

COLUMBIA COUNTY
BOARD OF ADJUSTMENT MEETING
SCHOOL BOARD ADMINISTRATIVE COMPLEX
372 WEST DUVAL STREET, LAKE CITY, FLORIDA
JUNE 23, 2011
7:00 P.M.
AGENDA

NO ITEMS FOR CONSIDERATION

COLUMBIA COUNTY
PLANNING AND ZONING BOARD MEETING
SCHOOL BOARD ADMINISTRATIVE COMPLEX
372 WEST DUVAL STREET, LAKE CITY, FLORIDA
JUNE 23, 2011
7:00 P.M.
AGENDA

Pledge to U.S. Flag

Invocation

Public Hearing;

LDR 11-03 - Board of County Commissioners, to amend the text of the Land Development Regulations by amending Section 4.14.5 entitled "CI Commercial Intensive zoning district, adding convention/conference centers and indoor concerts including dance halls in completely enclosed building to the list of special exceptions and amending Section 4.15.5 entitled "CI Commercial Highway Interchange zoning district, adding convention/conference centers and indoor concerts including dance halls in completely enclosed buildings to the list of special exceptions

Staff Matters;

SDP 11-02 - Site and Development Approval for Crew Engineering Services, LLC representing Global Innovation, LLC. New construction for office, showroom and warehousing facilities in an INDUSTRIAL, LIGHT AND WARHOUSING (ILW) zoning district. Located in Cannon Creek Center Industrial Subdivision at State Road 47 and I-75.

Approval of Minutes;

May 26, 2011 minutes

APPLICATION FOR SITE AND DEVELOPMENT PLAN APPROVAL
BY THE COLUMBIA COUNTY PLANNING AND ZONING BOARD

SECTION TO BE COMPLETED BY APPLICANT

INFORMATION CONCERNING TITLE HOLDER(S) AND AGENT

Name of Title Holder(s): Ahram Huber, Global Innovation, LLC
Address: 496 SW Ring Ct, Lake City State: FL Zip: 32025
Telephone: 386.752.4502

Do any other persons have any ownership or interest in subject property? Yes ___ No X

If yes, list such persons: _____

Title Holder's Representative (Agent), if applicable: Crews Engineering Services, LLC
Address: PO Box 970 Lake City State: FL Zip: 32056
Telephone: 386-623.4303

A Site and Development Plan Approval is requested in conformity with the County's Zoning Regulations to permit (check as appropriate):

() Alteration of site square footage of gross floor area of alteration: _____

(X) New construction on a site-square footage of gross floor area of new construction:
10,000 Sq. Ft.

() Relocation of a structure-square footage of gross floor area of structure: _____
on the property described below, and in conformity with the site plan dated: _____.

Type of Use: Office, Warehousing
(retail commercial, repair garage, office, warehousing, assembling, etc.)

Legal description (add additional pages as necessary):
See warranty deed.

Size of property in acres or fractions thereof: 2.75

Present Use: Vacant, Commercial
(commercial, industrial, residential, agricultural, etc.)

Future Land Use Plan Map Category: Commercial INDUSTRIAL

Zoning District: CHE INDUSTRIAL, LIGHT + WAREHOUSING

Application for Site and Development Plan
Approval by Planning and Zoning Board

ACTIONS BY APPLICATION ON PROPERTY

A previous site and development plan application:

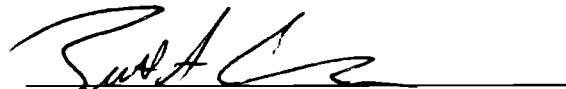
X was made with respect to these premises, Application No. SOP 10-03
_____ was not made with respect to these premises.

I (we) hereby certify that all of the above statements and the statements contained in any papers or plans submitted herewith are true and correct to the best of my (our) knowledge and belief.

If titleholder(s) are represented by an agent, a letter of such designation from the titleholder(s) addressed to the county's Building and Zoning Coordinator must be attached.

Brett A. Crews

Applicant Name (Type or Print)


Applicant Signature

6-3-2011
Date

APPLICANT ACKNOWLEDGES THAT EITHER APPLICANT OR
RESPRESENTATIVE MUST BE PRESENT AT THE PUBLIC HEARINGS BEFORE
THE BOARD, OTHERWISE THE REQUEST WILL NOT BE CONSIDERED
(UNLESS APPLICANT'S APPEARANCE IS PREVIOUSLY WAIVED BY STAFF).

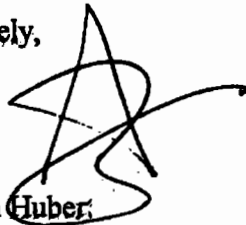
FOR OFFICE USE ONLY

Date Filed: 3 JUNE 2011
Site and Development Plan Application No. SOP 11-02
Fee Amount: 500.00 Receipt No.: 4232
Planning and Zoning Board Decision: _____
(Granted, Denied, Etc.)
Date of Action of Planning and Zoning Board: 23 JUNE 2011

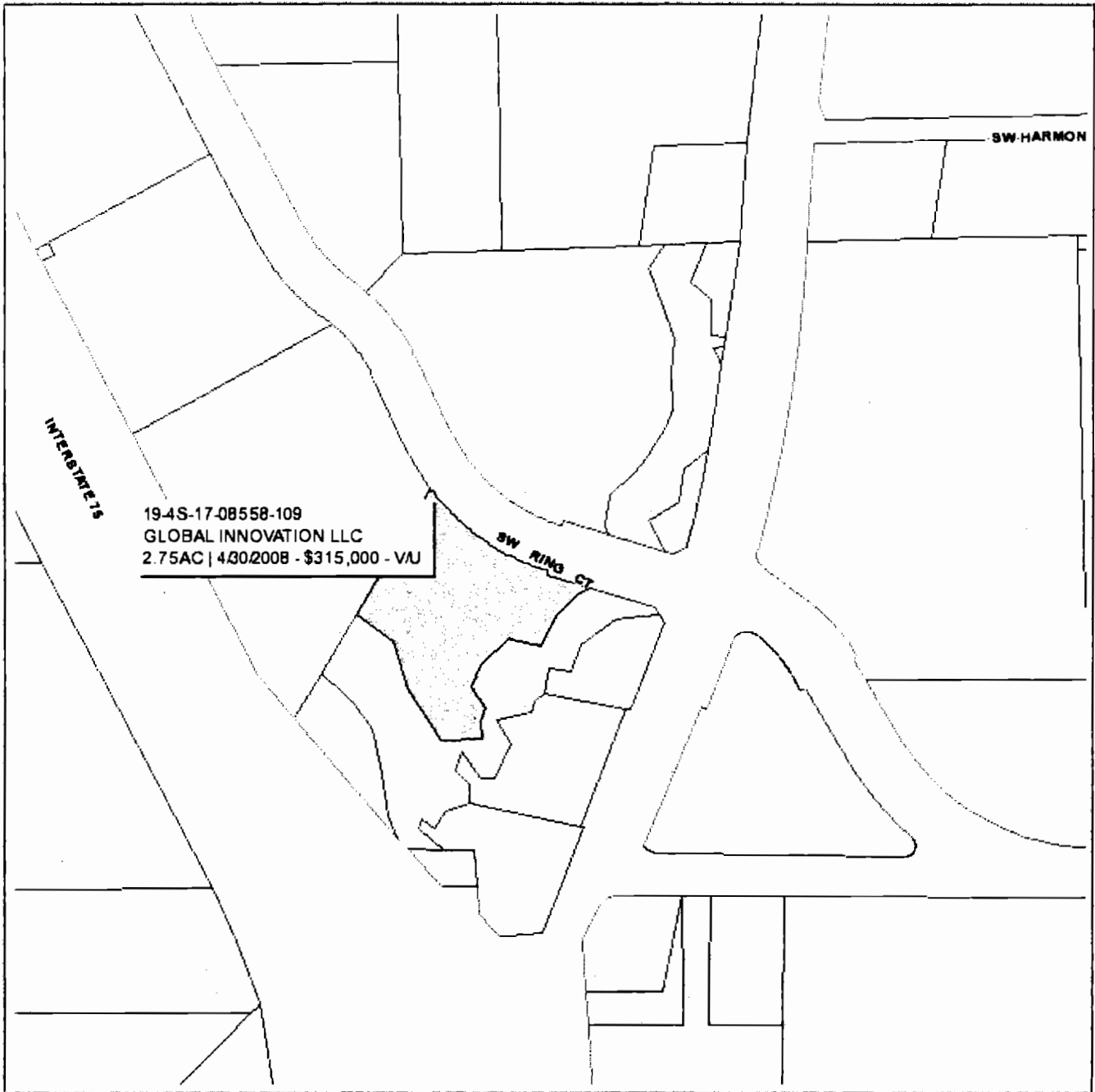
To Whom It May Concern:

I, Abram Hubert, a managing member of Global Innovation, LLC, owner of Parcel #19-4S-17-08558-109 in Columbia County, Florida, does hereby give authorization to Brett A. Crews, PE of Crews Engineering Services, LLC to act as agent on my behalf in matters concerning permitting the construction and development of said property.

Sincerely,

A handwritten signature in black ink, appearing to be 'Abram Hubert', written over a circular stamp or mark.

**Abram Hubert,
Managing Member,
Global Innovation, LLC**



Columbia County Property Appraiser

J. Doyle Crews - Lake City, Florida 32055 | 386-759-1083

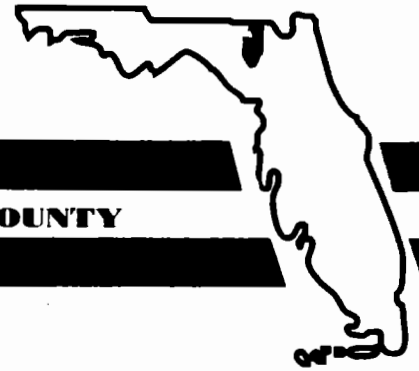
PARCEL: 19-4S-17-08558-109 - VACANT COM (001000)
 LOT 9 CANNON CREEK CENTER S/D EX BEG NE COR LOT 9, RUN SW 286.58 FT. SE 82.58 FT, SE 41.79 FT, NW 314.73 FT TO POB. ORB 886-2254, 924-686, WD 990-490,

NOTES:

Name: GLOBAL INNOVATION LLC	2008 Certified Values	
Site: CANNON CREEK CENTER	Land	\$206,250.00
Mail: P O BOX 932	Imp	\$0.00
LAKE CITY, FL 32056	Assd	\$206,250.00
Sales: 4/30/2008 \$315,000.00 V / U	Exmpt	\$0.00
Info: 7/25/2003 \$135,000.00 V / Q	Taxbl	Cnty: \$206,250
		Other: \$206,250 Schl: \$206,250



District No. 1 - Ronald Williams
District No. 2 - Rusty DePratter
District No. 3 - Jody DuPree
District No. 4 - Stephen E. Bailey
District No. 5 - Scarlet P. Frisina



BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

23 June 2011

TO: Planning and Zoning Board
FROM: Land Development Regulation Administrator
SUBJECT: SDP 11-02 (Crews Engineering Services, LLC/Global Innovation, LLC)
Concurrency Assessment Concerning a Site and Development Plan

The following assessment is provided for the purpose of a binding concurrency determination regarding the demand and residual capacities for public facilities required to be addressed within the Concurrency Management System. This assessment serves as a binding concurrency determination, but does not ensure that facilities, which are not owned, operated or permitted by the County will be available to the property at the time development occurs.

SDP 11-02, an application by Crews Engineering Services, LLC, as agent for Global Innovation, LLC, for site and development plan approval for showroom, general office and warehouse uses located in an INDUSTRIAL, LIGHT and WAREHOUSING (ILW), in accordance with a site plan dated June 2, 2011 and submitted with an application dated June 6, 2011, for property described, as follows:

A parcel of land lying within Section 19, Township 4 South, Range 17 East, Columbia County, Florida. Being more particularly described, as follows: Lot 9 Cannon Creek Center Industrial Subdivision as recorded in the Clerk of Courts Office, Columbia County, Florida.

