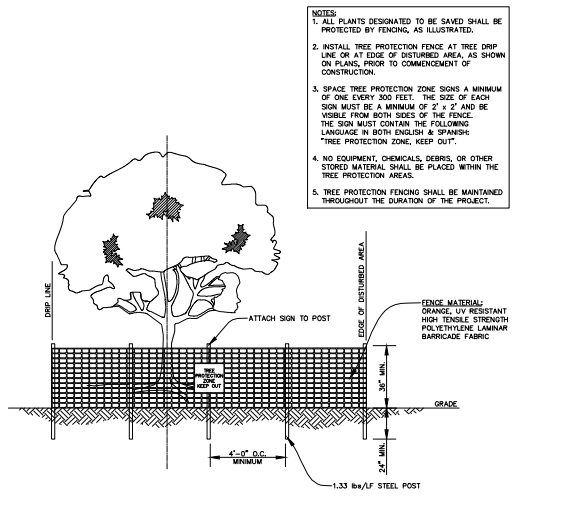
TREE PLANTING ON SLOPE DETAIL
N.T.S.



SHRUB PLANTING ON SLOPE DETAIL
N.T.S.



SHRUB/GROUNDCOVER SPACING DETAIL
N.T.S.



TREE PROTECTION FENCE DETAIL
N.T.S.

ISSUED	REVISIONS	COMMENT
03/13		CITY/CLIP SUBMITTAL
06/13		CITY RESUBMITTAL (TRC)

TIMOTHY W. LARSON, RLA
FL LIC. LA6867115

COMMERCIAL SITE SOLUTIONS, INC.
SITE PLANNING & ENGINEERING
FL COA. 2375
1886 N DALE MARBY HWY
LUTZ, FL 33548
813.882.3032

