HIGHLANDS COUNTY
BOARD OF COUNTY COMMISSIONERS
Purchasing Department

DATE: 11/01/16

BID NO.: ITB 17-014 ADDENDUM No. 1

Project: **SEBRING PARKWAY EMS STATION PROJECT NUMBER: 13061**

Owner: Highlands County BCC
Attn: Purchasing Department
4320 George Blvd; Sebring, FL 33875-5803

Please see the following Revised Sections:

1. **Section 00300 Revised Bid Form**
   This Revised Bid Form must be submitted with your bid to be considered responsive and responsible. This revised Bid Form includes spaces to record the cost of two Bid Alternates which are as follows:

   Alternate 1 is noted on Sheet 7 and 8 and is for roof panels with a painted finish in lieu of the Base Bid panels which have a galvalume finish.

   Alternate 2 is noted on Sheet 16, note 6. and is for a lighting protection system.

2. **Revised Site Plans and Drawings**

   Comments that have been addressed on the building plans.

   a. The legend on the floor plan still indicates the walls to be 1-hour rated which is not required.
      Additional information has been provided with respect to the construction of the interior walls.

   b. I don't see a note about the grounding of the meter being bonded to the footing steel.
      An additional note has been added to the electrical riser.

   Comments that have been addressed on the Site Plan:

   a. The two palm trees adjacent to the new crossover in the median of the Parkway
      The site plans have been modified to show the contractor is responsible of the removal of the 2 palm trees within the median adjacent to the new crossover.

   b. Regarding the trees on the neighbor's property overhanging branches to the property line.
      The site plans have been modified and a noted added stating the Contractor will be responsible for trimming back overhanging branches to the property line.

   c. The correct address for the site is 230 Peach St.
      The plans have corrected with the address.

   d. The location of underground utility.

Underground utility connections are shown connecting to the western side of the building. The contractor will contact the appropriate utility to coordinate the connections.

Request For Information Questions & Answers:

1. What do I tell an overhead door what manufacturer door it is, is it motorized, finish, they are not even on the door schedule.
A: The garage door is to be motorized, pre-finished and meet wind load/pressure requirements.

2. Another item is the metal roof – no manuf is listed. What do we use. Are these notes on the plans just a guide and you don't care what we use?
A: A note has been added to the plans in addition to the information currently provided, that the metal roof must meet wind load/pressure requirements.

3. Ducted range – no manufacture, no model, no size.
A: The manufacturer does not matter. The size is stated on the plans (30")

4. Is the exterior walls just getting painted? , What kind of finish?
A: Already stated on the plans

5. Cabinets are they just to meet spec shown on drawing # 12?
A: Yes

6. The A/C unit doesn't have a manufacturer – do we just use something that meets spec on page 14?
A: The manufacturer does not matter. Find something that meets the specifications on page 14.

7. The lightning protection there is a note 6 on page 16 – it says it is priced separately design and installation by gc. – is this to be part of our bid? What exactly are you looking for in lightning protection?
A: Lightning protection should be an alternate.

8. Is there any specifications and manufacturer for the generator? Do we provide that? Or does owner?
A: The information is on sheet 17. The contractor will provide the generator.

9. I see the $ 2.50 per sf material allowance for the floor tile, but is it your intent to have floor tile in all the rooms except the garage? – again we have no specifications – just the front end 168 pages.
A: The information is on sheet 15.

10. How about the walls – are we supposed to just paint the walls?
A: Wall finish will be light orange peel finish on all interior drywall walls.

11. The mechanical equipment is not specified – do we just use something that matches what is written on plans?
Yes

12. Plumbing or mechanical doesn't show the outdoor ac unit connections – where are they and what source of power are we using? Gas, electric?
A: The generator will be gas all others will be electric.

13. Who is responsible for paying permit, impact, and tap fees?
A: Contractor will be responsible for paying for permit. The county will be responsible for paying impact and tap fees.

14. Who is responsible for paying for the cost of the water meter?
A: The county will be responsible for paying the cost of the water meter.

15. Will the County require a temporary fence to enclose the site?
A: No temporary fence will be required.

16. Can the location of where the underground electric service is to terminate be provided?
A: The northwest corner of the building site/ northeast corner of the existing retention pond.

17. Who is responsible to pay for any utility costs for providing electric service to the building?
A: The county will be responsible for paying any utility costs for providing electric service to the building.

18. Can the location of the natural gas line to the generator be provided?
A: The approximate location of the gas line shown on the plans. The contractor will be responsible for contacting the gas company for actual tie-in location.

19. Who is responsible to pay for any utility costs for providing gas service to the building?
A: The county will be responsible for paying the utility cost providing gas service to the building.

20. Sheet 7, Section M-M: Can you better explain what a cementatious sand finish is? Are you looking for a stucco finish?
A: An addition note has been added to the plans to clarify.

21. What is the finish on the interior of the garage walls?
A: An addition note has been added to the plans to clarify.

22. Are we to include any window sills?
A: This is indicated on the plans Section N-N.

SECTION 00300
REVISED BID FORM
ITB 17-014

PROJECT IDENTIFICATION: SEBRING PARKWAY EMS STATION
PROJECT NO. 13061
ITB 17-014

THIS BID IS SUBMITTED TO: Highlands County Board of County Commissioners
Attn: Purchasing Department
4320 George Boulevard
Sebring, FL 33875-5803

BID SUBMITTED BY:

_____
[Bidder's Name]

_____
[Bidder's Authorized Representative's Name]

_____
[Bidder's Address 1]

_____
[Bidder's Address 2]

_____
[Print Contact Person's Name for this Bid]

_____
[Contact Person's Email Address]

_____
[Contact Person's Phone Number]

1. The Bidder proposes and agrees, if this Bid is accepted, to furnish all labor, materials, and equipment to construct and complete the Work according to and as specified or indicated in ITB 17-014 and the Bidding Documents for the Bid Price and within the time periods stated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for thirty (30) days after the day of Bid opening. Bidder will sign and deliver the required number of the other documents required by this ITB within fifteen (15) days after the date of County's Notice of Award.

3. In submitting this Bid, Bidder represents that:

   a. Bidder has examined and carefully studied the Bidding Documents, including the following Addenda, receipt of all of which is hereby acknowledged:

Date	Number	Date	Number
_____	_____	_____	_____
_____	_____	_____	_____

   b. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, performance, and furnishing of the Work;

   c. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

   d. Bidder acknowledges that County and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the Site. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the times, price, and other terms and conditions of the Contract Documents.

   e. Bidder is aware of the general nature of the Work to be performed by County and others at the Site that relates to the Work.

   f. Bidder has correlated information known to Bidder, information and observations obtained from visits to the Site and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

   g. Bidder has given Engineer written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Bidding Documents and the written resolution thereof by Engineer is acceptable to Bidder, and the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

h. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm or corporation to refrain from Bidding, and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over County.

4. Documentation included with Bid packet

	YES	NO
One (1) original (signed in blue ink), one (1) exact paper copy, and one (1) exact electronic copy (CD or thumb drive) of the submitted Bid.		
Acknowledgment of the Addenda (if applicable)		
Statement of compliance with Section 287.087, Florida Statutes, as a "Drug Free Workplace"		
Statement of compliance with Section 287.133, Florida Statutes, as a "Public Entity Crime"		
Statement of compliance with Section 287.134, Florida Statutes, as a "Discrimination"		
Section 00160 – Certification pursuant 287.135, Florida Statutes,		
Any document from the Dept. of Homeland Security's website showing the Bidder's Company ID # for E-Verify ID #		
Woman or Minority Owned Business (Include a copy of your certificate if applicable)		
Required Bidder's Qualification Statement with supporting data included		
A list of a minimum of (5) five jobs similar in scope and size included		
A minimum of five (5) references of clients for whom similar work has been performed included		
A tabulation of Subcontractors Included		
Acord Insurance Certificate Included		
Bid Security in the form of_____		
Local Preference Affidavit (Include a copy of your Affidavit if applicable)		
Copy of any applicable Licenses		
Other _____		

5. Pricing

This is a Lump Sum Bid. Bidder will complete the Work in accordance with the Contract Documents for the following Lump Sum Bid Price. Award will be based on the total Lump Sum Bid Price and requirements of Bidder. All work for this ITB will be awarded to one (1) Bidder.

BASE BID TOTAL:

_____

(Numbers)

_____

(Words)

ALTERNATE ONE ADD/DEDUCT: ($_____)

(Numbers)

_____

(Words)

ALTERNATE TWO ADD/DEDUCT: ($_____)

(Numbers)

_____

(Words)

6. Bidder agrees that the Work will be substantially complete within one hundred and eighty (180) days and completed and ready for final payment within two hundred and ten (210) days after the date when the Contract Times commence to run. The Contract Times will commence to run on the thirteenth (13th) day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty (30) days after the Effective Date of the Agreement.

7. Communications concerning this Bid have been addressed only to the contacts listed in Article 23 of Section 00100 of ITB 17-014.

SUBMITTED on _____, 2016

State Contractor License No. _____

If Bidder is:

An Individual

By: _____(SEAL)
(Individual's Name)

doing business as_____

Business
Address:_____

_____

Phone No.:_____Fax No.:_____

A Partnership

_____(SEAL)
(Partnership Name)

_____
(State in Which Organized and Type of Partnership)

By: _____
(Name of General Partner)

Business
Address:_____

Phone No.:_____Fax No.:_____

A Corporation

By: _____(SEAL)
(Corporation Name)

_____
(State of Incorporation)

By:_____
(Name of Person Authorized to Sign)

_____
(Title)

Attest:_____
(Secretary)

Business
Address:_____

Phone No.:_____ Fax No.:_____

Date of Qualification to do business is_____

A Joint Venture

By:_____(SEAL)
(Name)

_____
(Address)

By:_____(SEAL)
(Name)

_____
(Address)

Phone Number and Address for receipt of official communications:

_____

_____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above for an individual or the appropriate form of entity.)

-END OF SECTION-

COMPONENTS AND CLADDING PRESSURES (PSF) U.N.O.

ZONE 1: +30.1 / -47.7

ZONE 2: +30.1 / -83.2

ZONE 3: +30.1 / -123.1

ZONE 4: +52.2 / -56.6

ZONE 5: +52.2 / -69.9

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

PERMIT PLANS

FOR:

EMS STATION BUILDING
-SEBRING PARKWAY SITE-

DESIGN DATA

CODE CONFORMANCE REVIEW:

APPLICABLE CODES:

FLORIDA BUILDING CODE 5th Edition FLORIDA MECHANICAL CODE 5th Edition

FLORIDA PLUMBING CODE 5th Edition NATIONAL ELECTRICAL CODE (LATEST EDITION)

FLORIDA FIRE PREVENTION CODE (LATEST EDITION)

DESIGN ITEM	REQUIRED DESIGNED	
OCCUPANCY CLASSIFICATION (MIXED)	BUSINESS - B, RESIDENTIAL R-2	
CONSTRUCTION TYPE	TYPE III-B, SPRINKLED	
BUILDING HEIGHT AND AREAS Allowable Heights (sprinkled) Allowable Stories (sprinkled) Allowable One Story Area (sprinkled)	55 feet THREE story 19,000 sq ft	18.00 feet one story 3,241 proposed
MINIMUM OCCUPANT LOAD FOR EGRESS CAPACITY		TOTAL OCCUPANT LOAD 25
WIND DESIGN CRITERIA		150 m.p.h.
Roof angle (degrees)		22.62 degrees
Exposure Category		C
Internal Pressure Coefficient		+/-0.18
(h) Mean roof height		18.00 feet

ROOF DESIGN LOADS

TOP CHORD LIVE LOAD: 20 psf
TOP CHORD DEAD LOAD: 10 psf
BOTTOM CHORD LIVE LOAD: NON-CONCURRENT 10 psf
BOTTOM CHORD DEAD LOAD: 10 psf

ALL GLAZING SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING EXTERIOR DOORS & OVERHEAD GARAGE DOORS)

SITE ADDRESS:
230 PEACH ST.
SEBRING, FLA. 33870

OWNER:
HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
P.O. BOX 1926
SEBRING, FLA. 33871-1926

LIVING SPACE 1,896
GARAGE SPACE 1,272
COVERED ENTRY 73
TOTAL 3,241 SQ. FT.