Containing 2.75 acres, more or less.

BOARD MEETS FIRST THURSDAY AT 7:00 P.M.
AND THIRD THURSDAY AT 7:00 P.M.

Availability of and Demand on Public Facilities

Potable Water Impact -

The site is not located within a community potable water system service area. Consequently, the use to be located on the site will be served by individual well. The individual water well is anticipated to meet or exceed the adopted level of service standard for potable water established within the Comprehensive Plan.

The proposed development will result in the location of 1,000 square feet gross floor area of showroom (retail) use, 2,000 square feet gross floor area of office use and 7,000 square feet gross floor area of warehouse/storage use to be located on the site.

An average commercial retail use is estimated to have 1.82 employees per 1,000 square feet gross floor area:

1.0 (1,000 square feet gross floor area) x 1.82 (employees per 1,000 square feet gross floor area) = 2 employees x 45 gallons of potable water usage per employee per day = 90 gallons of potable water usage per day.

An average general office use is estimated to have 3.39 employees per 1,000 square feet gross floor area.

2.0 (2,000 square feet gross floor area) x 3.39 (employees per 1,000 square feet gross floor area) = 7 employees x 30 (gallons of potable water generated per 1,000 square feet gross floor area) = 210 gallons of potable water generated per day.

An average warehouse/storage use is estimated to generate 15 gallons of potable water per 1,000 square feet gross floor area.

7.0 (7,000 square feet gross floor area) x 15 (gallons of potable water generated per 1,000 square feet gross floor area) = 105 gallons of potable water generated per day.

Therefore, the estimated number of gallons of potable water generated per day = 405 gallons per day (90 + 210 + 105 = 405).

Sanitary Sewer Impact -

The site is not located within a community centralized sanitary sewer system service area. Consequently, the uses to be located on the site will be served by individual septic tanks. The individual septic tanks are anticipated to meet or exceed the adopted level of service standard for sanitary sewer established within the Comprehensive Plan.

The proposed development will result in the location of 1,000 square feet gross floor area of showroom (retail) use, 2,000 square feet gross floor area of office use and 7,000 square feet gross floor area of warehouse/storage use to be located on the site.

An average commercial retail is estimated to have 1.82 employees per 1,000 square feet gross floor area:

$1.0 (1,000 \text{ square feet gross floor area}) \times 1.82 (\text{employees per } 1,000 \text{ square feet gross floor area}) = 2 \text{ employees} \times 34.5 (\text{gallons of sanitary sewer effluent per employee per day}) = 69 \text{ gallons of sanitary sewer effluent per day.}$

An average general office use is estimated to have 3.39 employees per 1,000 square feet gross floor area.

$2.0 (2,000 \text{ square feet gross floor area}) \times 3.39 (\text{employees per } 1,000 \text{ square feet gross floor area}) = 7 \text{ employees} \times 23 (\text{gallons of sanitary sewer effluent generated per day}) = 161 \text{ gallons of sanitary sewer effluent generated per day.}$

An average warehouse/storage use is estimated to generate 12 gallons of sanitary sewer effluent generated per 1,000 square feet gross floor area per day.

$7.0 (7,000 \text{ square feet gross floor area}) \times 12 (\text{gallons of sanitary sewer effluent generated per day}) = 84 \text{ gallons of sanitary sewer effluent generated per day.}$

Therefore, the estimated number of gallons of sanitary sewer effluent generated per day = 314 gallons (69 + 161 + 84 = 314).

Solid Waste Impact -

Solid waste disposal is provided for uses to be located on the site at the County landfill. The level of service standard established within the Comprehensive Plan for the provision of solid waste disposal is currently being met or exceeded.

The proposed development will result in the location of 1,000 square feet gross floor area of showroom (retail) use, 2,000 square feet gross floor area of office use and 7,000 square feet gross floor area of warehouse/storage use to be located on the site.

Based upon a solid waste generation of 5.5 pounds per 1,000 square feet gross floor area per day:

10.0 (10,000 square feet gross floor area) \times 5.5 (pounds of solid waste per 1,000 square feet gross floor area) = 55 pounds of solid waste per day.

Total County average solid waste disposal per day (including municipalities) = 471,300 pounds per day.

Based upon the annual projections of solid waste disposal at the sanitary landfill for 2011, solid waste facilities are anticipated to continue to meet or exceed the adopted level of service standard for solid waste facilities, as provided in the Comprehensive Plan, after adding the solid waste demand generated by the commercial retail, office and warehouse/storage use of the site.

Drainage Impact -

Drainage facilities are already maintained on site for the management of stormwater. As stormwater is to be retained on site, the proposed development is not anticipated to adversely impact drainage systems. Therefore, the adopted level of service standard for drainage established within the Comprehensive Plan is anticipated to continue to be met or exceeded.

Recreation Impact -

The level of service standards established within the Comprehensive Plan for the provision of recreation facilities are currently being met or exceeded.

As there will be no increase in population as a result of the commercial retail, office and warehouse/storage use of the site, there will be no need for additional recreation facilities as a result of the proposed amendment. Therefore, the proposed development is not anticipated to adversely impact recreation facilities.

Resource-based and user-based facilities are anticipated to continue to meet or exceed the level of service established within the Comprehensive Plan after the proposed development of the site.

Traffic Impact -

The roadway serving the site is currently meeting or exceeding the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan.

The proposed development will result in the location of 1,000 square feet gross floor area of showroom (retail) use, 2,000 square feet gross floor area of office use and 7,000 square feet gross floor area of warehouse/storage use to be located on the site.

Summary of Trip Generation Calculations for an average Commercial (Specialty) Retail Use

Based upon 5.02 p.m. peak hour trips per 1,000 square feet gross floor area per day:

10.0 (10,000 square feet gross floor area) x 5.02 (trips per 1,000 square feet gross floor area per day) = 51 p.m. peak hour trips per day.

Existing p.m. peak hour trips for Section 35 = 10,600 annual average daily traffic trips per day (2009 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation) x .096 (k factor) = 1,018 peak hour p.m. trips per day.

The following table contains information concerning the assessment of the traffic level of service on the surrounding road network by the proposed development.

Level of Service Section	Existing P.M. Peak Hour Trips	Existing Level of Service	Reserved Capacity P.M. Peak Hour Trips Previously Approved	Development P.M. Peak Hour Trips	P.M. Peak Hour Trips With Development	Level of Service With Development
Section 35 S.R.47 (from Lake City city limits to I-75)	1,018 ^a	B	10	51	1,079	B

a 2009 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation.

Sources: Trip Generation. 8th Edition, Institute of Transportation Engineers, 2008.

Quality/Level of Service Handbook. Florida Department of Transportation, February 2002.

Based upon the above analysis and the adopted level of service standard of “D” with a capacity of 3,290 p.m. peak hour trips for Section 35, the roadway serving the site is anticipated to continue to meet or exceed the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan after adding the projected number of trips associated with the proposed development.

Surrounding Land Uses

The site is currently vacant. The site is bounded on the north by vacant land and industrial land uses, on the east by Cannon Creek, on the south by Cannon Creek and on the west by Cannon Creek.

Historic Resources

According to Illustration A-II of the Comprehensive Plan, entitled Historic Resources, which is based upon the Florida Division of Historical Resources, Master Site File, dated 1989 and 1996, there are no known historic resources located on the site.

Flood Prone Areas

According to the Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency, dated February 4, 2009, the eastern portion of the lot is located in a Zone AE comprising approximately 50 percent of the site. The remainder of the site is located in a zone X. Zone AE are areas determined to be within the 1% annual chance of flooding with a base flood elevation. The flood elevation for this site is 75 feet 1988 North American Vertical Datum (NAVD). Zone X are areas that have been determined to have a 0.2 percent of annual flooding. In addition, the very southeastern tip of the site is located within the floodway of Cannon Creek.

Wetlands

According to Illustration A-VI of the Comprehensive Plan, entitled Wetland Areas, which is based upon the National Wetlands Reconnaissance Survey, dated 1981, and the National Wetlands Inventory, dated 1987, the site does not contains any wetlands.

Minerals

According to Illustration A-VII of the Comprehensive Plan, entitled Minerals, which is based upon Natural Resources, prepared by the North Central Florida Regional Planning Council, 1977, the site is within an area known to contain phosphate deposits.

Soil Types

According to Illustration A-VIII of the Comprehensive Plan, entitled General Soil Map, which is based upon the U.S. Department of Agriculture, Soil Conservation Service, Soil Survey dated October 1984 and revised in 2004, the northern portion of the site contains Blanton fine sand soils (0 to 5 percent slope) comprising approximately 20 percent of the site. The remainder of the site contains Bonneau fine sand soils (2 to 5 percent slopes) comprising approximately 80 percent of the site.

Blanton fine sand soils (0 to 5 percent slopes) are moderately well drained, nearly level to gently sloping soils on broad ridges and undulating side slopes. The surface and subsurface layers are comprised of fine sand to a depth of 52 inches. The subsoil layer is comprised of fine sandy loam to a depth of 80 inches.

Bonneau fine sand soils (2 to 5 percent slopes) are moderately well drained, gently sloping soils on uplands and on knolls in the uplands. The surface and subsurface layers are comprised of fine sand to a depth of 27 inches. The subsoil layer is comprised of fine sandy loam and sandy clay loam to a depth of 80 inches.

Blanton fine sand soils (0 to 5 percent slopes) and Bonneau fine sand soils (2 to 5 percent slopes) have slight limitations for building site development and moderate limitations for septic tank absorption fields.

Stream to Sink

According to the Stream to Sink Watersheds, prepared by the Suwannee River Water Management District, dated October 7, 1997, the site is located within a stream to sink area. The proposed development does appear to be in compliance with Section 4.2.37 of the County's Land Development Regulations.

High Aquifer Groundwater Recharge

According to the Areas of High Recharge Potential to the Floridan Aquifer, prepared by the Suwannee River Water Management District, dated July 17, 2001, the site is not located within an area of high aquifer groundwater recharge.

Vegetative Communities/Wildlife

According to Illustration V-I of the Data and Analysis Report, entitled Vegetative Communities, the site is located in a non-vegetative community. There are no known wildlife habitats associated with a non-vegetative community.

COLUMBIA COUNTY
PLANNING AND ZONING BOARD MEETING
SCHOOL BOARD ADMINISTRATIVE COMPLEX
372 WEST DUVAL STREET, LAKE CITY, FLORIDA
MAY 26, 2011
UNADOPTED MINUTES

The meeting opened at 7:30 P.M.

Board Members in Attendance:

Robert Jordan, Vice-Chairman
Jock Phelps
Teena Ruffo
Matt Vann

Others in Attendance:

Brian Kepner, Secretary to the Board
Marlin Feagle, County Attorney

PUBLIC HEARING:

LDR 11-01

Brian

Kepner: This application is proposing to amend Sections 5.7 and 5.20 of the subdivision regulations of the LDR's. The 1st section basically clarifies that any road, street, utilities, public parking or other public area, or drainage facility accepted for maintenance by the County shall meet the County's requirements in order for them to be accepted by the County for maintenance. Section 5.20 spells out the steps and procedures for those roads, street and drainage areas to be accepted by the County for maintenance. It changes the requirement from 1 year to 50 percent build out of the subdivision before acceptance can be made. It changes the maintenance bond from 10 percent to 15 percent and allows for other forms of security such as letters of credit. It then spells out the steps required for the County to take over maintenance of the subdivision. As you can see the steps are there in your packet. This application was submitted through the public works department. I have also included a copy of the memo from the Board of County Commissioners approving submission of the application for the proposed changes to the LDR's.