PREPARED BY: ARLENE STY ANDREWS
4815 EAST 1ST AVENUE
SUITE 200
MURPHY OIL USA, INC.
813.882.5330

PREPARED FOR:
MURPHY OIL USA, INC.
422 NORTH WASHINGTON AVENUE
EL DORADO, AR 71730
PH: 870.875.7629

LANDSCAPE DETAILS
MURPHY OIL USA
GAINESVILLE, FL
NW 23RD STREET AT US HWY 441
GAINESVILLE, FL

Date: 4/29/13
Drawn: SKS
Checked: SKS

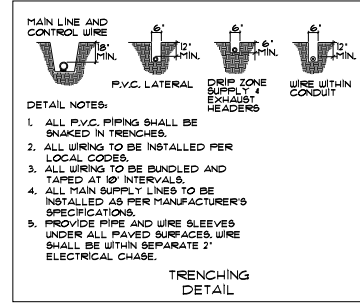
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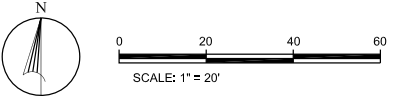
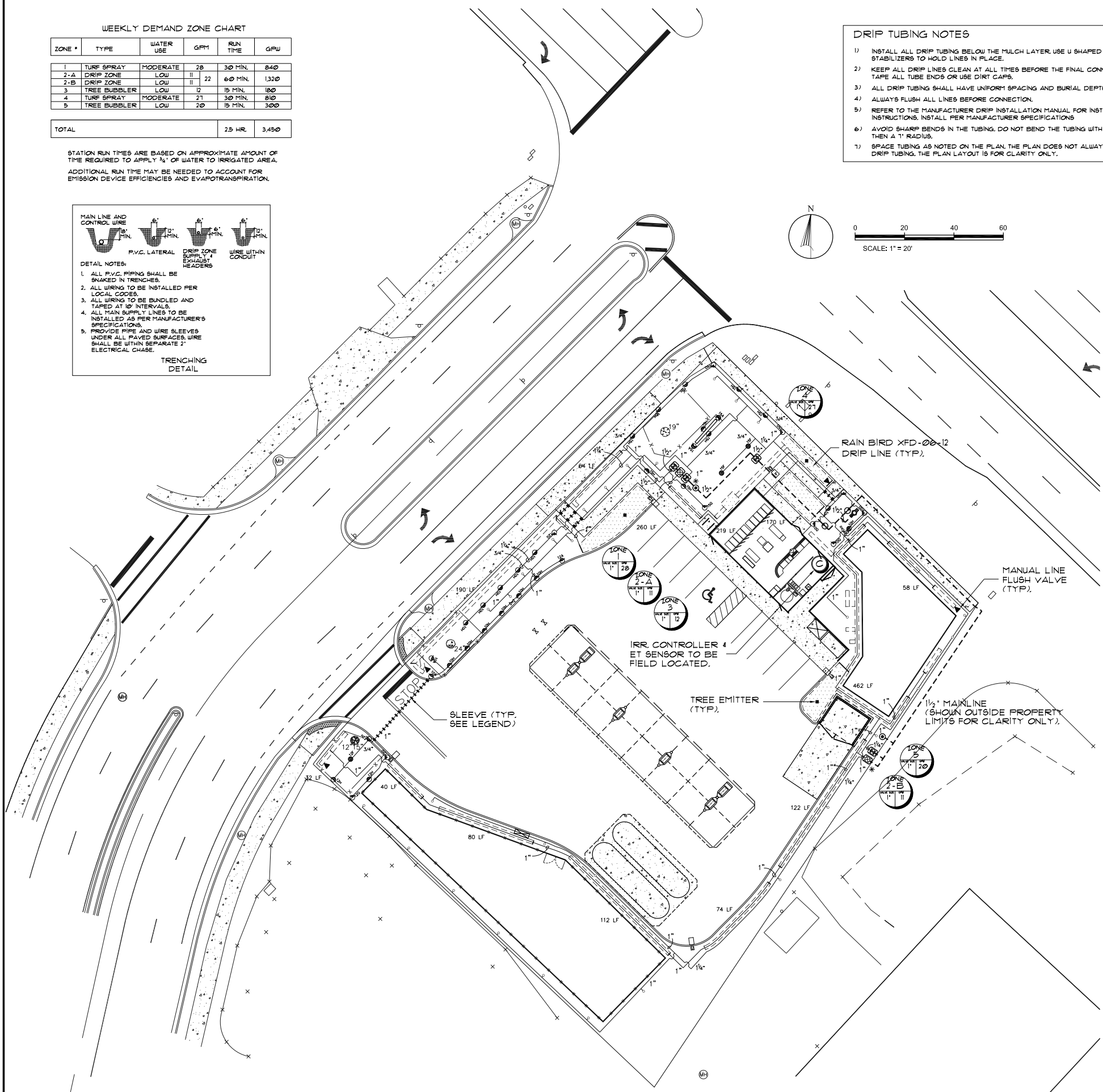
WEEKLY DEMAND ZONE CHART

ZONE #	TYPE	WATER USE	GPM	RUN TIME	GPW
1	TURF SPRAY	MODERATE	28	30 MIN.	840
2-A	DRIP ZONE	LOW	11	22	60 MIN. 1320
2-B	DRIP ZONE	LOW	12	15 MIN.	180
3	TREE BUBBLER	MODERATE	21	30 MIN.	810
4	TURF SPRAY	MODERATE	20	15 MIN.	300
5	TREE BUBBLER	LOW	20	15 MIN.	300
TOTAL				2.5 HR.	3,450

STATION RUN TIMES ARE BASED ON APPROXIMATE AMOUNT OF TIME REQUIRED TO APPLY 1/2" OF WATER TO IRRIGATED AREA. ADDITIONAL RUN TIME MAY BE NEEDED TO ACCOUNT FOR EMISSION DEVICE EFFICIENCIES AND EVAPOTRANSPIRATION.