SHEET INDEX

DR	CH	DATE:
		9-8-2015
		9-25-2015
		10-15-2015
		2-25-2016
		8-5-2016
		8-16-2016
		10-31-2016

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46630

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Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD. - SEBRING, FLORIDA 33870
863-385-5564 - 863-385-2462 FAX

WO# 15071

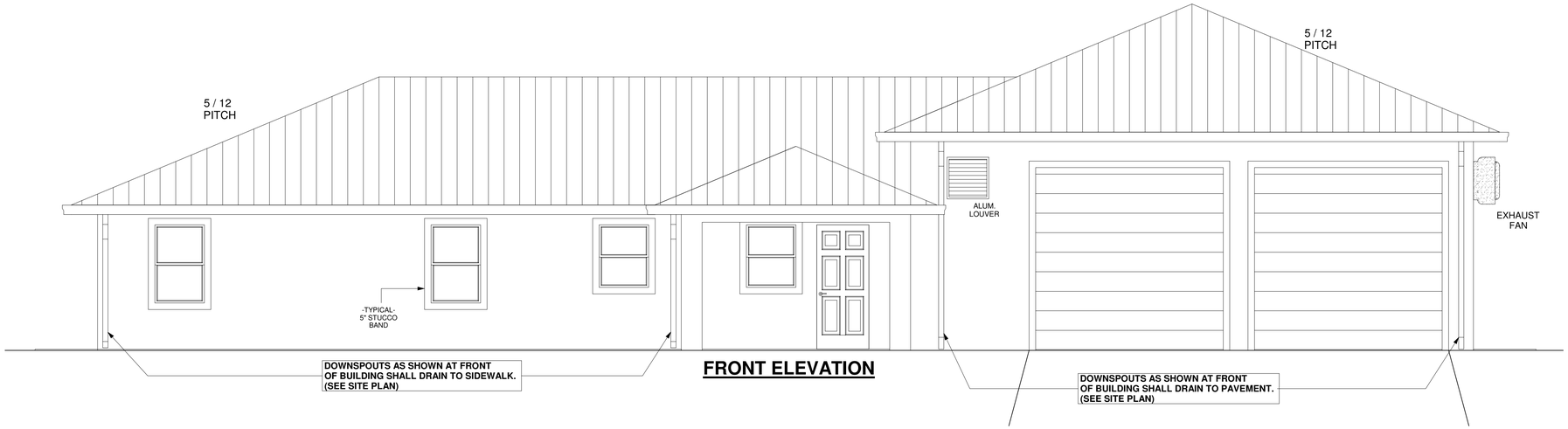
Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:

COVER SHEET

SCALE:

SHEET #



FRONT ELEVATION

REAR ELEVATION

ALL 5 DOWN SPOUTS SHOWN AT REAR OF BUILDING TO BE CONNECTED INTO 8" HDPE DRAIN PIPE W/ 6" FLEX TUBING AND 6" TEE. (SEE SITE PLAN)

DATE:	DR	CH
9-8-2015		
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8-16-2016		
10-31-2016		

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

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CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD. - SEBRING, FLORIDA 33870
863-385-1564 - 863-385-2462 FAX

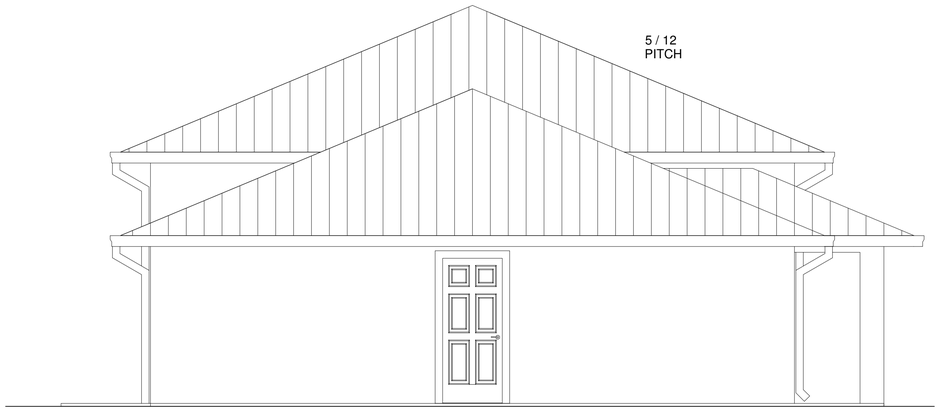
Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

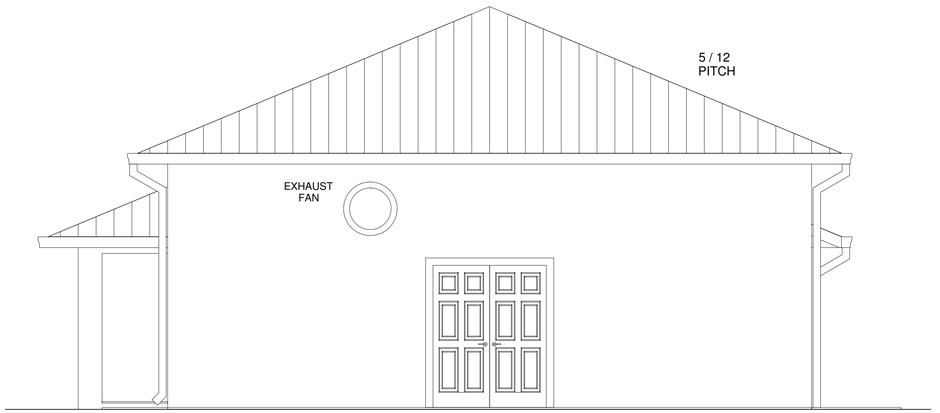
DRAWING:
FRONT & REAR ELEVATIONS

SCALE:
1/4"=1'-0"

SHEET # 1



LEFT SIDE ELEVATION



RIGHT SIDE ELEVATION

DATE:	DR	CH
9-8-2015		
9-25-2015		
10-15-2015		
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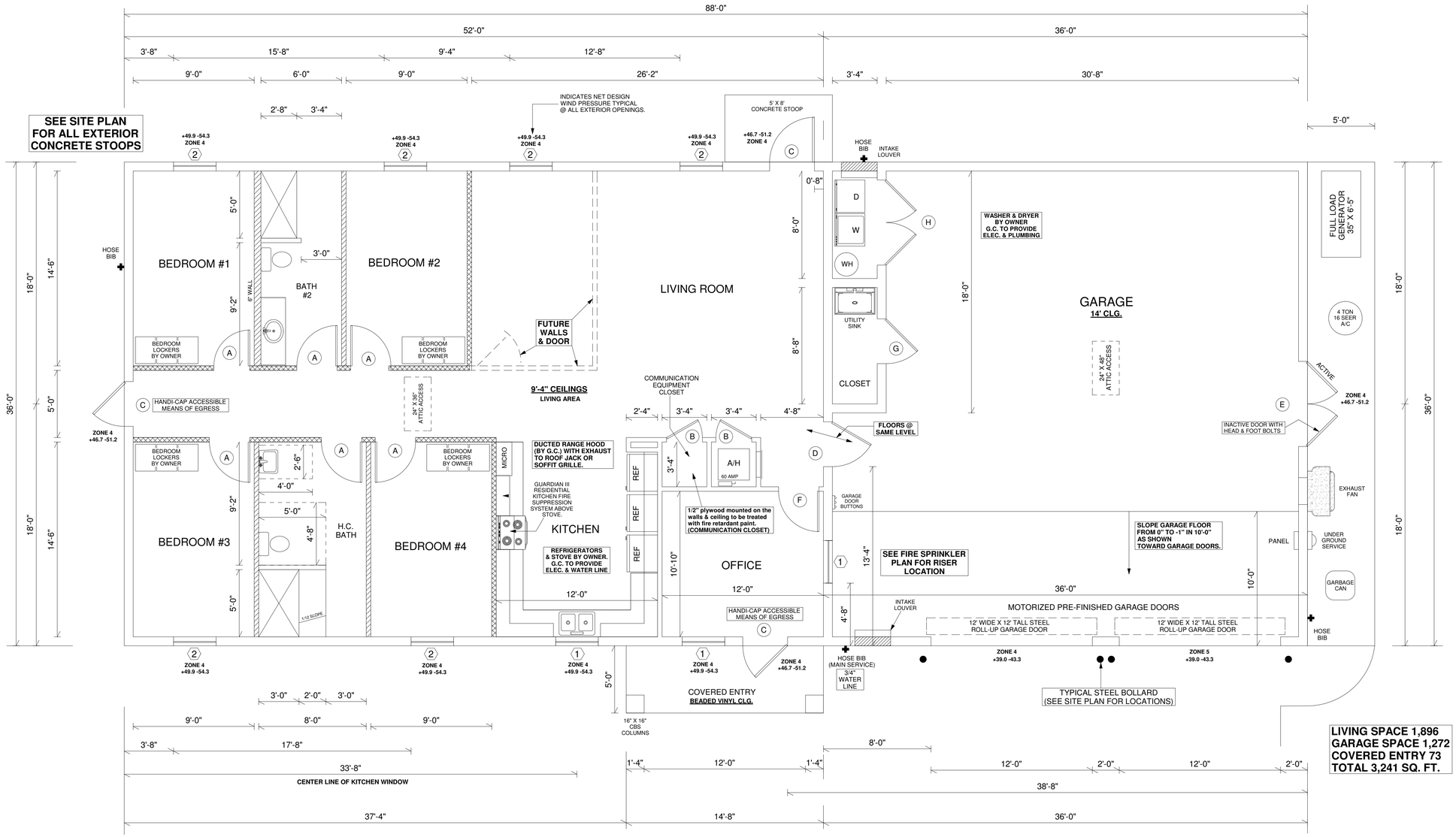
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
LEFT & RIGHT ELEVATIONS

SCALE:
1/4"=1'-0"

SHEET # 2



LIVING SPACE 1,896
GARAGE SPACE 1,272
COVERED ENTRY 73
TOTAL 3,241 SQ. FT.