Jordan: Open the public hearing. Anyone wish to speak on behalf of this matter? No one at all let the record reflect. Close the public hearing.

Jordan: I think some of this is unnecessary, the County already has to inspect the road before it is accepted do they not Marlin. In the case of my subdivision they had to be inspected before being approved.

Feagle: Yes, they do.

Jordan: I think this idea and I am speaking now as a developer and not as a board member. When the County approves the subdivision they are placed on the tax rolls and part of that tax money goes for maintaining those roads. While there are several subdivisions

in the county now that will take years to build out, I know that this would only apply to new subdivisions going in but, I believe that this will turn them off. Once the County starts accepting tax money they should be the ones taking responsibility of the roads. My subdivision for example does not have any houses in it and the roads are just as good today.

Ruffo: Right, same thing as in the Hills of Huntsville. There are 2 houses in there and the roads in there are in perfect shape because no one is driving on those roads.

Jordan: The other practical issue that I see is who is going to be responsible for the roads? Most of the subdivision in the county are set up by corporations and they have very limited assets and do not have the financial abilities to take on a 5, 10 or 15 year obligation to maintain these roads. I think there should be a clear line, either the County accepts them or they don't.

Phelps: As a former developer I agree. When you take raw land and develop it into a subdivision the tax base increase is not 2 fold, not 3 fold, not 4 fold, it is like 10 fold, so the money is there for the county. There is money there for those roads whether it is built out or not. This hurts the local developer not just someone from outside. THE more beauracary we place upon ourselves the more we are hurting the local developer and builders that live here the harder and harder it is going to be to create jobs for this community.

Ruffo: When someone comes in and gets approval for a development the county should just say no, no we are not going to be able to maintain those roads, right? If the county gets that tax money then they should be able to take over maintenance.

Vann: Certainly you can see how there is a need to draw the line for the developer to maintain the roads.

Jordan: But, there really isn't because those roads require very little maintenance and the county is already getting extra money for their maintenance.

Feagle: There are 2 issues that are driving this. One that may not have much bearing is that other counties are doing this. I believe that Clay County now required a high percentage of build out. The other issue which may be legitimate is that until there is a percentage of build out in the subdivision, the concern is the heavy trucks coming in and tearing up the roads. Some of the County folks felt that since the developer benefits from the sale of the lot that they should have a greater stake in the maintenance of the road until a certain build out has been met. It has been discussed that if the heavy truck was responsible for the damage to the road, that they should pay for the repair. However it was decided that this would be a difficult way of trying to manage that and that this was a better way of managing that type of situation.

Kepner: There was discussion in the past that one way to manage that would be not to issue the CO for the house until any damage done to the road in front of the house was fixed. There were other issues and was not pursued.

Jordan: How would you prove that they were responsible? If you're saying that a concrete truck damages the road and should pay, why shouldn't they be responsible for any county road in which they damage the road?

Kepner: That is one of the reasons for not pursuing is the fact of proving who was indeed responsible for the damage to the road.

Jordan: It just seems that the county is trying to have it both ways. Getting the taxes and still requiring the developer to maintain the roads.

Phelps: Exactly, and this is going to slow down any type of development within the county.

Jordan: Is there a motion? I can make one being chair.

Phelps: Motion to strongly recommend denial to the Board of County Commissioners.

Ruffo: 2nd Motion.

MOTION APPROVED UNANIMOUSLY

LDR 11-02

Kepner: This application is to amend Section 4.2.3.2 of the LDR's. It would change the maximum required curb break from 24 feet to 40 feet. It also updates the resolution number that is currently in place for specifying culvert standards for the curb breaks. The reasons being that it would make the culverts wide enough for all purposes and have standardization. The Prior width was not wide enough for all purposes and the ends are being damaged, therefore causing additional expense for Public Works Department to repair. It also amends the resolution to the current one which govern the culvert specifications, being Resolution 2000R-9.

Jordan: Is that the resolution that states how the culvert is to be installed?

Kepner: Correct.

Jordan: I'm a little confused. On the residential curb break, they want the minimum to stay at 12 feet and the maximum to go to 40 feet?

Kepner: Correct, because you have certain developments with pre-existing lots or lots in a cul-de-sac that only have to meet 60 percent of the lot width requirement and a 40 foot curb break would extend beyond the property lines.

Jordan: Maybe I am missing something if a person builds a culvert anywhere between 12 and 40 feet he should be ok, right.

Kepner: Well the resolution would spells out the actual requirement of 40 feet. That resolution will also have to be amended to reflect the change in the LDR's. The resolution also spells out the exemptions.

Jordan: In terms of the driveway. This won't require the driveway to be wider, just the culvert?

Kepner: No not necessarily.

Jordan: So you are increasing the culvert by 8 feet. At 10 dollars a foot for a culvert, you're increasing the cost by about 80 dollars. I have bought a few culverts recently. That doesn't seem unreasonable. I'm still not sure exactly what this is going to accomplish.

Ruffo: It's going to help prevent someone from driving off the driveway and damaging the ends when they are trying to turn the corner.

Jordan: This would apply to not jut subdivisions but any residential development?

Kepner: Correct.

Jordan: Even a mobile home.

Kepner: Yes.

Jordan: Open the public hearing. Is there anyone her to speak for or against it? Seeing no one, close the public hearing. What is the pleasure of the board? I think we can go ahead any entertain a motion

Vann: Motion to recommend approval of LDR 11-02 to the County Commissioners.

Ruffo: 2nd Motion.

MOTION APPROVED UNANIMOUSLY

Jordan: Approval of the March 24th minutes?

Vann: Motion to approve the minutes of the March 24th meeting.

Phelps: 2nd Motion.

MOTION APPROVED UNANIMOUSLY

Meeting Adjourned

GLOBAL INNOVATION, LLC

SITE PLAN FOR:
ABRAM HUBER
GLOBAL INNOVATION, LLC
496 SW RING CT
LAKE CITY, FL 32025
386.752.4502

CES

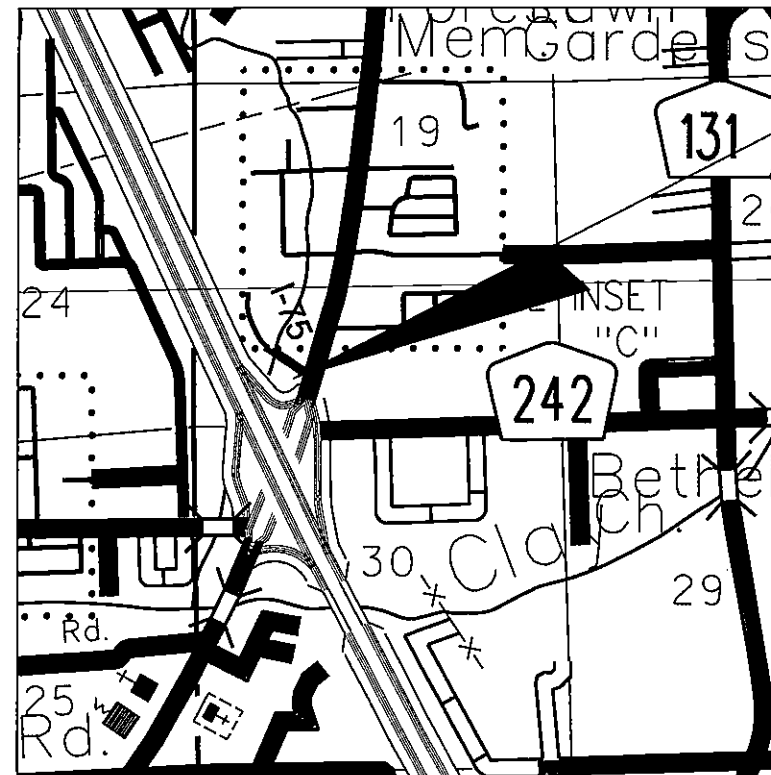
Crews Engineering Services, LLC

P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

www.crewsengineeringservices.com

CERTIFICATE OF AUTHORIZATION: NO. 28022

BRETT A. CREWS, P.E. 65592



PROJECT LOCATION

INDEX OF SHEETS

DET1
DET2
SIT1
SIT2
PAV1
PAV2
SWM1

GENERAL NOTES
MISCELLANEOUS NOTES AND DETAILS
EXISTING CONDITIONS
SITE PLAN
PAVING AND DRAINAGE PLAN
PAVING AND DRAINAGE NOTES AND DETAILS
SURFACE WATER MANAGEMENT FACILITY
APPLICABLE FDOT DESIGN STANDARDS

LOCATION MAP

SECTION 19, TOWNSHIP 4 SOUTH, RANGE 17 EAST
COLUMBIA, FLORIDA

LOT 9, CANNON CREEK CENTER

PARCEL # 19-4S-17-08558-109

REVISIONS

06-02-2011 REVISED SITE PER SRWMD AND CLIENT

6-3-2011

CES PROJECT ID:
2010-008

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO INSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH DIFFERENCES IMMEDIATELY & PRIOR TO PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE AT ALL TIMES IN A SECURE MANNER. ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.
3. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE ENGINEER.
4. THE STORM WATER MANAGEMENT SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SRWMD RULES AND REGULATIONS (CH. 40B-4 F.A.C.).
5. EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
6. THE CONTRACTOR SHALL WASTE ALL EXCESS EARTH ON SITE AS DIRECTED BY THE ENGINEER.
7. ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLUMBIA COUNTY LAND DEVELOPMENT REGULATIONS.
8. SITE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS WITHIN PROJECT LIMITS.
9. ALL PROPOSED CONSTRUCTION SHALL CONFORM TO CURRENT FDOT DESIGN STANDARDS AND FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. ALL STORM SEWER PIPES SHALL HAVE A MINIMUM COVER OF 6". LIMEROCK BACKFILL SHALL BE USED IF PIPE UNDER PAVEMENT HAS LESS THAN 12" COVER.
11. ALL SWALES, DEPRESSION AREAS AND RETENTION PONDS SHALL BE INSPECTED MONTHLY FOR SINKHOLE OCCURRENCE. SHOULD A SINKHOLE OCCUR, THE AREA SHOULD BE REPAIRED AS SOON AS POSSIBLE. IF A SOLUTION PIPE SINKHOLE FORMS WITHIN THE STORM WATER SYSTEM, THE SINKHOLE SHALL BE REPAIRED BY BACKFILLING WITH A LOW PERMEABILITY MATERIAL. A 2-FOOT CAP THAT EXTENDS 2 FEET BEYOND THE PERIMETER OF THE SINKHOLE SHALL BE CONSTRUCTED WITH CLAYEY SOILS. THE CLAYEY SOIL SHOULD HAVE AT LEAST 20% PASSING THE NUMBER 200 SIEVE, COMPACTED TO 95% OF STANDARD PROCTOR, AND COMPACTED IN A WET CONDITION WITH MOISTURE 2%-4% ABOVE OPTIMUM. THE CLAY SOIL CAP SHALL BE RE-GRADED TO PREVENT PONDING AND RE-VEGETATED.
12. ALL NEW TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE CURRENT FDOT DESIGN STANDARDS.
13. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH CURRENT FDOT DESIGN STANDARDS.
14. CONTRACTOR SHALL CONTACT COLUMBIA COUNTY BUILDING AND ZONING DEPARTMENT TO PERFORM THE FOLLOWING SITE INSPECTIONS:
 A) EROSION AND SEDIMENT CONTROL - PRIOR TO BEGINNING CONSTRUCTION
 B) SITE COMPLIANCE - ONCE BUILDING FOUNDATION IS POURED AND IMPROVEMENTS ARE STAKED OUT
 C) FINAL SITE COMPLIANCE - ONCE ALL IMPROVEMENTS ARE FINALIZED
15. CONTRACTOR SHALL CONTACT SRWMD AND ENGINEER OF RECORD 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
16. ANY UNSUITABLE MATERIAL (SPOTIC, CLAY, OTHER IMPERMEABLE SOILS) SHALL BE REMOVED FROM THE SURFACE WATER MANAGEMENT FACILITIES. THIS UNSUITABLE MATERIAL SHALL NOT BE USED AS FILL MATERIAL IN CONSTRUCTION OF THE BERMS. CONTRACTOR SHALL CONTACT ENGINEER OF RECORD TO INSPECT SURFACE WATER MANAGEMENT FACILITY ONCE EXCAVATED TO FINISH GRADE TO DETERMINE IF LINED WITH SUITABLE MATERIAL.