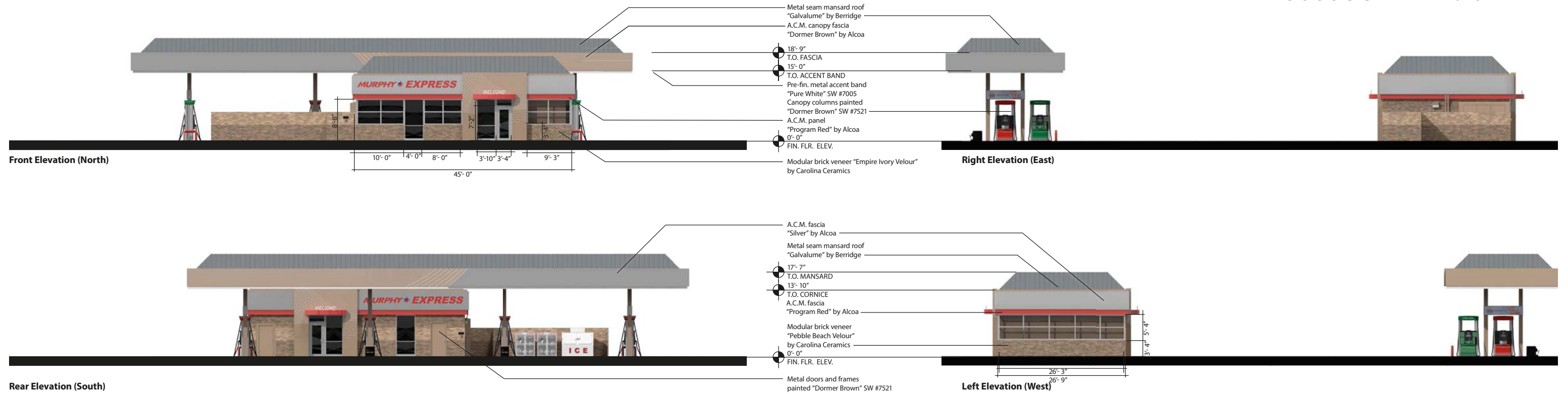


- DRIP TUBING NOTES
- INSTALL ALL DRIP TUBING BELOW THE MULCH LAYER. USE U SHAPED WIRE STABILIZERS TO HOLD LINES IN PLACE.
 - KEEP ALL DRIP LINES CLEAN AT ALL TIMES BEFORE THE FINAL CONNECTION. TAPE ALL TUBE ENDS OR USE DIRT CAPS.
 - ALL DRIP TUBING SHALL HAVE UNIFORM SPACING AND BURIAL DEPTH.
 - ALWAYS FLUSH ALL LINES BEFORE CONNECTION.
 - REFER TO THE MANUFACTURER DRIP INSTALLATION MANUAL FOR INSTALLATION INSTRUCTIONS. INSTALL PER MANUFACTURER SPECIFICATIONS.
 - AVOID SHARP BENDS IN THE TUBING. DO NOT BEND THE TUBING WITH LESS THAN A 1' RADIUS.
 - SPACE TUBING AS NOTED ON THE PLAN. THE PLAN DOES NOT ALWAYS SHOW ALL DRIP TUBING. THE PLAN LAYOUT IS FOR CLARITY ONLY.



SPRAY HEAD LEGEND AND NOZZLE CHART

Symbol	MFR	DESCRIPTION	Nozzle Type	Radius ft.	F51	Flow GPM	PRECIP. IN/HR.
●	RAIN BIRD	36" Arc 1806 5/8" FRS (6" POP-UP SPRAY) installed with SPX-FLEX Tubing with a SPE-050 Baro Elbow & MFR Nozzle	1/2"	5'	30	3.70	1.63
			3/4"	10'	30	7.40	3.26
			1"	15'	30	11.10	4.89
○	RAIN BIRD	180" Arc 1806 5/8" FRS (6" POP-UP SPRAY) installed with SPX-FLEX Tubing with a SPE-050 Baro Elbow & MFR Nozzle	1/2"	5'	30	3.70	1.63
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			3/4"	10'	30	7.40	3.26
			1"	15'	30	11.10	4.89
○	RAIN BIRD	180" Arc 1806 5/8" FRS (6" POP-UP SPRAY) installed with SPX-FLEX Tubing with a SPE-050 Baro Elbow & MFR Nozzle	1/2"	5'	30	3.70	1.63
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Sign	Qty.	Height	Width	Area	Total S.F.
Murphy USA logo sign (building)	2	Graphic Area		22.27	44.54
Island Spanner	4	25.19"	97.19"	17.00	68.00
Welcome	1	14.25"	89.13"	8.82	8.82
Monument Sign	1	58.25"	148.00"	59.87	59.87
Total Signage				181.23	

	Total Area	Glass Area (Total)	Percentage Glass Area (Total)	Glass Area (Pedestrian)	Percentage (Pedestrian)
North Side	622.50	242.11	39%	192.11	31%
West Side	370.04	140.00	39%	140.00	39%