DOOR & FRAME SCHEDULE

NO.	SIZE	TYPE	FINISH	FRAME	HARDWARE	NOTES	MANUFACTURER
A	3068	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS **WITH WALL STOP**	PRIVACY LOCK	
B	2868	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS		
C	3080	6 PANEL FIBERGLASS	PAINT	**COMPOSITE**	FLAT LEVER DOOR KNOBS	DEAD BOLT SINGLE CYLINDER **AUTO CLOSER**	THERMA-TRU
D	3068	FLAT PANEL FIBERGLASS	PAINT	**COMPOSITE**	FLAT LEVER DOOR KNOBS	DEAD BOLT SINGLE CYLINDER **AUTO CLOSER**	THERMA-TRU
E	2-3080	6 PANEL FIBERGLASS	PAINT	**COMPOSITE**	FLAT LEVER DOOR KNOBS **WITH OVERHEAD STOP**	DEAD BOLT SINGLE CYLINDER	THERMA-TRU
F	3068	6 PANEL MASONITE	PAINT	WOOD	FLAT LEVER DOOR KNOBS **WITH WALL STOP**	NO LOCKING MECHANISM	
G	3068	FLAT PANEL FIBERGLASS	PAINT	**COMPOSITE**	FLAT LEVER DOOR KNOBS **WITH OVERHEAD STOP**	NO LOCKING MECHANISM	THERMA-TRU
H	2-3068	FLAT PANEL FIBERGLASS	PAINT	**COMPOSITE**	FLAT LEVER DOOR KNOBS **WITH OVERHEAD STOP**	NO LOCKING MECHANISM	THERMA-TRU

NOTES:

1. ALL INTERIOR WOOD DOOR CASINGS SHALL BE (2 1/4" COLONIAL, FINGER JOINT, PAINT GRADE)

2. ALL DOOR HARDWARE SHALL BE (SCHLAGE BRAND, BRUSHED NICKLE) INTERIOR & EXTERIOR.

WINDOW SCHEDULE

NO.	TYPE	FRAME MATERIAL	COLOR	ROUGH BLOCK OPENING -VERIFY-	SCREEN	GLAZING	MANUFACTURER
1	24 SH	VINYL	WHITE	38" WIDE X 50 5/8" HIGH	STANDARD	LO-E (ENERGY SHIELD) TINTED (SUPER SPACER)	PGT WINDGUARD SERIES 5500
2	25 SH	VINYL	WHITE	38" WIDE X 63" HIGH	STANDARD	LO-E (ENERGY SHIELD) TINTED (SUPER SPACER)	PGT WINDGUARD SERIES 5500

NOTE: ALL ROUGH BLOCK OPENINGS SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR PRIOR TO START OF WALL & FOUNDATION CONSTRUCTION. -TYPICAL-

ALL GLAZING SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING EXTERIOR DOORS & OVERHEAD GARAGE DOORS)

WALL LEGEND

INTERIOR FRAME SMOKE WALLS WITH R-11 BATT INSULATION. ALL PENETRATIONS SHALL BE SEALED.

INTERIOR FRAME WALLS WITH R-11 BATT INSULATION.

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

GENERAL NOTES:

1. ALL INTERIOR FRAME WALLS SHALL HAVE R-11 INSULATION.

2. ALL INTERIOR WALLS NOT RECEIVING TILE SHALL HAVE A KNOCK DOWN FINISH WITH SQUARE INTERSECTING CORNERS.

3. G.C. IS RESPONSIBLE FOR CITY WATER & SEWER HOOK-UP AND ALL IMPACT FEES.

4. REFER TO APPROVED SITE PLAN AND LANDSCAPE PLAN FOR: IRRIGATION, LANDSCAPING, PARKING LOT DESIGN, SIDEWALKS AND OTHER SITE DEVELOPEMENT REQUIREMENTS.

PAINT SPECS & INFO:

ALL INTERIOR & EXTERIOR CONCRETE WALLS AND ALL INTERIOR DRYWALL FINISHED WALLS AND CEILINGS SHALL HAVE ONE COAT PRIMER & TWO COATS SATIN FINISH.
ALL EXTERIOR WALLS SHALL BE OF SAME COLOR AND ALL WINDOW BANDS SHALL BE OF SAME COLOR.
ALL INTERIOR WALLS SHALL BE OF SAME COLOR AND ALL CEILINGS SHALL BE OF SAME COLOR.
ALL EXTERIOR DOORS AND TRIM SHALL HAVE ONE COAT PRIMER & TWO COATS GLOSS FINISH.
ALL EXTERIOR DOORS AND TRIM SHALL BE OF SAME COLOR.
ALL INTERIOR DOORS AND TRIM SHALL HAVE ONE COAT PRIMER & TWO COATS GLOSS FINISH.

ALL PAINT AND PAINT PRODUCTS SHALL BE LISTED ON THE CURRENT EDITION OF THE MPI APPROVED PRODUCT LIST. PRODUCTS FROM THE FOLLOWING MANUFACTURER'S WILL BE CONSIDERED:

1) SHERWIN WILLIAMS - (A-100 OR BETTER)
2) BENJAMIN MOORE - (EQUIVALENT TO A-100)
3) PORTER PAINTS (ACRI-PRO OR BETTER)

DATE:	DR	CH
9-8-2015		
9-25-2015		
10-15-2015		
2-25-2016		
8-5-2016		
8-16-2016		
10-31-2016		

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

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Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
FLOOR PLAN

SCALE:
1/4"=1'-0"

SHEET # 3

MONOLITHIC FLOOR SLAB:

1. FOUNDATION WALL SHALL BE FILLED WITH CLEAN FILL DIRT.
2. FILL DIRT SHALL BE MECHANICALLY COMPACTED TO 1,500 LBS PER SQ. FOOT MINIMUM. 95% MODIFIED PROCTOR. THEN GRADED TO ALLOW A CONCRETE THICKNESS OF 4". (MINIMUM TO BE 3 1/2")
3. GRADED FILL DIRT SHALL THEN BE TERMITE TREATED AND A VAPOR BARRIER OF 6 MIL. VISQUEEN LAID IN PLACE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES.
4. FLOOR CONCRETE MIXTURE SHALL BE 3,000 PSI AND SHALL BE REINFORCED WITH FIBER-MESH (@ LIVING SPACE). FIBERS SHALL COMPLY WITH ASTM C 1116 AND DOSAGE AMOUNTS ARE TO BE PER THE FIBER MANUFACTURERS RECOMMENDATIONS.
5. GARAGE FLOOR REINFORCEMENT OF 6" X 6" W2.9 X W2.9 WWM FABRIC LOCATED IN THE MIDDLE TO THE UPPER ONE THIRD OF THE SLAB. WELDED WIRE REINFORCEMENT FABRIC SHALL BE SUPPORTED WITH APPROVED MATERIALS AT SPACING NOT TO EXCEED 3 FEET OR IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
-TYPICAL-

CJ = CONTROL JOINT 1/4 OF SLAB THICKNESS

MONOLITHIC FLOOR SLAB:

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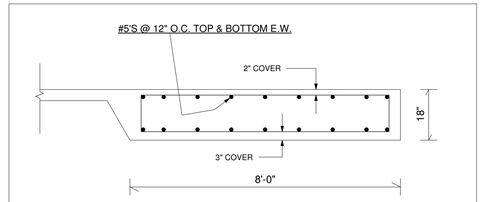
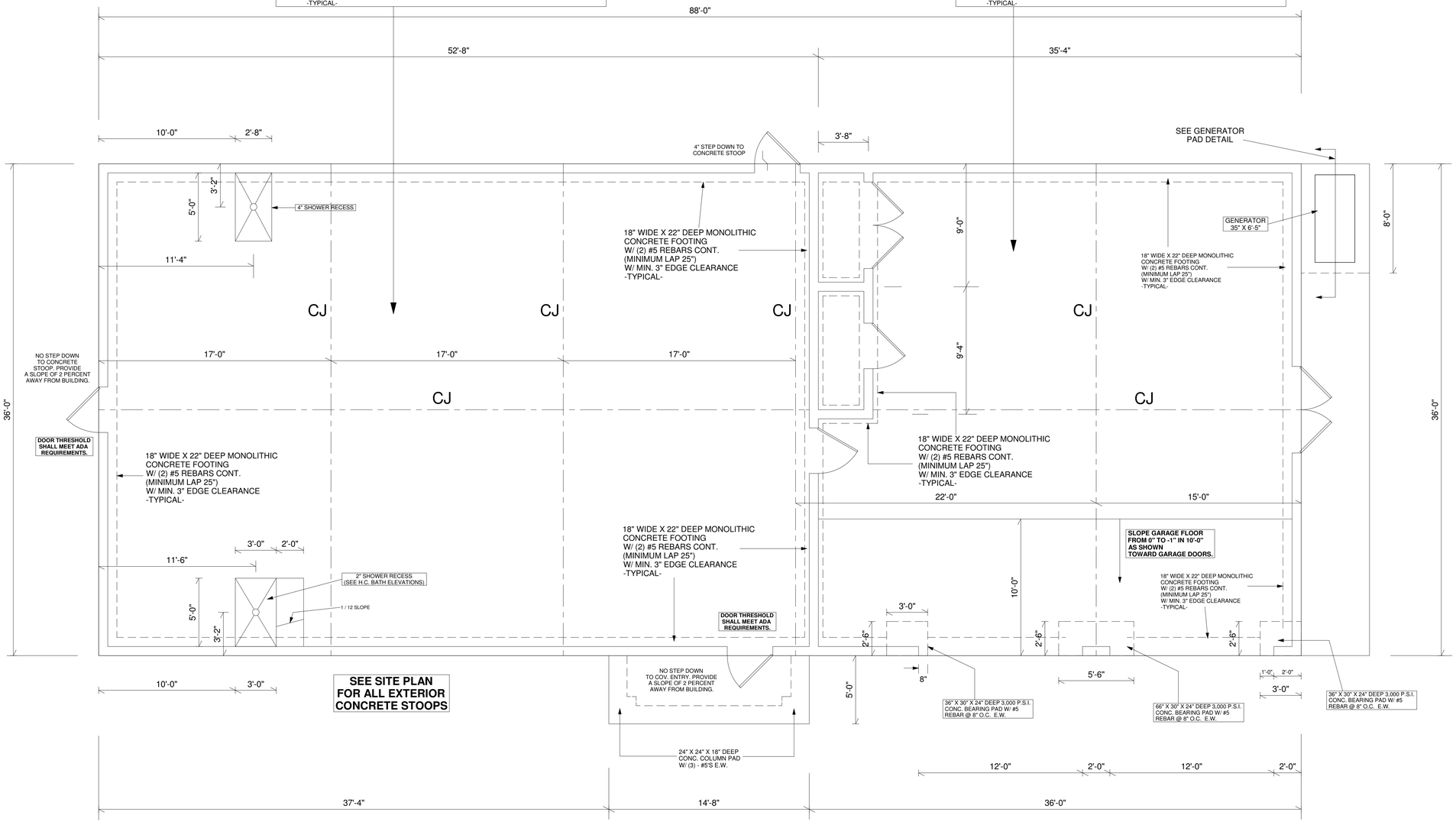
-TYPICAL-



18" THICK 3000 PSI CONCRETE GENERATOR PAD W/ #5'S @ 12" O.C. TOP & BOTTOM E.W.