UTILITY NOTES

1. ALL EXISTING UTILITIES SHALL BE LOCATED PRIOR TO BEGINNING WORK. THIS INCLUDES VERIFYING LOCATION (HORIZONTAL AND VERTICAL) AT ANY CONNECTION POINT OF THE EXISTING UTILITY. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES EXISTING BETWEEN THE CONSTRUCTION PLANS AND ACTUAL FIELD CONDITIONS. EXISTING UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY AND SHALL BE VERIFIED IN THE FIELD BY NON-DESTRUCTIVE METHODS.
2. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL REQUIRED UTILITY CONNECTIONS PRIOR TO BIDDING. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO COMPLETE CONNECTION TO THE EXISTING UTILITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, MANHOLE CORING, WET TAPS, PAVEMENT REPAIRS AND DIRECTIONAL BORING.
3. ALL UTILITY CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF LAKE CITY UTILITY STANDARDS.
4. ALL NEW AND RELOCATED WATER MAIN PIPES, FITTINGS, APPURTENANCES AND PACKING AND JOINT MATERIALS SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND/OR MANUFACTURES RECOMMENDATIONS.
5. SUFFICIENT VALVES SHALL BE PROVIDED IN NEW AND RELOCATED WATER MAINS TO MINIMIZE INCONVENIENCE AND SANITARY HAZARDS DURING REPAIRS.
6. AT HIGH POINTS WHERE AIR CAN ACCUMULATE IN NEW AND RELOCATED WATER MAINS, HYDRANTS OR AIR RELEASE VALVES SHALL BE PROVIDED TO REMOVE AIR.
7. AUTOMATIC AIR RELEASE VALVES ON NEW AND RELOCATED WATER MAINS SHALL NOT BE LOCATED WHERE FLOODING OF THE VALVE MANHOLE OR CHAMBER COULD OCCUR.
8. HYDRANT DRAINS, FLUSHING DEVICES, AIR RELEASE VALVES OR CHAMBERS, MANHOLES CONTAINING VALVES, BLOW-OFFS, METERS, OR OTHER APPURTENANCES PROVIDED IN CONJUNCTION WITH NEW AND RELOCATED WATER MAINS SHALL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER.
9. STONES FOUND IN TRENCHES FOR NEW AND RELOCATED WATER AND SANITARY SEWER MAINS SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF PIPE. CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN THESE TRENCHES. THIS BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND PIPE TO A SUFFICIENT HEIGHT ABOVE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
10. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL BE PROVIDED WITH RESTRAINED JOINTS TO PREVENT MOVEMENT. MEGALUG MECHANICAL JOINT RESTRAINTS OR APPROVED ALTERNATIVE (NOT THRUST BLOCKS) SHALL BE USED WITH MANUFACTURES RECOMMENDATIONS. ALL RESTRAINED JOINTS SHALL BE LEFT OPEN UNTIL INSPECTED BY THE CITY.
11. A 24" MINIMUM COVER HEIGHT SHALL BE PROVIDED ABOVE ANY NEW OR RELOCATED WATER OR SANITARY SEWER MAIN CROSSING UNDER ANY SURFACE WATER. PROVIDE THE FOLLOWING FEATURES IF WIDTH OF SURFACE WATER IS GREATER THAN 15' AT THIS CROSSING:
 A) FLEXIBLE WATER TIGHT JOINTS THROUGHOUT THE CROSSING
 B) EASILY ACCESSIBLE VALVES LOCATED IN A MANHOLE
 C) PERMANENT TAPS ON EACH SIDE OF VALVE WITHIN THE MANHOLE TO ALLOW FOR SAMPLING AND INSERTION OF A SMALL METER TO DETERMINE LEAKAGE
12. PROPER BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360 F.A.C. (CROSS-CONNECTION CONTROL FOR PUBLIC WATER SYSTEMS).
13. THIS PROJECT SHALL NOT INCLUDE ANY INTERCONNECTION BETWEEN PREVIOUSLY SEPARATE PUBLIC WATER SYSTEMS HAVING SEPARATE WATER SUPPLY SOURCES.
14. ANY NEW AND RELOCATED WATER LATERALS SHALL CROSS ABOVE SANITARY SEWER PIPE OR PROVIDE PROTECTION TO PREVENT CONTAMINATION AS REQUIRED BY FDEP AND OTHER APPLICABLE STANDARDS.

EROSION CONTROL NOTES

1. CONTRACTORS SHALL ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN, EROSION AND SEDIMENT CONTROL REGULATIONS AS SET BY SRWMD AND OTHER GOVERNING AUTHORITIES AND USE (AS A MINIMUM) THE MEASURES DESCRIBED ON THE EROSION CONTROL NOTES AND DETAILS SHEET.
2. ALL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND WATER MANAGEMENT FACILITIES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL MEASURES AS REQUIRED FOR PROPER EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHOULD USE BMP'S IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL TO IMPLEMENT A PLAN THAT WILL WORK AND MEET ACTUAL FIELD CONDITIONS.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE AND UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
5. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED IMMEDIATELY AND RIP RAP SHALL BE PLACED AS REQUIRED TO CONTROL EROSION.
6. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING PROJECT LIMITS. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO WITHIN ONE FOOT OF TOP OF SILT FENCE.
7. DURING CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE, ALL STRUCTURES SHALL BE CLEANED OF ALL DEBRIS AND EXCESS SEDIMENT.
8. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY TO PREVENT EROSION. SLOPES GREATER THAN 1V:4H SHALL BE STABILIZED WITH SOD. STAPLE SOD SHALL BE USED ON SLOPES GREATER THAN 1V:2H. ALL DISTURBED AREAS NOT SODDED SHALL BE SEEDED WITH A MIXTURE OF LONG-TERM VEGETATION AND QUICK-GROWING SHORT-TERM VEGETATION FOR THE FOLLOWING CONDITIONS: FOR THE MONTHS FROM SEPTEMBER THROUGH MARCH, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF WINTER RYE. FOR THE MONTHS OF APRIL THROUGH AUGUST, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF MILLET.
9. ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN AREAS OF THE JOB WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY STOPPED, BUT IN NO CASE SHALL THE DISTURBED AREA BE LEFT UNPROTECTED FOR MORE THAN THREE (3) DAYS.
10. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPS AND EXCESS DIRT REMOVED DAILY.
11. THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE WATER QUALITY STANDARDS.
12. QUALIFIED PERSONNEL SHALL INSPECT THE STOCKPILE AREAS, SILT FENCE, CONSTRUCTION ENTRANCE, AND ALL DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5 INCHES OR GREATER. CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY.
13. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS DURING PROPOSED CONSTRUCTION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



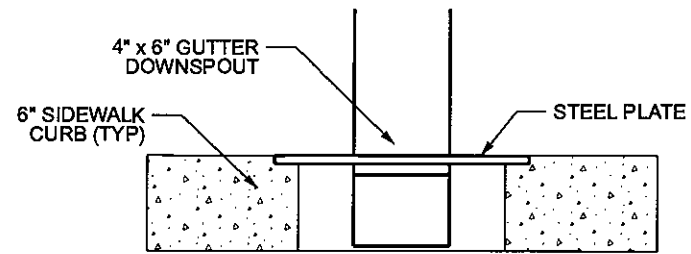
CERTIFICATE OF AUTHORIZATION
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Brett A. Crews
 6-3-2011
 Brett A. Crews, P.E. 65592

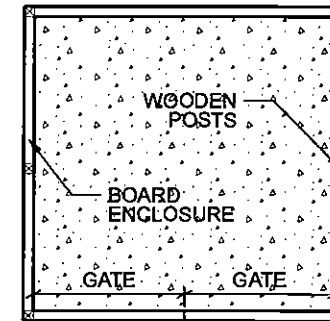
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**GLOBAL INNOVATION, LLC
 COMMERCIAL SITE**
GENERAL NOTES

CES PROJECT NO.:
 2010-008
 SHEET:
 DET1

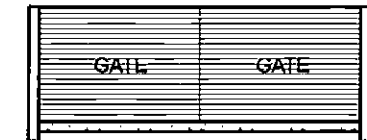


GUTTER DOWNSPOUT AT SIDEWALK DETAIL
NTS



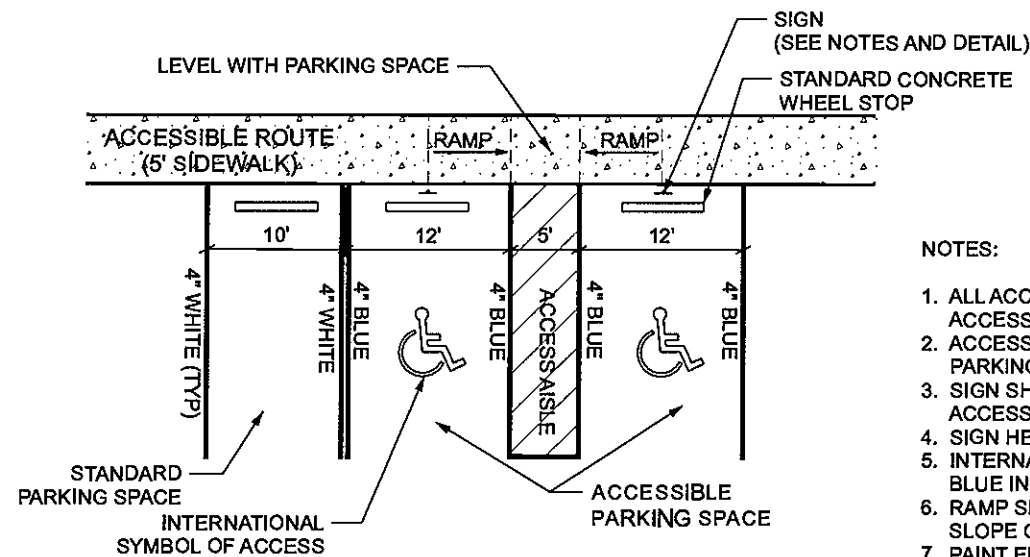
PLAN VIEW

4" THICK, 2500 PSI CONCRETE WITH FIBER MESH
PROVIDE 1/8" - 1/4" CONTRACTION JOINTS ON 10' CENTERS MAXIMUM

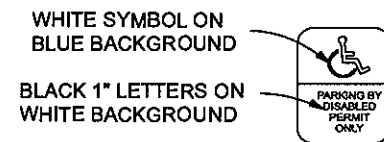


SECTION

DUMPSTER PAD DETAIL
NTS



TYPICAL OFF-STREET PARKING DETAIL
NTS



SIGN DETAIL

NOTES:

1. ALL ACCESSIBLE ROUTES SHALL MEET ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. ACCESS AISLE MAY BE PLACED ON RIGHT OR LEFT SIDE OF PARKING STALL.
3. SIGN SHALL BE PLACED IN FRONT OF ALL DESIGNATED ACCESSIBLE PARKING SPACES.
4. SIGN HEIGHT SHALL BE 7" FROM PAVEMENT TO BOTTOM OF SIGN.
5. INTERNATIONAL SYMBOL OF ACCESS SHALL BE 3 - 5 FT HIGH AND BLUE IN COLOR.
6. RAMP SHALL PROVIDE NON-SLIP FINISH AND HAVE A MAXIMUM SLOPE OF 1:12.
7. PAINT EDGE OF SIDEWALK WITH CONTRASTING PAINT AT RAMP TRANSITION. 3" WIDTH ON TOP AND ON FACE OF TRANSITION.
8. SEE SITE PLAN FOR ADDITIONAL PARKING SPACEL DIMENSIONS.