GENERATOR PAD DETAIL



SEE SITE PLAN FOR ALL EXTERIOR CONCRETE STOOPS

DR	CH	DATE:
		9-8-2015
		9-25-2015
		10-15-2015
		2-25-2016
		8-5-2016
		8-16-2016
		10-31-2016

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46630

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863-385-5564 - 863-385-5462 FAX

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

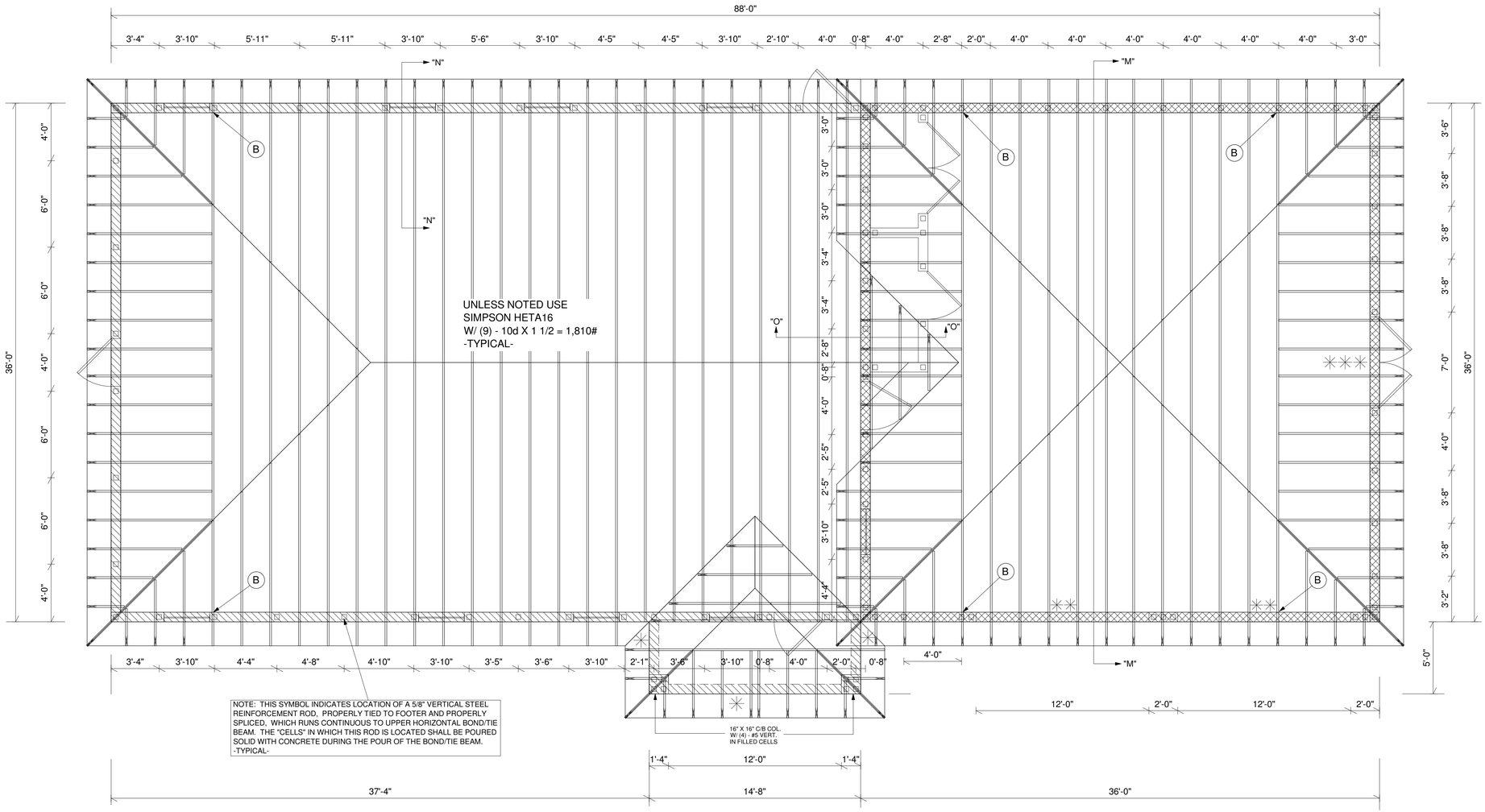
WO# 15071

DRAWING:

FOUNDATION

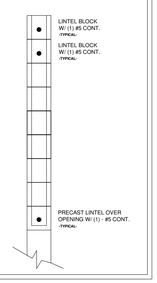
SCALE:
1/4"=1'-0"

SHEET # 4

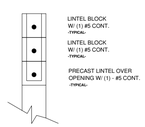


NOTE: THIS SYMBOL INDICATES LOCATION OF A 5/8" VERTICAL STEEL REINFORCEMENT ROD, PROPERLY TIED TO FOOTER AND PROPERLY SPLICED, WHICH RUNS CONTINUOUS TO UPPER HORIZONTAL BOND/TIE BEAM. THE "CEILLS" IN WHICH THIS ROD IS LOCATED SHALL BE POURED SOLID WITH CONCRETE DURING THE POUR OF THE BOND/TIE BEAM. -TYPICAL-

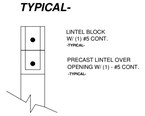
8" X 72" DEEP COMPOSITE LINTEL W/ (3) - #5 REBAR CONT. IN SOLID POUR. -TYPICAL-



8" X 24" DEEP COMPOSITE LINTEL W/ (3) - #5 REBAR CONT. IN SOLID POUR. - TYPICAL-



8" X 16" DEEP COMPOSITE LINTEL W/ (2) - #5 REBAR CONT. IN SOLID POUR. - TYPICAL-



NOTE:
PROVIDE 2" X 4" BLOCKING @ 48" O.C. @ THE BOTTOM CHORD OF ALL TRUSSES AT EXTERIOR ENTRIES AND PORCHES (AREAS EXPOSED TO WIND). CEILING SHEATHING IN THOSE AREAS TO BE 5/8" EXTERIOR GRADE DRYWALL OR 1/2" EXTERIOR GRADE PLYWOOD.

VERTICAL REINFORCEMENT:

1. AT ALL INSIDE & OUTSIDE CORNERS.
2. AT EACH SIDE OF ALL OPENINGS.
3. TWO #5 BARS ARE NEEDED AT EACH SIDE OF ALL OPENINGS WIDER THAN 12'-0".
4. AT ALL LOCATIONS WHERE A GIRDER BEAM OR GIRDER TRUSS BEAR ON MASONRY WALLS.
5. AT ALL #1 HIP TRUSS LOCATIONS.

(CONCRETE MIXTURE SHALL BE 3,000 PSI) -TYPICAL-

(1) #5 VERTICAL IN FILLED CELL @ 4'-0" O.C. (MAX.) FOR ALL 14'-0" TALL WALLS. VERTICAL DOWN ROD SHALL RUN FROM FOOTING TO TIE LINTEL & ALL STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

(1) #5 VERTICAL IN FILLED CELL @ 6'-0" O.C. (MAX.) FOR ALL 9'-4" TALL WALLS. VERTICAL DOWN ROD SHALL RUN FROM FOOTING TO TIE LINTEL & ALL STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

STRUCTURAL DESIGN BASED ON TRUSS FRAMING SHOWN. DEVIATION FROM THIS FRAMING MAY VOID STRUCTURAL DESIGN. PROVIDE TRUSS MANUFACTURERS ENGINEERING TO POLSTON ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO ORDERING TRUSSES.

NOTE:
ALL TRUSS TO TRUSS CONNECTIONS ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER PER ANSI / TPI - 2007

ALL CONTINUOUS LATERAL WEB BRACING SHOWN ON TRUSS DESIGN DRAWINGS, AND ALL BOTTOM CHORD AND PIGGY BACK RAT RUNS TO BE 2 X 4 #3 S.Y.P. AND SHALL BE PROPERLY DIAGONALLY BRACED PER THE LATEST EDITION OF WTCA'S BCSI. CONNECT TO EACH TRUSS W/ (2) 16d NAILS -TYPICAL-

WALL LEGEND

= TRUSS BEARING @ 9'-4" A.F.F.

= TRUSS BEARING @ 14'-0" ABOVE GARAGE FLOOR

ANCHORAGE SCHEDULE

	MODEL	NO.	FASTENERS	RATED UPLIFT
A	SIMPSON HETA16	1	(9) - 10d X 1 1/2	1,810#
B	SIMPSON HHETA16	1	(10) - 10d X 1 1/2	2,235#

(OR EQUIV.)

NOTE: INSTALL ALL STRUCTURAL HARDWARE ACCORDING TO MANUFACTURERS REQUIREMENTS.

UNLESS NOTED USE SIMPSON HETA16 W/ (9) - 10d X 1 1/2 = 1,810#

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MARVIN LUTHER WOLFE P.E. # 46650

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Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
STRUCTURAL & ROOF FRAMING

SCALE:
1/4"=1'-0"

SHEET # 5

GENERAL

1 THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.

2 THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION.

3 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.

4 THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANCHORED, EMBEDDED, SUPPORTED ITEMS WHICH AFFECT THE STRUCTURAL DRAWINGS AND NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.

CONCRETE AND REINFORCING

1 CONCRETE WORK SHALL CONFORM TO ACI CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02)

2 ALL CONRETE SHALL HAVE A MINUMUM 28 DAY STRENGTH & PROPERTIES AS FOLLOWS:

		MAX. SLUMP	WATER / CMT
SLAB ON GRADE & FOUNDATION	3000 PSI	6±1″	0.62
FILLED CELLS	3000 PSI	9±1″	0.65
ALL OTHER CONCRETE	3000 PSI	5±1″	0.58

3 REBARS SHALL CONFORM TO ASTM-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

4 MINIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

FOOTINGS	3″
SLABS ON GRADE	1 ½″ FROM TOP
BEAMS	1 ½″ (ON TIES)
COLUMNS	1 ½″ (ON TIES)

5 SPLICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

WELDED WIRE FABRIC	6″
LONGITUDINAL FOOTER BARS	MINIMUM 25" LAP

MASONRY

1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES (ACI 530-02 / ASCE 5-02 / TMS 402-02), SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-02 /ASCE 6-02/TMS 602-02) ASTM C476, ASTM C1019, AND NCMA TEK 107.

2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90. (f'm = 1500 PSI) (1900 PSI ON THE NET AREA)

3 MORTAR SHALL COMPLY WITH ASTM C270, TYPE M OR S. (COMPRESSIVE STRENGTH = 2500 PSI AND 1800 PSI, RESPECTIVELY. SITE TESTED MORTAR CUBES SHALL ACHIEVE A MINIMUM OF 80% OF THE DESIGN COMPRESSIVE STRENGTH)

4 BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.

5 ALL MASONRY CROSS WEBS SHALL BE FULLY BEDDED IN MORTAR AROUND CELLS TO BE GROUTED.

6 THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST BE NOT LESS THAN 2"X3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.

7 WHERE SHOWN, CELLS OF BLOCK MASONRY SHALL BE FILLED WITH GROUT WITH MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, AND MEET ASTM C476. GROUT SHALL BE PROVIDED BY CONCRETE SUPPLIER FROM THEIR BATCH PLANT WITH A SLUMP OF 8" TO 10". JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED. TESTING SHALL CONFORM TO ASTM C1019.

8 GROUT FOR FILLED CELLS SHALL BE POURED OR PUMPED IN LIFTS NOT TO EXCEED FOUR (4) FEET IN HEIGHT. FILLED CELLS SHALL BE CONSOLIDATED AT TIME OF POURING BY RODDING OR VIBRATING BETWEEN LIFTS.

9 PROVIDE KNOCK-OUT CMU AT BASE OF EACH FILLED CELL TO ALLOW VISUAL VERIFICATION OF COMPLETE GROUT PENETRATION (FOR LIFTS OF 5'-0" OR LESS, A KNOCK-OUT AT BASE OF LIFT WILL NOT BE REQUIRED).

10 VERTICAL REINFORCING MUST HAVE A MINIMUM CLEARANCE OF 1/2" TO INSIDE FACE. MIN VERTICAL BAR LAP = 40 X BAR DIAMETER. VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND LATERALLY SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 192 X BAR DIAMETER NOR 10 FT.

11 GROUT PLACEMENT STOPPED FOR (1) HOUR OR MORE SHOULD BE STOPPED (1 1/2") BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.

12 SEE FOUNDATION PLANS FOR ALL VERT FEINFORCING. TYP VERTICAL REINFORCING SIZE & SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.

13 TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

14 DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS.

15 DO NOT APPLY CONCENTRATED LOADS TO MASONRY WALLS FOR (7) DAYS.

16 EXTEND ALL VERTICAL WALL REINFORCEMENT TO WITHIN 2" OF TOP OF WALL OR BEAM UNLESS NOTED OTHERWISE. TERMINATE REIN-FORCING WITH STANDARD ACI HOOK.