STRIPING LEGEND	
YELLOW CURBING AND BOLLARDS - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300
STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT WHITE TM5494
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT "H.C." BLUE

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES

Crews Engineering Services, LLC

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**GLOBAL INNOVATION, LLC
COMMERCIAL SITE**

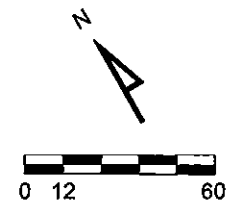
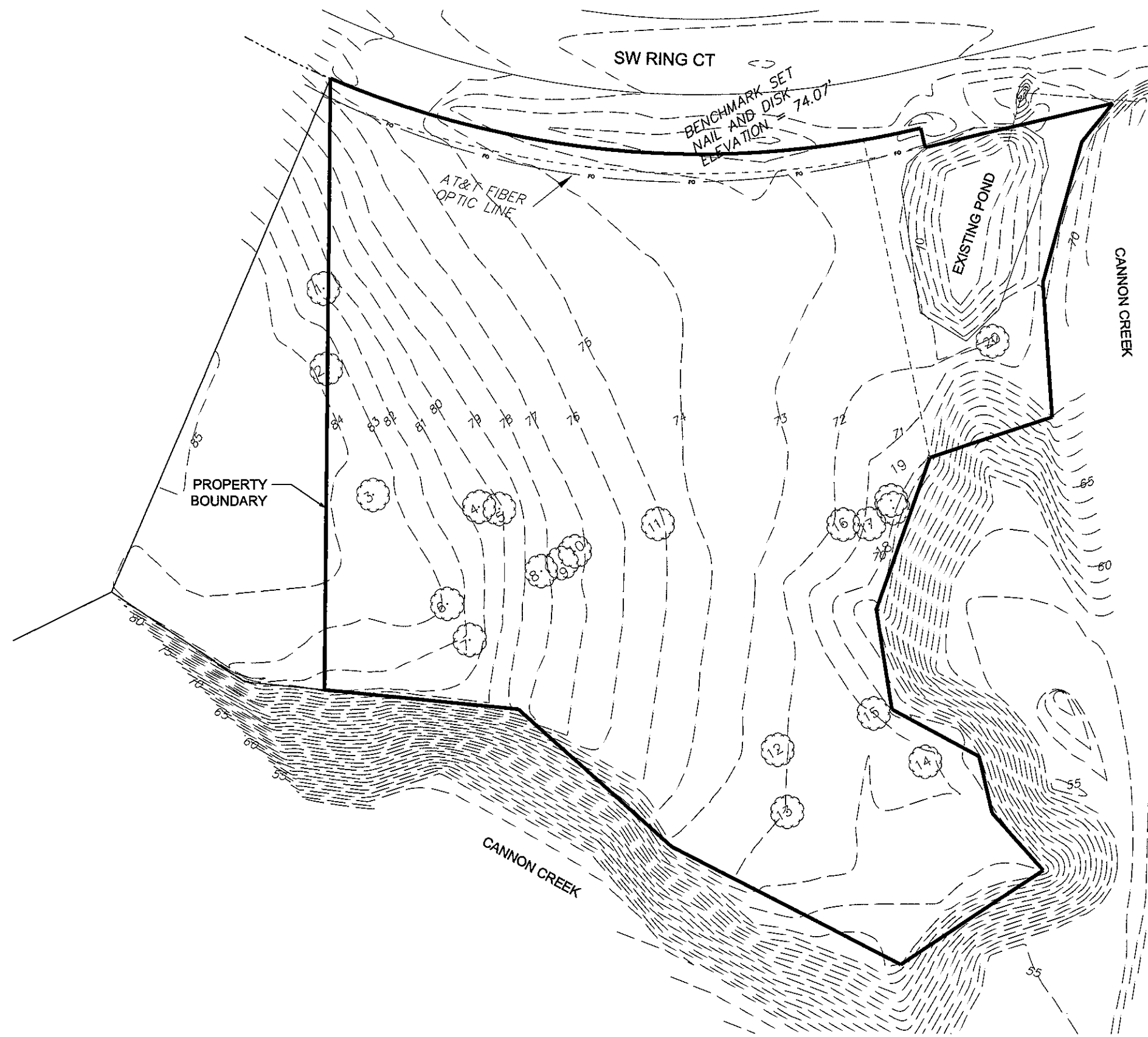
**MISCELLANEOUS NOTES
AND DETAILS**

CES PROJECT NO.:

2010-008

SHEET:

DET2



TREE TABLE

1. 26" OAK TREE
2. 18" PECAN TREE
3. 15" OAK TREE
4. 18" OAK TREE
5. 18" OAK TREE
6. 24" OAK TREE
7. 48" OAK TREE
8. 18" OAK TREE
9. 18" OAK TREE
10. 18" OAK TREE
11. 48" OAK TREE
12. 30" HICKORY TREE
13. 30" HICKORY TREE
14. 26" OAK TREE
15. 18" CEDAR TREE
16. 34" OAK TREE
17. 30" OAK TREE
18. 18" OAK TREE
19. 12" OAK TREE
20. 24" PINE TREE BENCHMARK
ELEVATION = 74.36'

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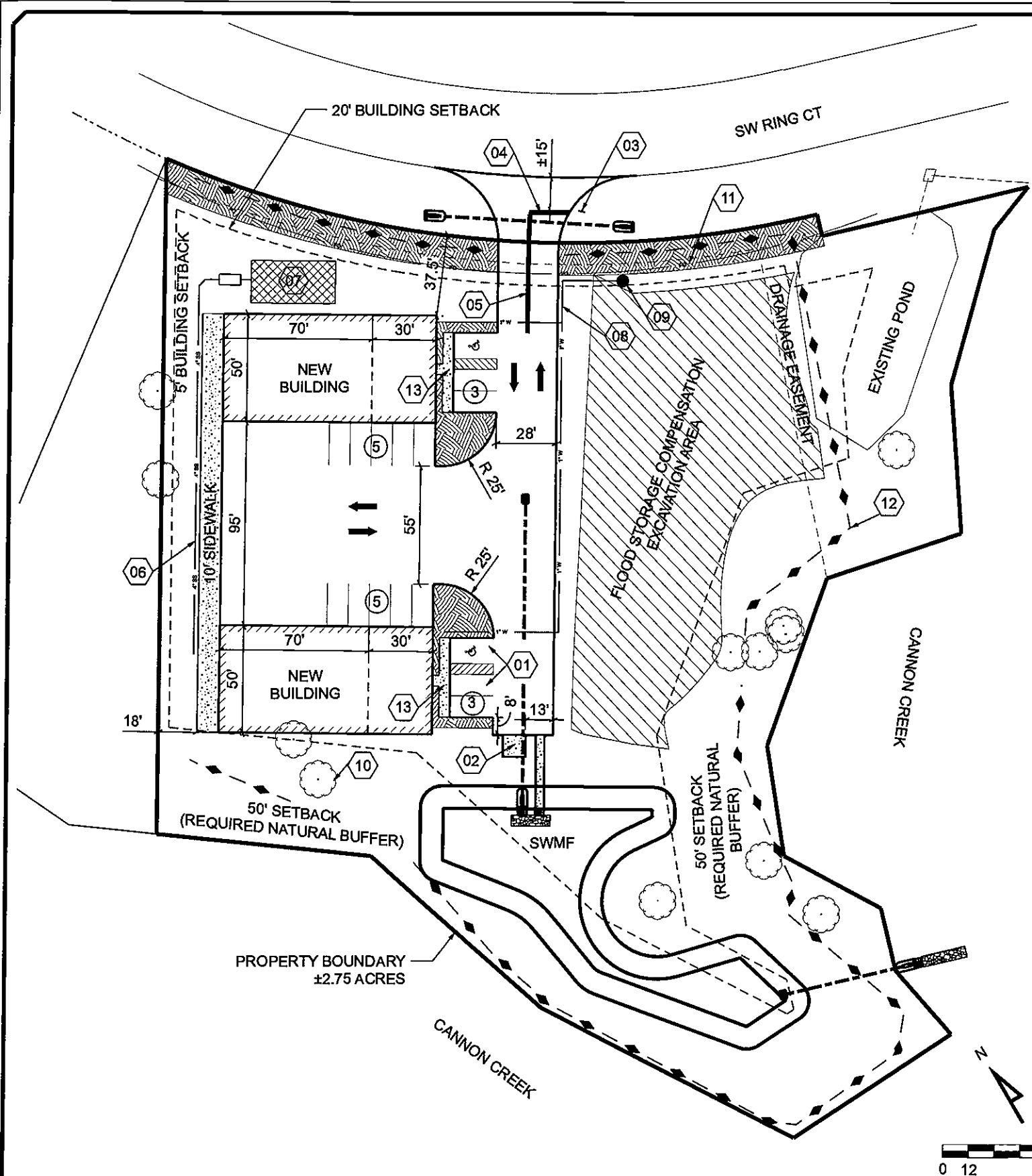
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**GLOBAL INNOVATION, LLC
COMMERCIAL SITE**
EXISTING CONDITIONS

CES PROJECT NO.:
2010-008
SHEET:
SIT1



LANDSCAPING
 REQUIRED LANDSCAPED AREA:
 10% OF NEW PARKING AREA = 13,875 SF * 10% = 1,388 SF

LANDSCAPE AREA PROVIDED = +2,000 SF

REQUIRED TREES
 1 TREE PER 200 SF OF REQUIRED LANDSCAPED AREA
 # OF REQUIRED TREES = 1,388 / 200 = 7 TREES

LAND USE AND ZONING
 FUTURE LAND USE: COMMERCIAL
 ZONING: COMMERCIAL HIGHWAY INTERCHANGE

DEVELOPMENT DATA
 TOTAL SITE AREA = 119,256 SF = 2.74 ACRES

EXISTING CONDITIONS IMPERVIOUS AREAS
 NONE

PROPOSED CONDITIONS IMPERVIOUS AREAS
 BUILDING (NEW) = 10,000 SF
 ASPHALT PAVEMENT (NEW) = 17,900 SF
 CONCRETE PAVEMENT (NEW) = 2,200 SF

TOTAL IMPERVIOUS AREA = 30,100 SF (25.23% SITE AREA)

FAR = 10,000 SF / 119,256 SF = 0.083

MINIMUM BUILDING/YARD SETBACKS PER LDR
 FRONT YARD = 20'
 SIDE YARD = 5'
 REAR YARD = 15'

PARKING CALCULATIONS
 COMMERCIAL SERVICE (SHOWROOM):
 1 SPACE PER 150 SF NON-STORAGE FLOOR AREA
 REQUIRED PARKING = 1000 SF / 150 = 7 SPACES

OFFICE SPACE:
 1 SPACES PER 500 SF OF FLOOR AREA
 REQUIRED PARKING = 2,000 SF / 500 = 4 SPACES

WAREHOUSING AND STORAGE:
 1 SPACE PER 1,500 SF OF FLOOR AREA
 REQUIRED PARKING = 7,000 SF / 1500 = 5 SPACES

ACCESSIBLE PARKING :
 1 PER 25 REQUIRED SPACES = 1 SPACE

STANDARD PARKING PROVIDED = 14 SPACES
 ACCESSIBLE PARKING PROVIDED = 2 SPACE

BOUNDARY AND TOPOGRAPHICAL SURVEY
 THE BOUNDARY AND TOPOGRAPHICAL SURVEY INFORMATION SHOWN IN THESE PLANS IS BASED ON A SURVEY BY BRITT SURVEYING AND ACCOCIATES, INC., LB 7593