17. TYPICAL HORIZONTAL WALL REINFORCING SHALL BE PREFABRICATED, GALVANIZED, LADDER TYPE, MINIMUM TWO 9-GUAGE WIRES WITH CROSS TIES. USE PREFABRICATED L'S AT CORNERS AND T'S AT WALL INTERSECTIONS WITH SAME GAUGE WIRE. HORIZONTAL REDINFORCING AT 16" O.C. VERTICALLY STARTING AT THE FIRST COURSE ABOVE THE FOUNDATION USING 6" LAP SPLICE. (FOR WALLS 10'-0" HIGH OR MORE ONLY)

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ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

Polston PE Engineering Inc.
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863-385-5564 – 863-385-2462 FAX

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:

STRUCTURAL NOTES

SCALE:

N/A

SHEET # 6

"All exterior components and cladding, including but not limited to doors, windows and roof coverings, must be certified and installed to meet the design wind pressures shown on these drawings."

5/8" CDX PLYWOOD SHEATHING
W/ 10d @ 6" O.C. EDGES &
INTERMEDIATE & @ 4" O.C. @
GABLE ENDS -TYPICAL-

26 GUAGE GALVALUME
MILL FINISH METAL ROOF
(SM PANEL WITH 9" RIB)
OVER 30# FELT
-ASTM-D-226 TYPE 1

BID ALTERNATE

26 GUAGE PAINTED METAL ROOF
WITH MINIMUM 3-YEAR AGED
SOLAR REFLECTIVE INDEX OF 64
(SM PANEL WITH 9" RIB)
OVER 30# FELT
-ASTM-D-226 TYPE 1

#9 X 1 1/2" WOOD FAST WEATHER
SEAL FASTENER SCREWS @ 12"
O.C. W/ NEOPHRENE WASHERS
OR PER MANUFACTURER SPECS.

12
5 PITCH

MINIMUM R-20 OPEN CELL SPRAY
FOAM INSULATION TO UNDERSIDE
OF ROOF DECK OVER GARAGE.

NOTE: METAL ROOF ASSEMBLY
CERTIFIED TO WITHSTAND
150 MPH WIND SPEEDS.

UNLESS NOTED USE
SIMPSON HETA16
W/ (9) - 10d X 1 1/2 = 1,810#

PRE-ENGINEERED
WOOD TRUSSES
@ 24" O.C.

UN-VENTED
ATTIC
SPACE

GUTTER STRAPS @ 24" O.C.

-TYPICAL-
24 GA. MTL. GUTTER

3 X 4 MTL.
DOWNSPOUT

CONCRETE FILLED
DOUBLE LINTEL BLOCK
COURSE W/ (1) #5 BAR
CONTINUOUS IN EACH

5/8" TYPE-X CEILING BOARD
W/ KNOCK DOWN FINISH

ALUMINUM DRIP EDGE
6" ALUMINUM FACIA OVER
2" X 6" SPRUCE SUB-FACIA

NON-VENTED VINYL SOFFIT

20"
OVERHANGS

CONTINUOUS INTERMEDIATE POUR
(TOP @ 9'-4") FILLED SOLID WITH
(1) #5 BAR (3000 P.S.I. CONC.)

3/8" STUCCO WITH SAND FINISH
ON ALL INTERIOR GARAGE WALLS.
(LAUNDRY AREA & CLOSET)

14'-0"

9'-4"

TYPICAL HORIZONTAL WALL REINFORCING SHALL BE PREFABRICATED, GALVANIZED, LADDER TYPE, MINIMUM TWO 9-GUAGE WIRES WITH CROSS TIES. USE PREFABRICATED L'S AT CORNERS AND T'S AT WALL INTERSECTIONS WITH SAME GAUGE WIRE. HORIZONTAL REDINFORCING AT 16" O.C. VERTICALLY STARTING AT THE FIRST COURSE ABOVE THE FOUNDATION USING 6" LAP SPLICE. (FOR WALLS 10'-0" HIGH OR MORE ONLY)

(1) #5 VERTICAL IN FILLED CELL @ 4'-0" O.C. (MAX.)
FOR ALL 14'-0" TALL WALLS. VERTICAL DOWN ROD
SHALL RUN FROM FOOTING TO TIE LINTEL & ALL
STEEL LAPS SHALL BE MIN. OF 30". -TYPICAL-

FOOTING DOWEL: (TYP)
#5 REBAR W/ STANDARD HOOK @ ALL VERTICAL REBARS.
-ALL CORNERS
- (1) BAR EACH SIDE OF ALL OPENINGS
- (2) BARS EACH SIDE OF ALL OPENINGS WIDER THAN 12'-0"
- UNDER ALL GIRDER TRUSSES
(ALSO REFER TO STRUCTURAL PAGE FOR VERTICAL PLACEMENT)

1/2" THICK STUCCO WITH SKIP TROWEL
FINISH ON ALL EXTERIOR WALLS (TYP.)

CONCRETE SLAB
THICKNESS OF 6".
(MINIMUM TO BE 5 1/2")

FINISH FLOOR

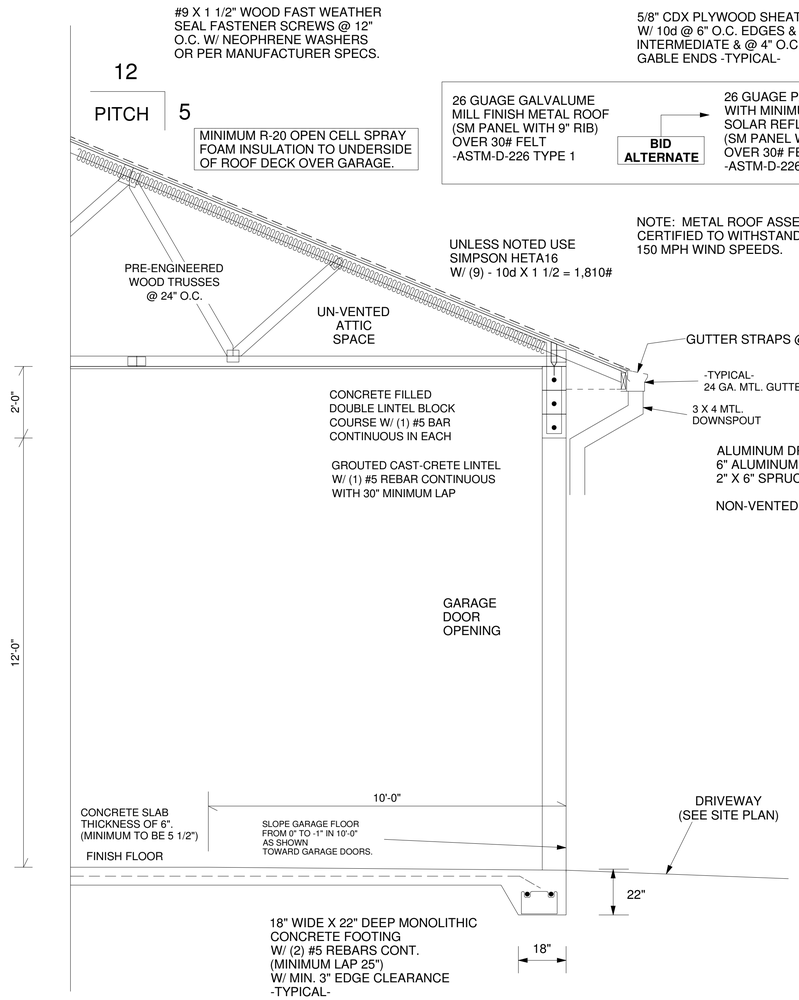
22"

FINISHED GRADE @ 4"
BELOW FINISHED FLOOR

18"

SUPPORT LONGITUDINAL FOOTER BARS
WITH CHAIRS @ 4'-0" 0.C. (TYPICAL)

18" WIDE X 22" DEEP MONOLITHIC
CONCRETE FOOTING
W/ (2) #5 REBARS CONT.
(MINIMUM LAP 25")
W/ MIN. 3" EDGE CLEARANCE
-TYPICAL-



MONOLITHIC FLOOR SLAB:

1. FOUNDATION WALL SHALL BE FILLED WITH CLEAN FILL DIRT.
2. FILL DIRT SHALL BE MECHANICALLY COMPACTED TO 1,500 LBS PER SQ. FOOT MINIMUM. 95% MODIFIED PROCTOR. THEN GRADED TO ALLOW A CONCRETE THICKNESS OF 6". (MINIMUM TO BE 5 1/2")
3. GRADED FILL DIRT SHALL THEN BE TERMITE TREATED AND A VAPOR BARRIER OF 6 MIL. VISQUEEN LAID IN PLACE WITH JOINTS LAPPED NOT LESS THAN 6 INCHES.
4. FLOOR CONCRETE MIXTURE SHALL BE 3,000 PSI AND SHALL BE REINFORCED WITH FIBER-MESH (@ LIVING SPACE). FIBERS SHALL COMPLY WITH ASTM C 1116 AND DOSAGE AMOUNTS ARE TO BE PER THE FIBER MANUFACTURERS RECOMMENDATIONS.
5. GARAGE FLOOR REINFORCEMENT OF 6" X 6" W2.9 X W2.9 WWM FABRIC LOCATED IN THE MIDDLE TO THE UPPER ONE THIRD OF THE SLAB. WELDED WIRE REINFORCEMENT FABRIC SHALL BE SUPPORTED WITH APPROVED MATERIALS AT SPACING NOT TO EXCEED 3 FEET OR IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. -TYPICAL-

SECTION DETAIL M-M

SCALE:1/2"=1'-0"

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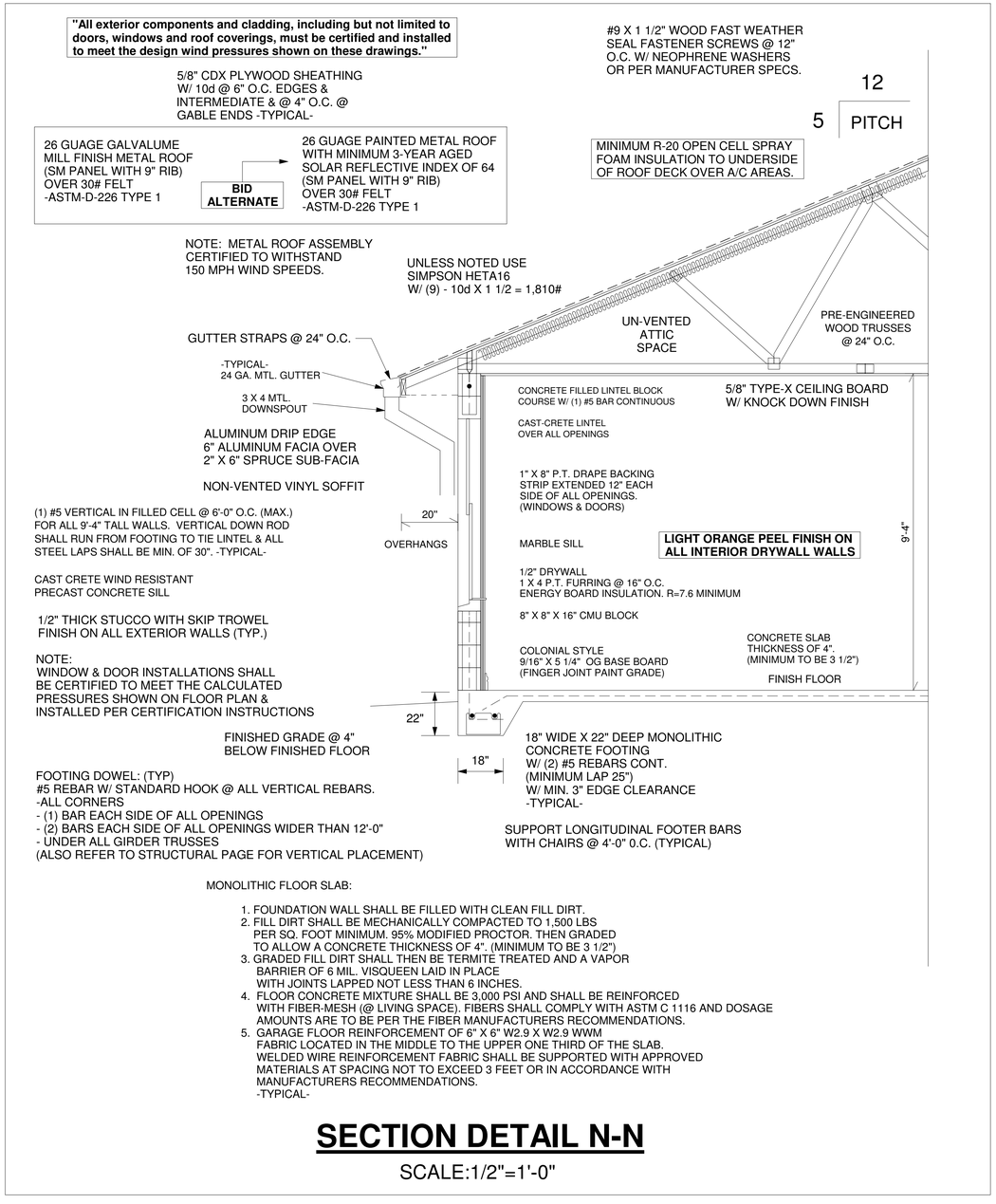
Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
SECTION
DETAIL M-M

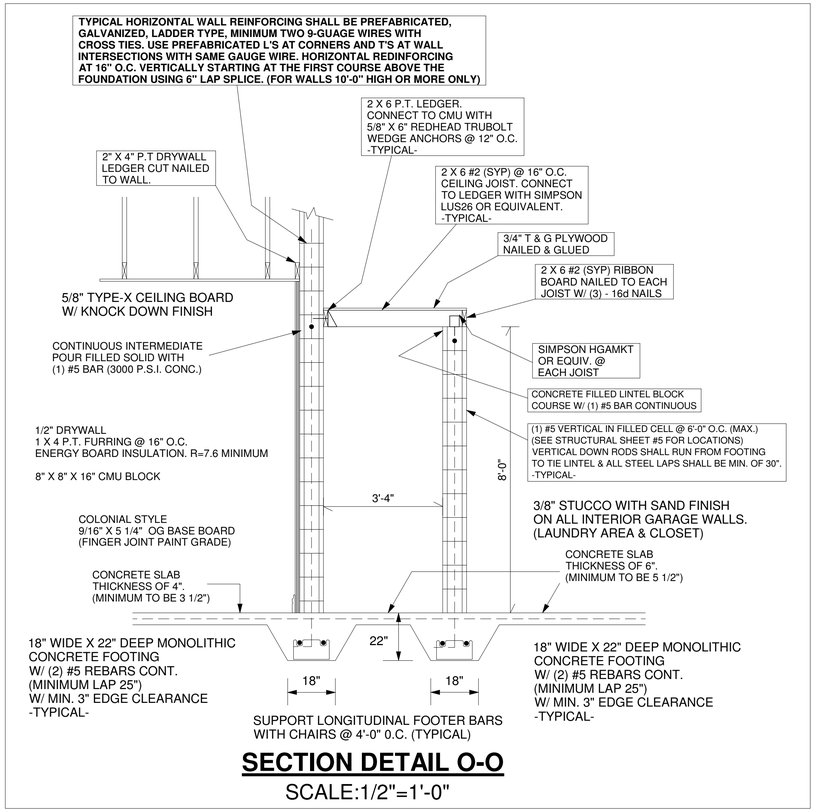
SCALE:
1/2"=1'-0"

SHEET # 7



SECTION DETAIL N-N

SCALE:1/2"=1'-0"



SECTION DETAIL O-O

SCALE:1/2"=1'-0"

DR	CH	DATE:
		9-8-2015
		9-25-2015
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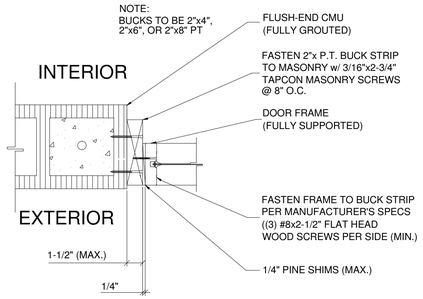
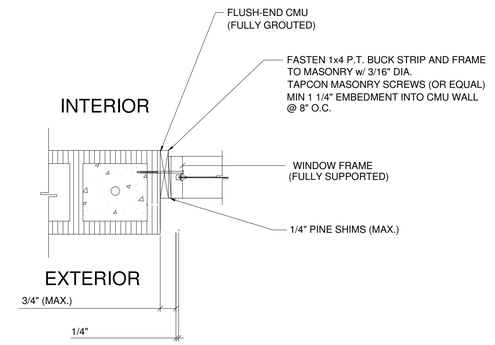
DRAWING:
SECTION DETAILS N-N & O-O

SCALE:
1/2"=1'-0"

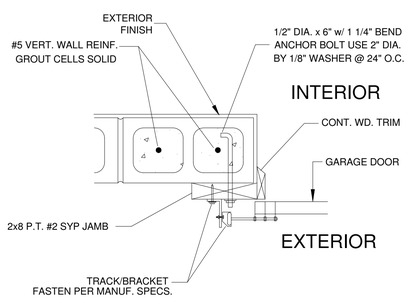
SHEET # 8



-TYP.-
EXTERIOR DOOR TO BLOCK
ATTACHMENT DETAIL
N.T.S.



-TYP.-
WINDOW TO BLOCK
ATTACHMENT DETAIL
N.T.S.



GARAGE DOOR TO BLOCK
ATTACHMENT DETAIL
N.T.S.

DR	CH	DATE:
		9-8-2015
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		10-15-2015
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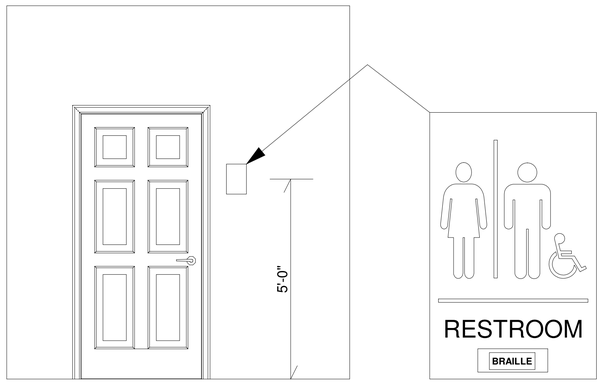
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
DOOR & WINDOW
BUCK DETAILS

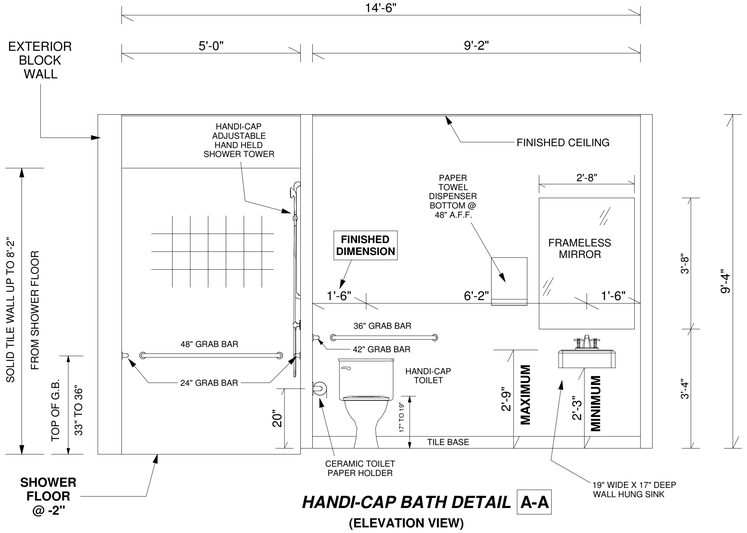
SCALE:
AS SHOWN

SHEET # 9



HANDI-CAP BATHROOM DOOR

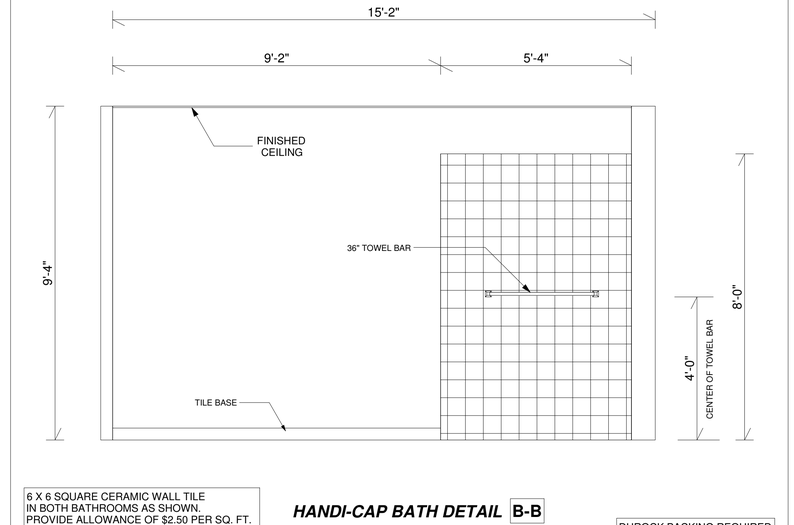
N.T.S.



HANDI-CAP BATH DETAIL A-A

(ELEVATION VIEW)

SCALE:1/2"=1'-0"



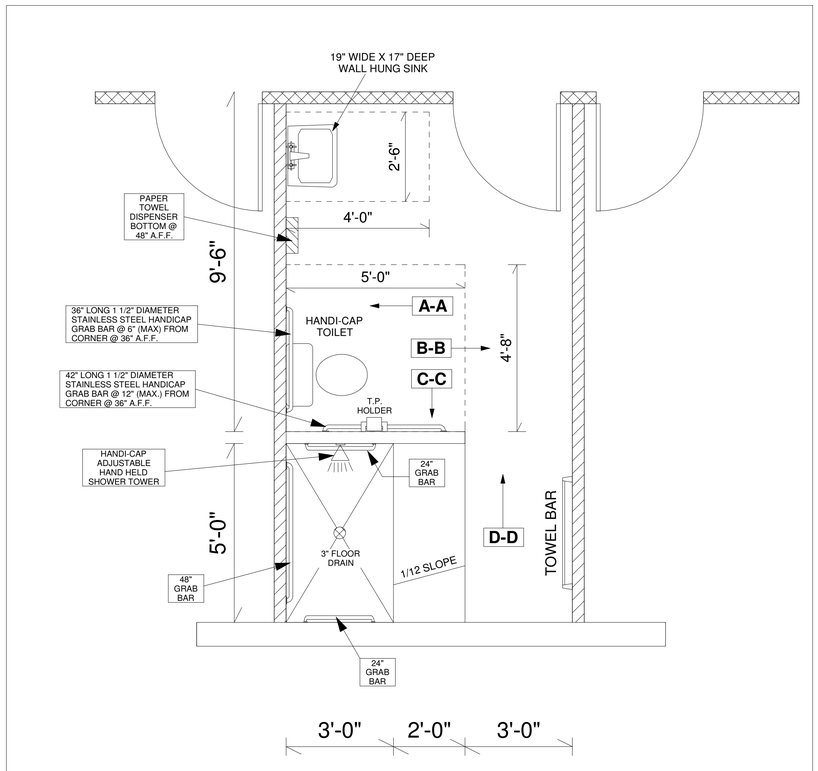
6 X 6 SQUARE CERAMIC WALL TILE IN BOTH BATHROOMS AS SHOWN. PROVIDE ALLOWANCE OF $2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)