ELEVATIONS BASED ON NAVD 88 DATUM

UTILITIES
 WATER SERVICE: TO BE PROVIDED BY PRIVATE WELL, DESIGN AND PERMITTED BY OTHERS

WASTEWATER SERVICE: TO BE PROVIDED BY PRIVATE ON-SITE SEPTIC SYSTEM, DESIGNED AND PERMITTED BY OTHERS

ELECTRIC SERVICE: PROVIDED BY CONNECTION TO CLAY ELECTRIC FACILITIES

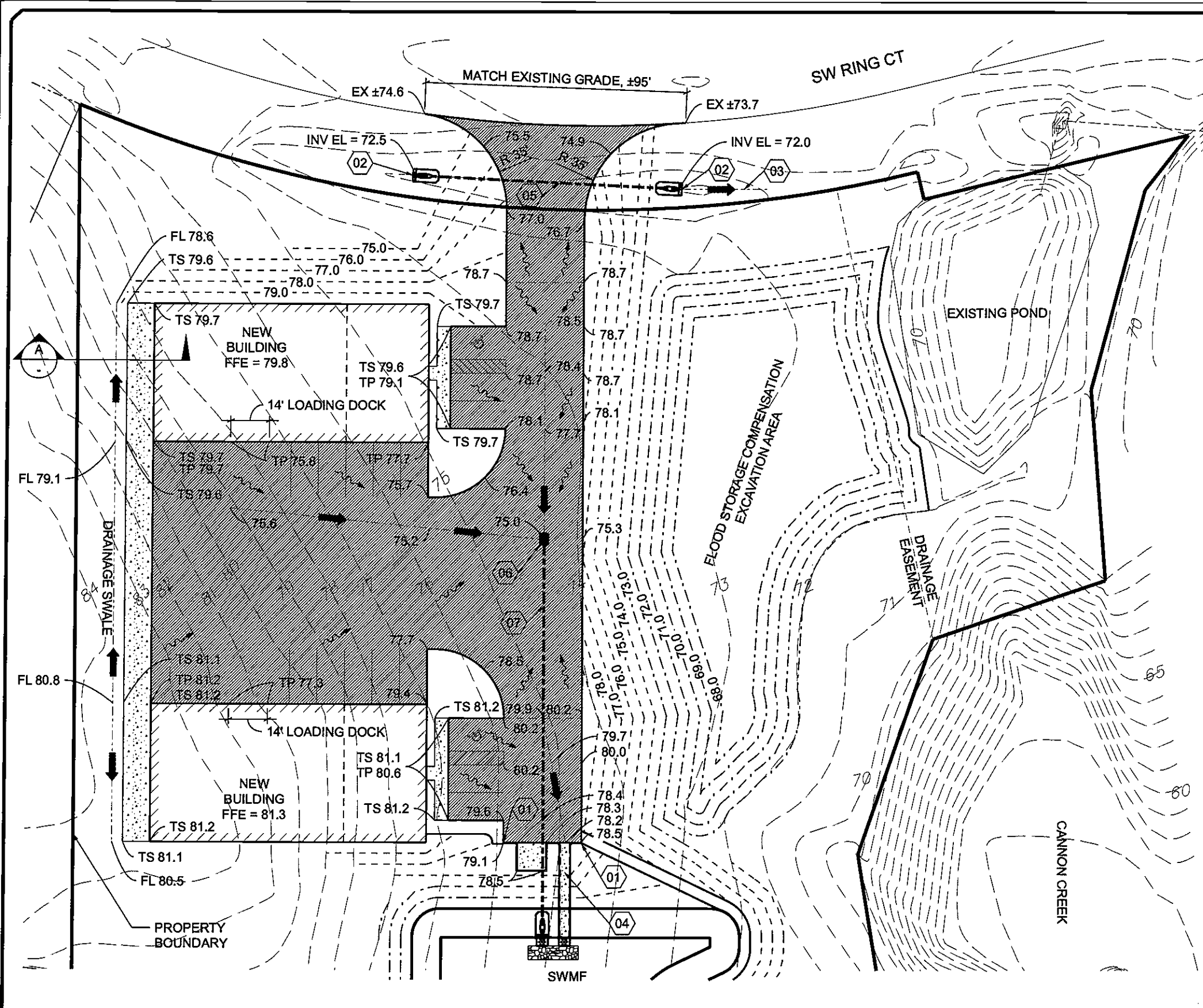
DRAINAGE
 THE PROPOSED STORMWATER MANAGEMENT SYSTEM IS DESIGNED TO MEET SRWMD RULES AND REGULATIONS AS A DRY RETENTION FACILITY

- NOTES**
- 01 OFFSTREET PARKING (T.Y.P) SEE DETAILS
 - 02 10'X10' CONCRETE DUMPSTER PAD SEE DETAIL
 - 03 30" X 30" FDOT R1-1 "STOP" SIGN FDOT INDEX 11860 AND 17302
 - 04 24" WHITE STOP BAR
 - 05 6" DOUBLE YELLOW
 - 06 4" SANITARY GRAVITY, PLACE CLEANOUTS AS REQUIRED SEE ARCHITECTURAL PLANS FOR CONTINUATION
 - 07 SEPTIC SYSTEM LOCATION
 - 08 1" WATER LINE, ±270 LF SEE ARCHITECTURAL PLANS FOR CONTINUATION
 - 09 WATER WELL
 - 10 EXISTING TREE TO REMAIN (TYP) SHALL BE PROTECTED DURING CONSTRUCTION
 - 11 BURIED FIBER OPTIC CABLE COORDINATE WITH PROVIDER PRIOR TO CONSTRUCTION USE EXTREME CAUTION
 - 12 TYPE IV SILT FENCE, ±1,100 LF FDOT INDEX 102
 - 13 5' WIDE CONCRETE SIDEWALK

- LEGEND**
- ⊙ AVAILABLE PARKING SPACES
 - ⇄ TRAFFIC FLOW
 - ▨ AREA TO BE LANDSCAPED WITH GRASS, PLANTS, SHRUBS AND/OR TREES

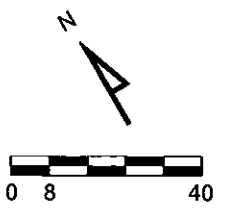
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
06-02-2011	BC	REVISED SITE			

<p>CES Crews Engineering Services, LLC</p>	<p>CERTIFICATE OF AUTHORIZATION NO. 28022</p> <p>P.O. BOX 970 LAKE CITY, FL 32056 PHONE: 386.754.4085</p>	<p>6-3-2011 Brett A. Crews, P.E. 65592</p>	DRAWN BY: BC	<p>GLOBAL INNOVATION, LLC COMMERCIAL SITE</p>	CES PROJECT NO.:
			APPROVED BY: BC		<p>SITE PLAN</p>



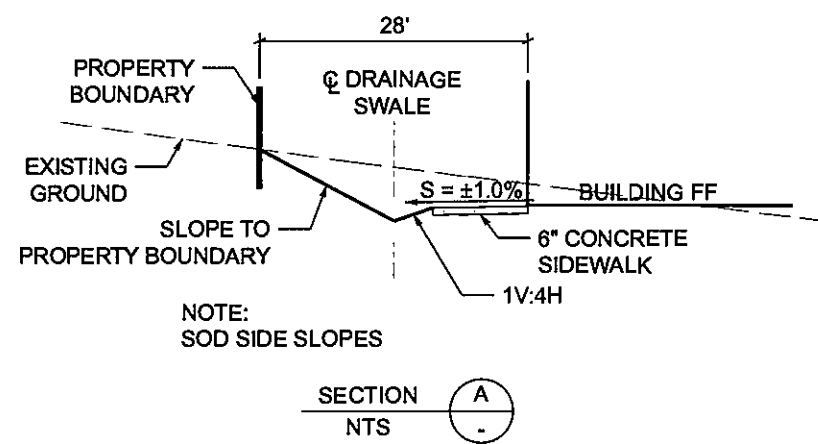
NOTES

- 01 BEGIN / END 6" HEADER CURB ±45 LF (TOTAL)
- 02 CONCRETE MITERED END SECTION FDOT INDEX 273
- 03 REGRADE EXISTING DITCH ENSURE POSITIVE DRAINAGE
- 04 3' WIDE CONCRETE FLUME SEE DETAIL
- 05 SWP-3 18" HDPE PIPE, ±96 LF
- 06 SWS-2 TYPE C INLET FDOT INDEX 232 GRATE EL=75.0 18" INV EL=72.0
- 07 SWP-2 18" HDPE PIPE ±142 LF



PAVING AND DRAINAGE LEGEND

- 000.00 PROPOSED EDGE OF PAVEMENT ELEVATION
- TP 00.00 PROPOSED TOP OF PAVEMENT
- TS 00.00 PROPOSED TOP OF SIDEWALK ELEVATION
- EX ±00.00 MATCH EXISTING GRADE
- PROPOSED EDGE OF PAVEMENT ELEVATION
- SHEET FLOW
- CHANNEL FLOW
- DENOTES STANDARD DUTY ASPHALT PAVEMENT WITH WHITE PARKING STRIPING SEE DETAIL
- DENOTES CONCRETE PAVEMENT



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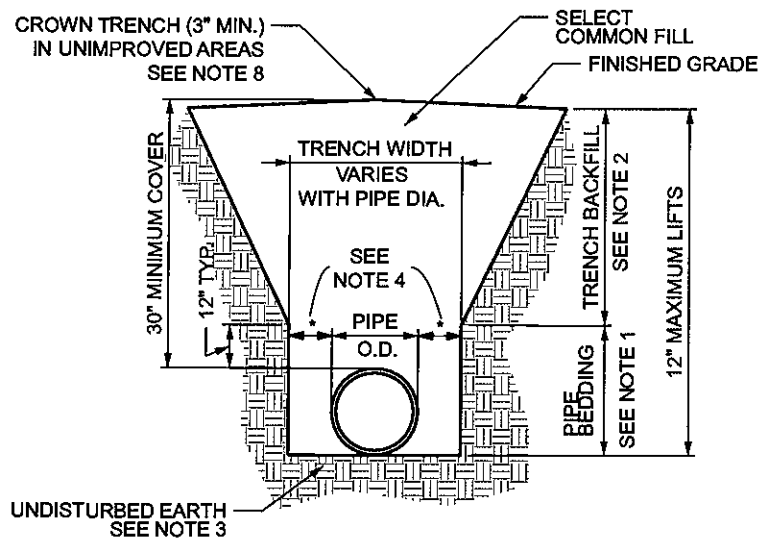
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**GLOBAL INNOVATION, LLC
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**PAVING AND DRAINAGE
PLAN**

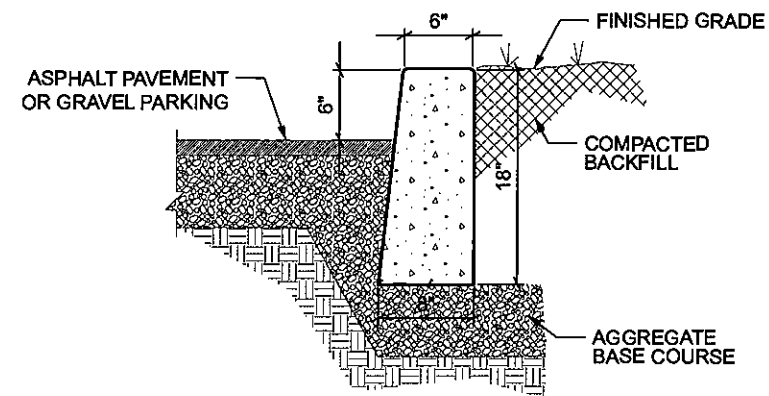
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SHEET:
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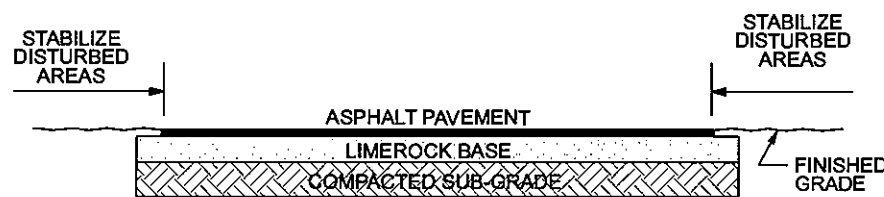
TRENCH AND BACKFILL DETAIL
NTS

NOTES

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK WILL BE REQUIRED IF OVER-EXCAVATION OCCURS.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. PROVIDE TRENCH SLOPING AND BRACING AS REQUIRED FOR SAFETY.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN PAVED AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROAD CONSTRUCTION SPECIFICATIONS.



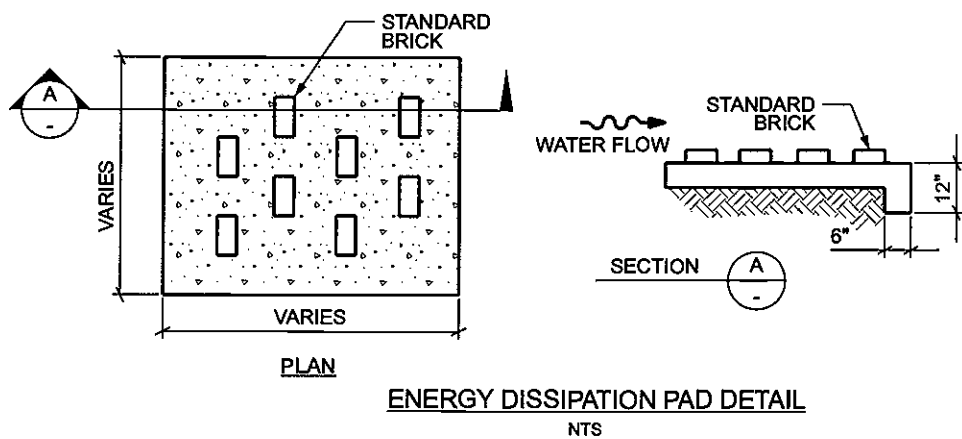
HEADER CURB DETAIL
NTS



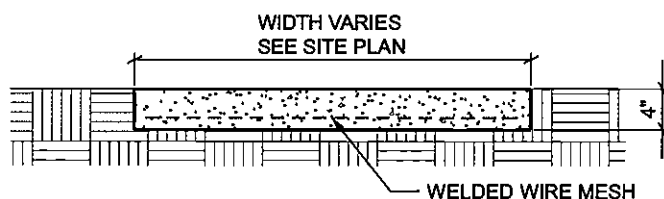
1.5" SUPERPAVE (12.5)
0.1 GAL/SY PRIME COAT
6" LIMEROCK BASE, LBR 30
8" COMPACTED SUB-GRADE

NOTE:
SUBGRADE SHALL BE COMPACTED TO
98% OF MAXIMUM DRY DENSITY AS
ESTABLISHED BY ASTM T-99.

STANDARD DUTY ASPHALT PAVEMENT SECTION
NTS

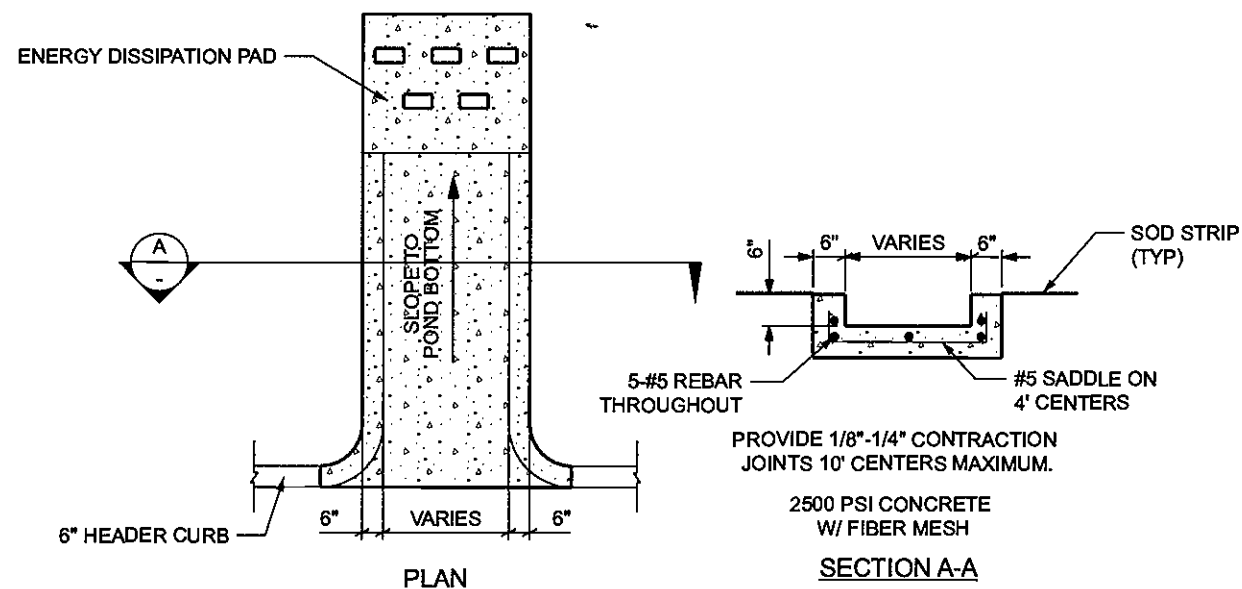


ENERGY DISSIPATION PAD DETAIL
NTS



3000 PSI CONCRETE
REINFORCED WITH 6x6x10/10 WELDED WIRE MESH
PROVIDE 1/8"-1/4" CONTRACTION JOINTS
AT 10' CENTERS (MAXIMUM)

TYPICAL SIDEWALK DETAIL
NTS



CONCRETE FLUME DETAIL
NTS

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**GLOBAL INNOVATION, LLC
COMMERCIAL SITE**
**PAVING AND DRAINAGE
NOTES AND DETAILS**

CES PROJECT NO.:
2010-008
SHEET:
PAV2

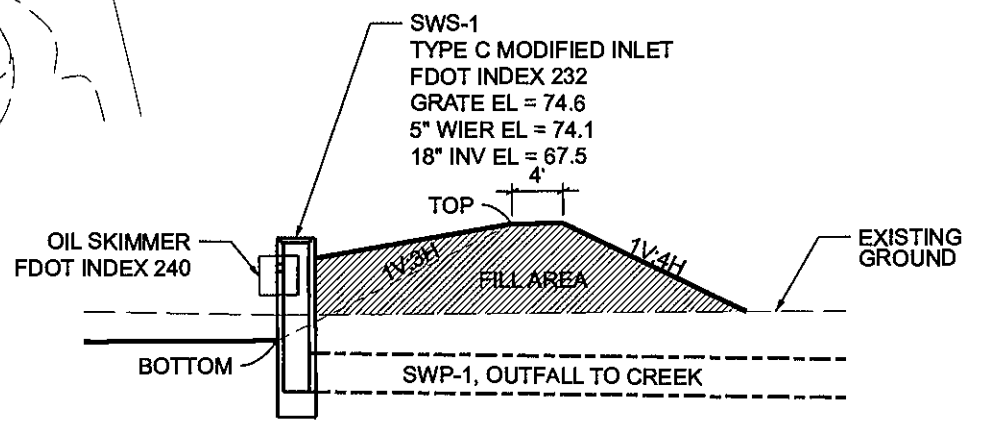
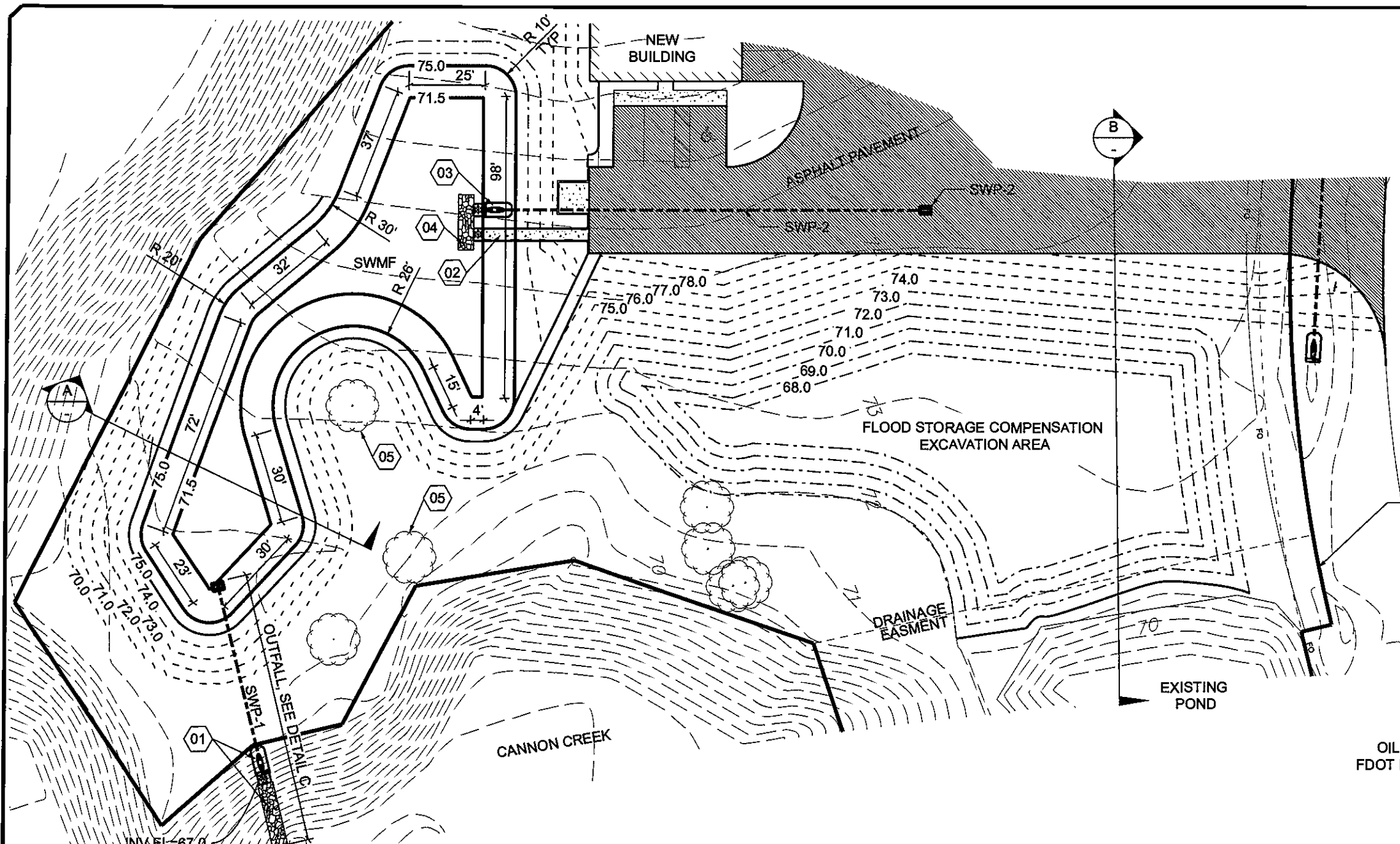


SPECIAL NOTE:

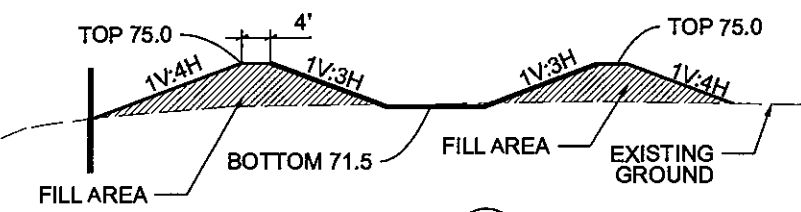
MATERIAL USED FOR SWMF BOTTOM AND SIDE SLOPES SHALL BE SUITABLE FOR DRAINAGE. ANY CLAY ENCOUNTERED SHALL BE REMOVED 2' BEYOND SWMF SURFACE.