HANDI-CAP BATH DETAIL B-B

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

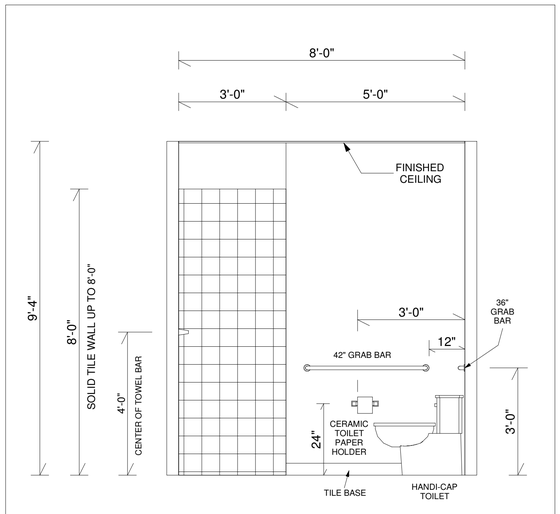
DUROCK BACKING REQUIRED ON ALL WALLS RECEIVING CERAMIC TILE -TYPICAL-



HANDI-CAP BATH DETAIL

(FLOOR PLAN VIEW)

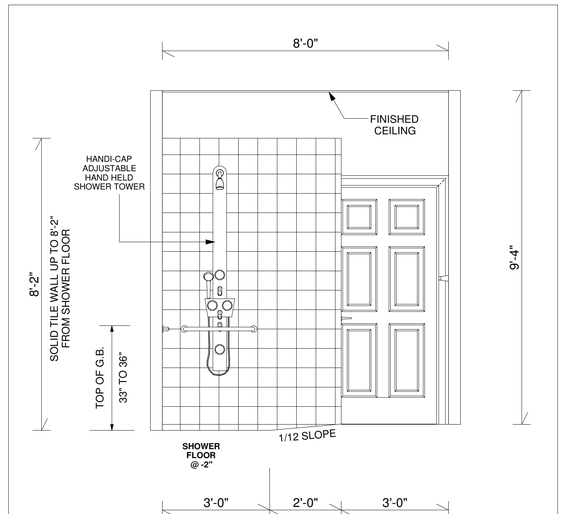
SCALE:1/2"=1'-0"



HANDI-CAP BATH DETAIL C-C

(ELEVATION VIEW)

SCALE:1/2"=1'-0"



HANDI-CAP BATH DETAIL D-D

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

DATE:	DR	CH
9-8-2015		
9-25-2015		
10-15-2015		
2-25-2016		
8-5-2016		
8-16-2016		
10-31-2016		

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

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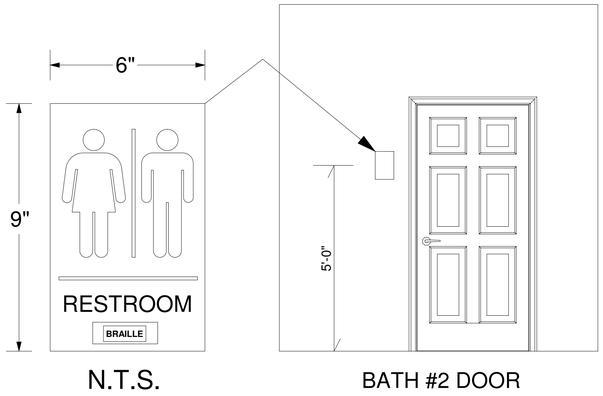
Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
HANDI-CAP BATHROOM DETAILS

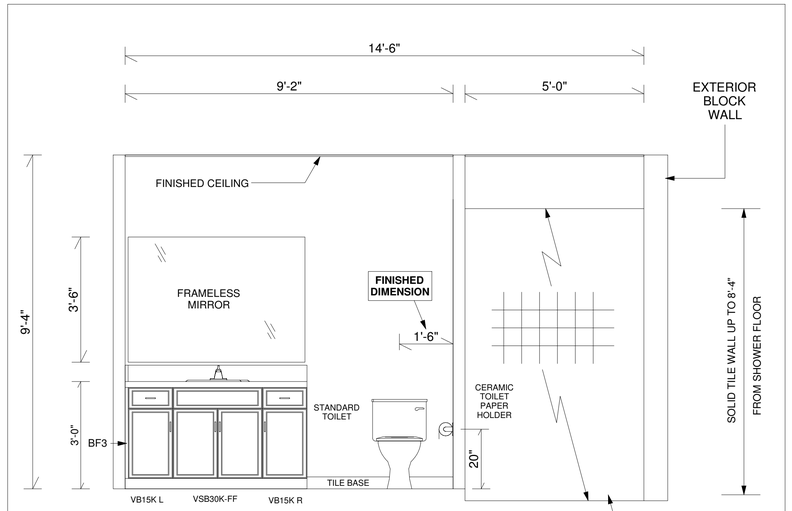
SCALE:
AS SHOWN

SHEET # 10



N.T.S.

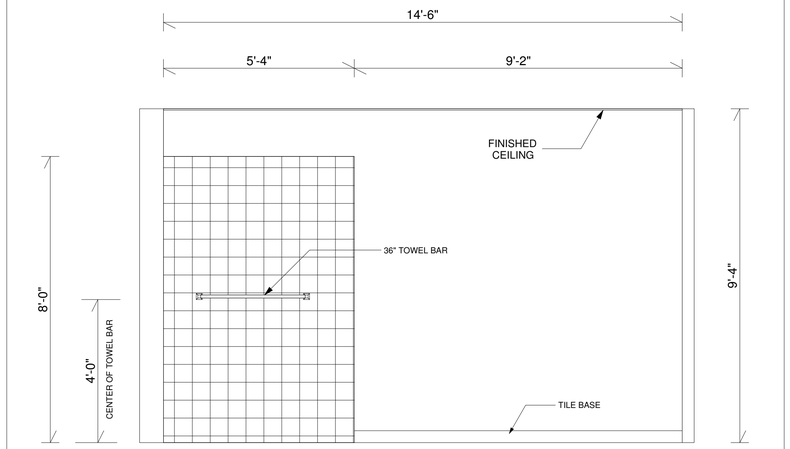
BATH #2 DOOR



BATH #2 DETAIL **E-E**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"



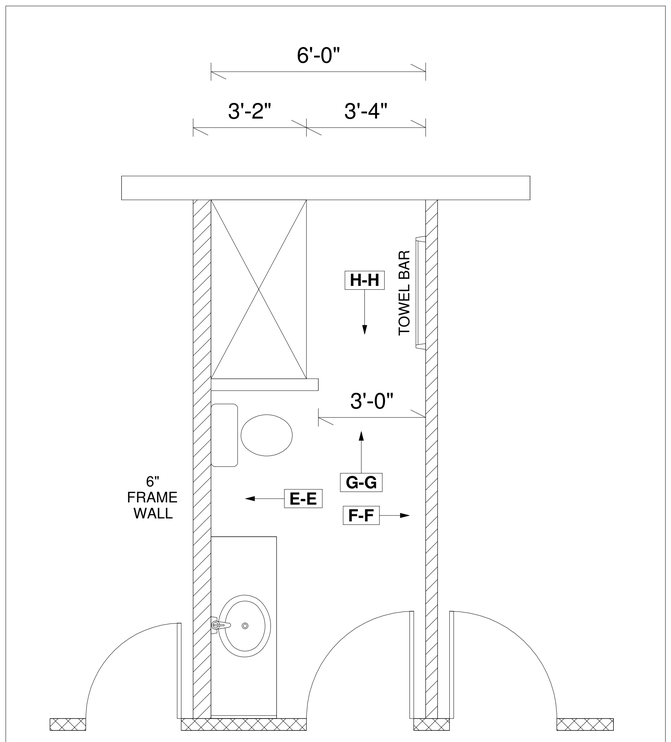
DUROCK BACKING REQUIRED ON ALL WALLS RECEIVING CERAMIC TILE -TYPICAL-

BATH #2 DETAIL **F-F**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

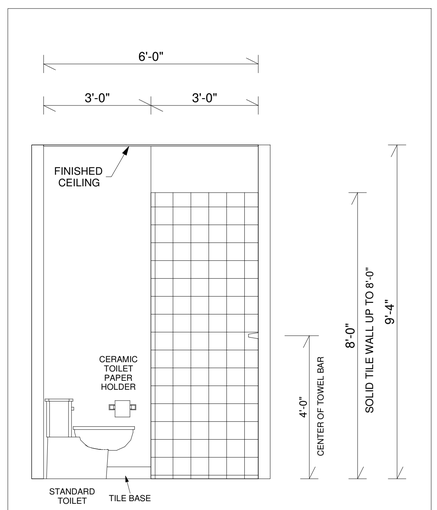
6 X 6 SQUARE CERAMIC WALL TILE IN BOTH BATHROOMS AS SHOWN. PROVIDE ALLOWANCE OF $2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)



BATH #2 DETAIL

(FLOOR PLAN VIEW)

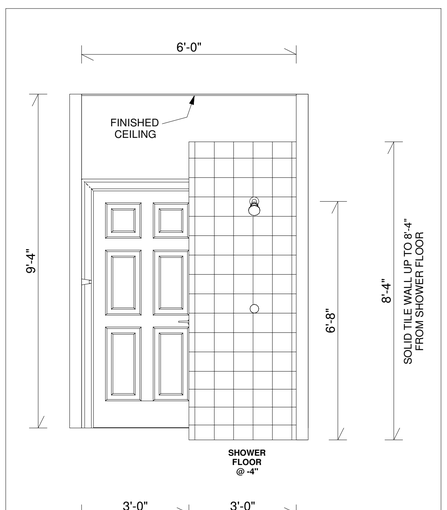
SCALE:1/2"=1'-0"



BATH #2 DETAIL **G-G**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"



BATH #2 DETAIL **H-H**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

DR	CH	DATE:
		9-8-2015
		9-25-2015
		10-15-2015
		2-25-2016
		8-5-2016
		8-16-2016
		10-31-2016

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46630

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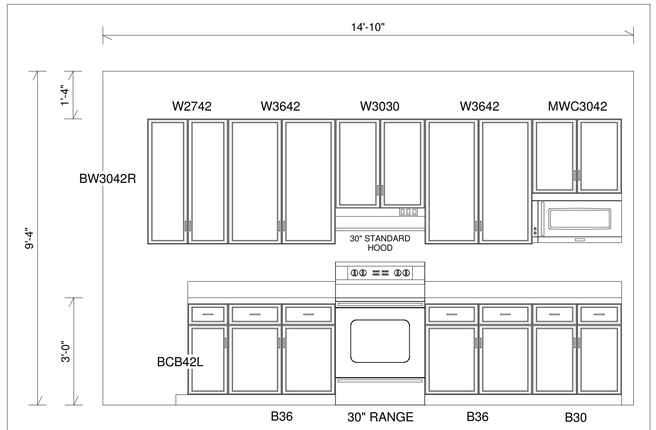
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
BATHROOM #2 DETAILS