NOTES

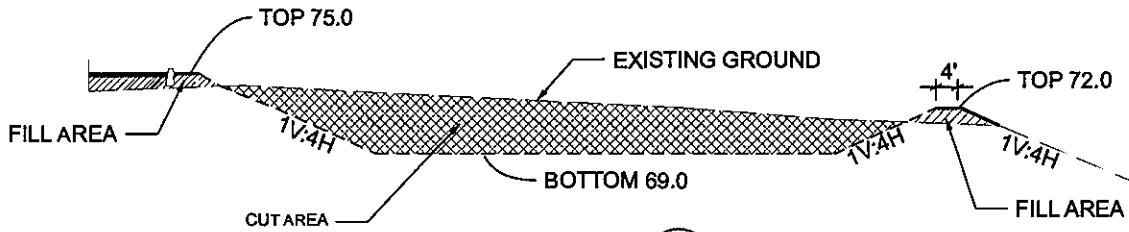
- 01 CONCRETE MES, FDOT INDEX 272 ENERGY DISSIPATION PAD RIP RAP TO BOTTOM OF SLOPE
- 02 CONCRETE FLUME ENERGY DISSIPATION PAD
- 03 CONCRETE MES, FDOT INDEX 272 ENERGY DISSIPATION PAD
- 04 20' X 5' RIP RAP
- 05 EXISTING TREE TO REMAIN (TYP) SHALL BE PROTECTED DURING CONSTRUCTION



OUTFALL DETAIL
NTS



SECTION
NTS



SECTION
NTS

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
6-2-11	JK	REVISED SWMF			



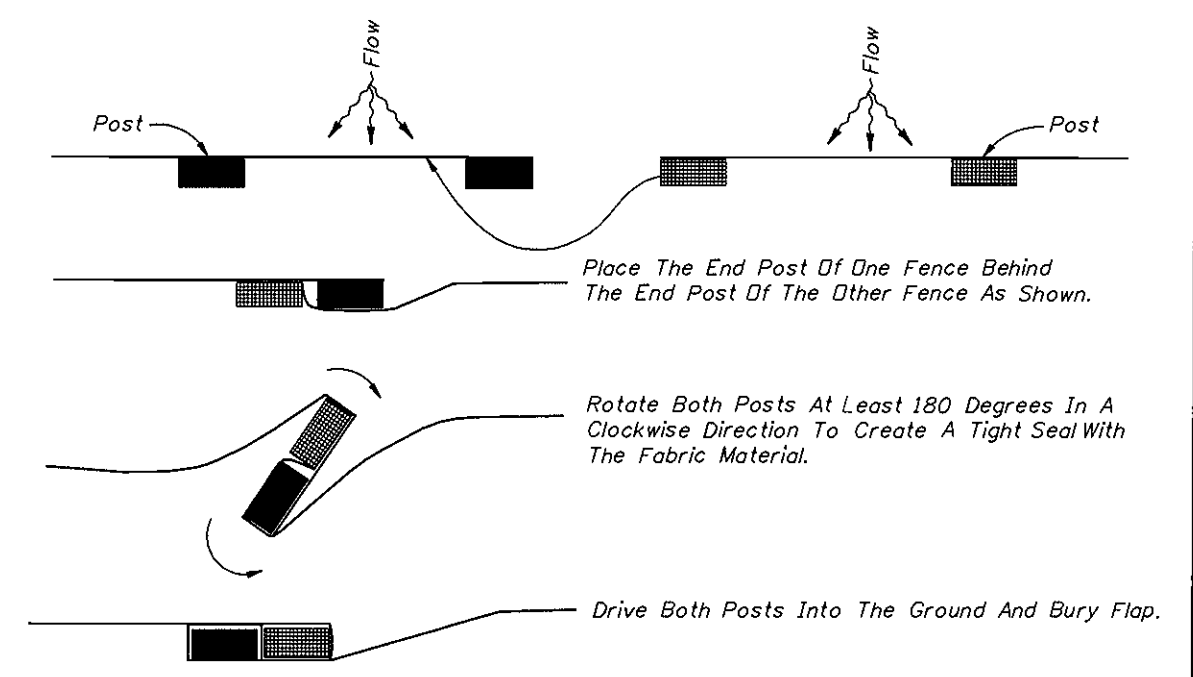
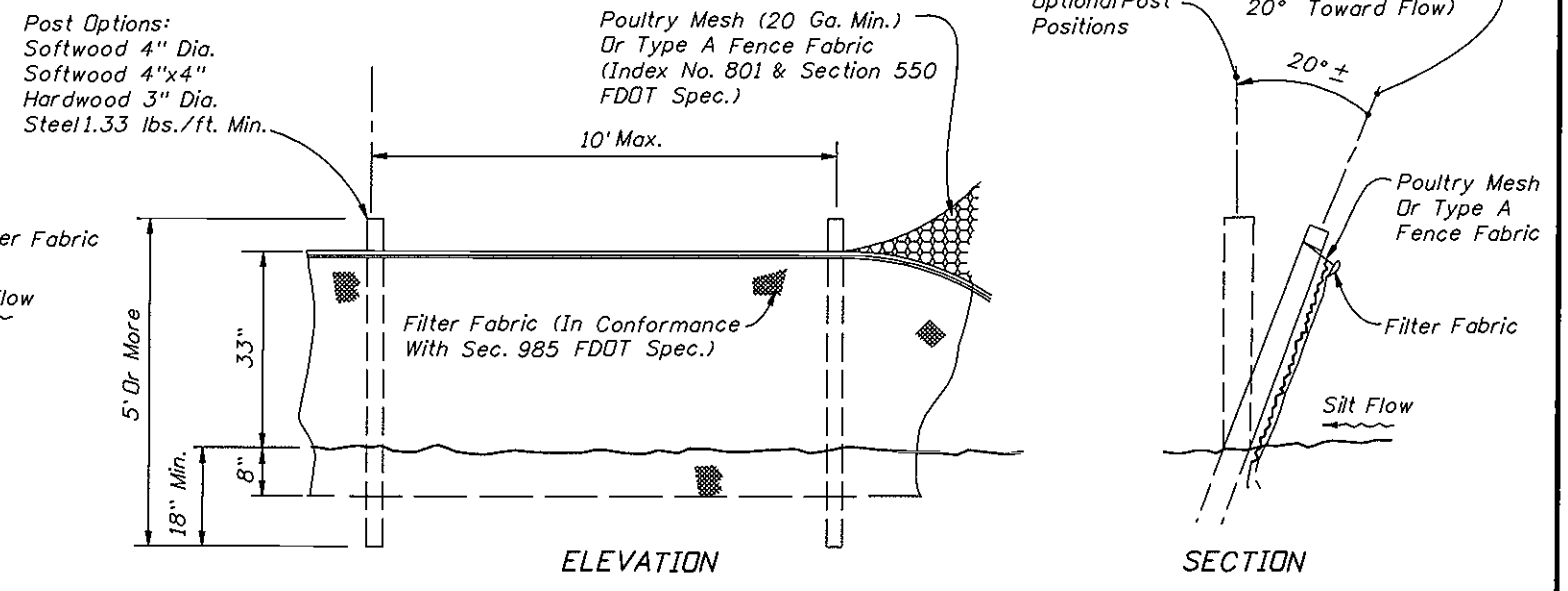
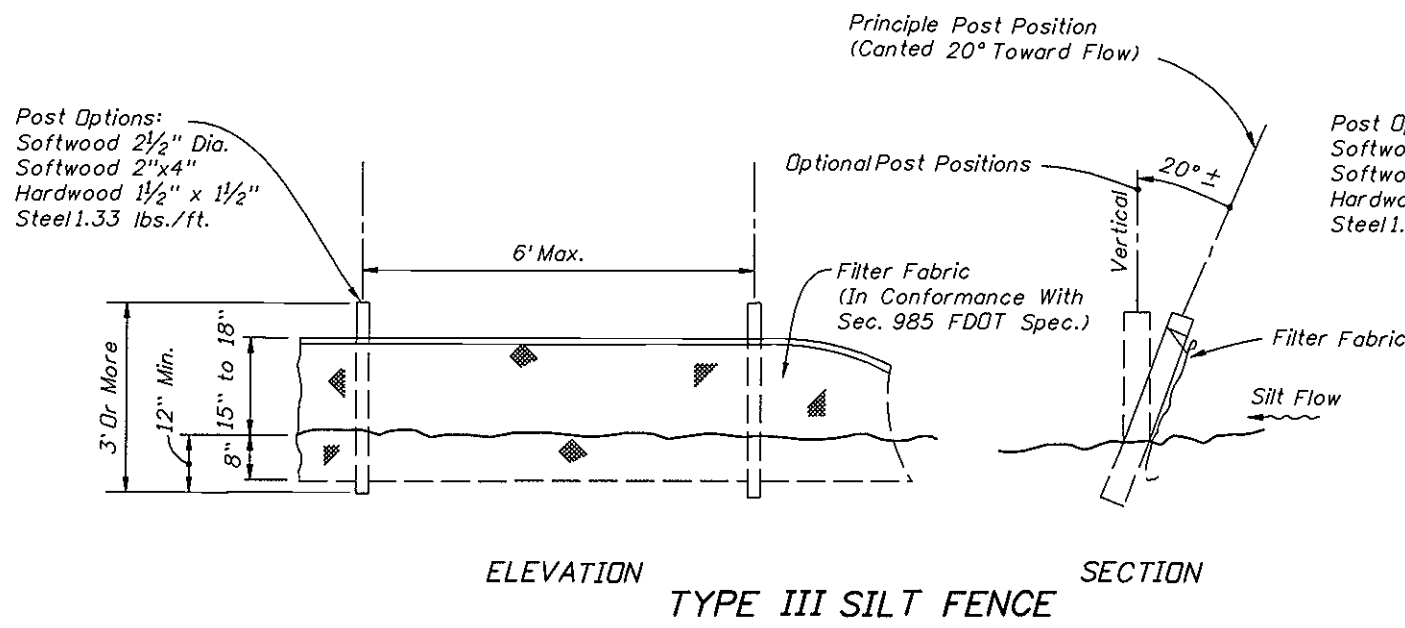
CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews
6-3-2011
Brett A. Crews, P.E. 65592

DRAWN BY:
BC
APPROVED BY:
BC

**GLOBAL INNOVATION, LLC
COMMERCIAL SITE**
**SURFACE WATER
MANAGEMENT SYSTEM**

CES PROJECT NO.:
2010-008
SHEET:
SWM1



SILT FENCE APPLICATIONS

**PLAN VIEW
JOINING TWO SILT FENCES**

NOTES FOR SILT FENCES

1. Type III Silt Fence to be used at most locations. Where used in ditches, the spacing for Type III Silt fence shall be in accordance with Chart 1, Sheet 1.
2. Type IV Silt Fence to be used where large sediment loads are anticipated. Suggested use is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travel lanes or off the right of way.
3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be at upland locations and turbidity barriers used at permanent bodies of water.
4. Where used as slope protection, Silt Fence is to be constructed on 0% longitudinal grade to avoid channelizing runoff along the length of the fence.
5. Silt Fence to be paid for under the contract unit price for Staked Silt Fence, (LF).