SCALE:
AS SHOWN

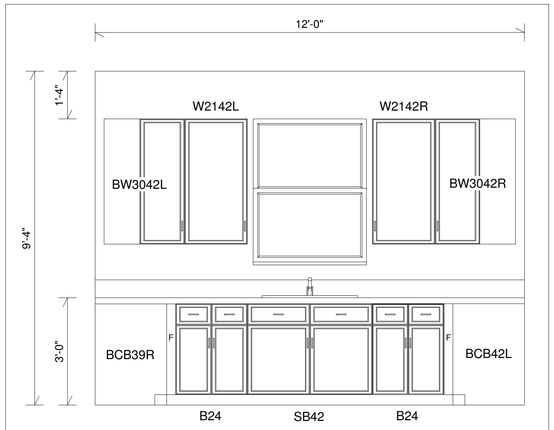
SHEET # 11



***KITCHEN CABINET DETAIL* J-J**

(ELEVATION VIEW)

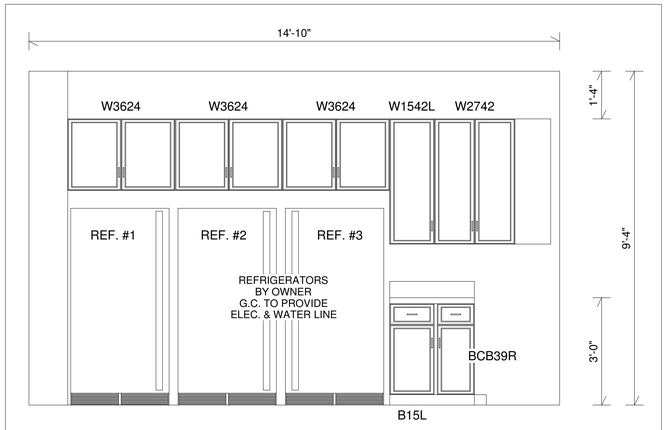
SCALE:1/2"=1'-0"



***KITCHEN CABINET DETAIL* K-K**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

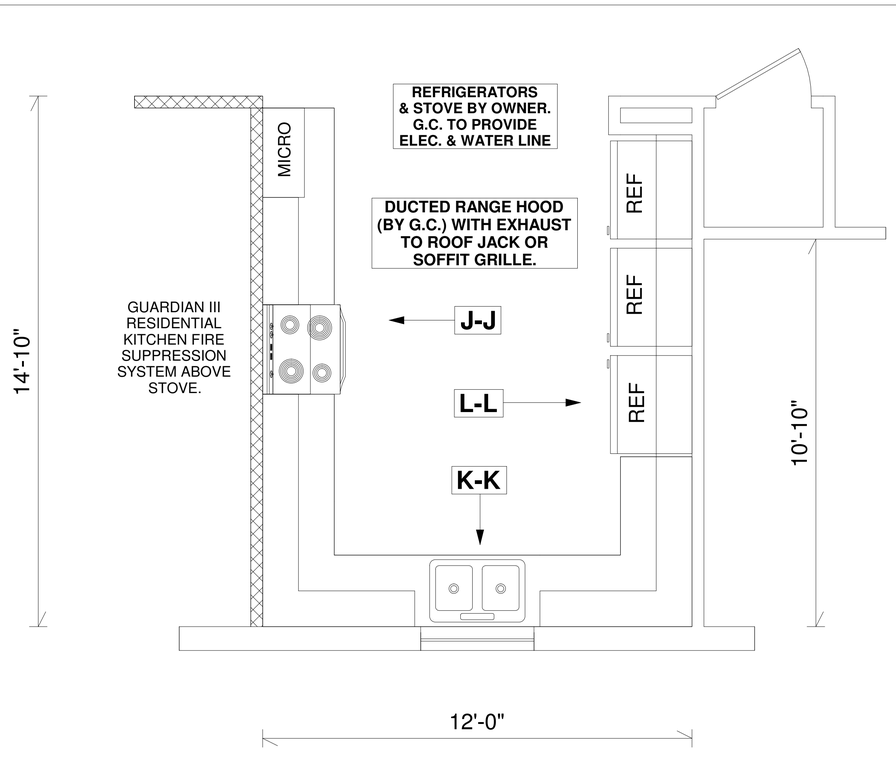


***KITCHEN CABINET DETAIL* L-L**

(ELEVATION VIEW)

SCALE:1/2"=1'-0"

ALL DIMENSIONS & SIZE DESIGNATIONS GIVEN ARE SUBJECT TO VERIFICATION ON JOB SITE AND ADJUSTMENT TO FIT CONDITIONS.



KITCHEN LAYOUT & DESIGN

SCALE:1/2"=1'-0"

CABINET SPECIFICATIONS

CABINET CONSTRUCTION TO BE LAMINATE ON PLYWOOD CONSTRUCTION.
LAMINATE ON CABINETS SHALL BE VERTICAL GRADE.
BASE CABINET HEIGHT = 34 1/2" AND DEPTH = 24"
VANITY BASE HEIGHT = 34 1/2" AND DEPTH = 21"
WALL CABINET HEIGHT = 42" AND DEPTH = 12"
DRAWERS TO BE MINIMUM 1/2" PLYWOOD SIDES WITH MINIMUM 1/4" PLYWOOD CAPTIVE BOTTOM.
DRAWER SLIDES TO BE FULL EXTENSION HEAVY DUTY BALL BEARING SLIDES.
ADJUSTABLE HALF SHELVES IN BASE CABINETS AND FULL DEPTH SHELVES IN WALL CABINETS.
DOORS AND DRAWER FRONTS SHALL BE RAISED PANEL THERMOFOIL TO MATCH LAMINATE.
HINGES TO BE CONCEALED TYPE HINGES WITH MINIMUM 100 DEGREE OPENING ANGLE.
PROVIDE A $4.00 ALLOWANCE PER HANDLE OR KNOB FOR DOORS & DRAWERS.

COUNTERTOP SPECIFICATIONS

KITCHEN COUNTERTOPS TO BE STANDARD COLOR LAMINATE ON PLYWOOD CONSTRUCTION.
BACKSPLASH TO BE 4" TALL LAMINATE ON PLYWOOD CONSTRUCTION.
LAMINATE ON COUNTERTOPS AND BACK SPLASHES SHALL BE HORIZONTAL GRADE.
BATH COUNTERTOPS TO BE CULTURED MARBLE WITH INTEGRAL SINK AND BACKSPLASH.

CONSTRUCTION NOTES

PROVIDE WALL CABINET WITH OPENING AND SHELF FOR A COUNTERTOP MICROWAVE OVEN.
CABINET OVER RANGE HOOD VENT WILL HOUSE FIRE SUPPRESSION EQUIPMENT.
USE BLIND CORNER CABINETS IN BASE AND WALL APPLICATIONS - (NO LAZY SUSANS).
PROVIDE A MINIMUM 74" WIDE BY 72" TALL OPENING FOR 2 STANDARD 36" REFRIGERATORS.
PROVIDE A CUTOUT IN LAMINATE TOP FOR STANDARD STAINLESS DROP IN SINK.

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		10-15-2015
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		8-5-2016
		8-16-2016
		10-31-2016

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ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

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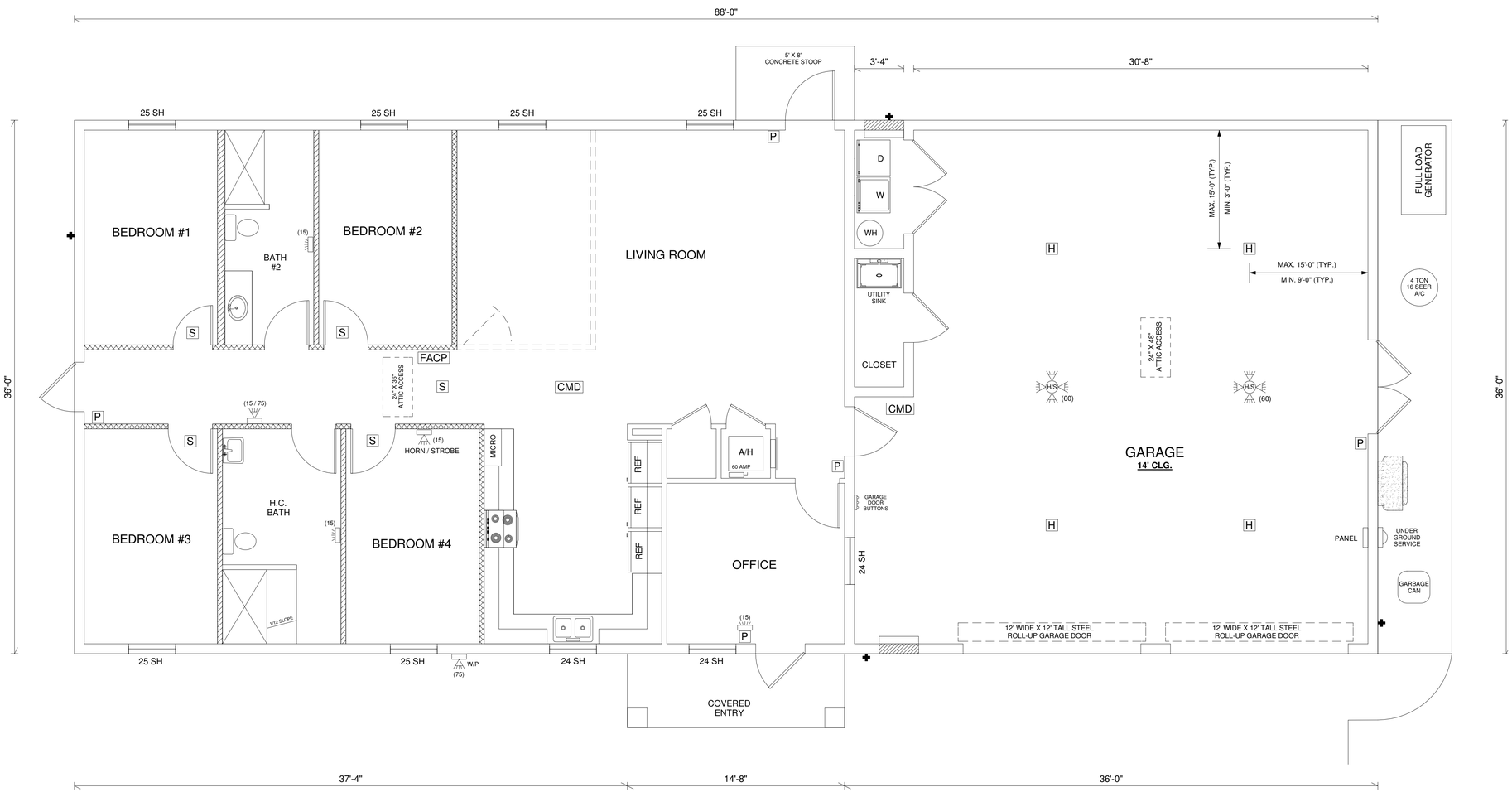
Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
KITCHEN CABINET DETAIL & SPECS

SCALE:
1/2"=1'-0"

SHEET # 12



LEGEND

FACP	FIRE ALARM CONTROL PANEL (5 ZONE)
P	MANUAL PULL STATION
S	PHOTO-ELECTRIC SMOKE DETECTOR
H	RATE-OF-RISE SPOT HEAT DETECTOR (194 DEGREES)
CMD	CARBON MONOXIDE DETECTOR
	WALL MOUNT FIRE HORN / STROBE (cd)
	WALL MOUNT FIRE STROBE (cd)
W/P	OUTDOOR WALL MOUNT FIRE HORN / STROBE (cd)
H/S	CEILING MOUNT FIRE HORN / STROBE (cd)

FIRE ALARM SYSTEM TO BE INSTALLED PER - NFPA 70 & 72
& FOLLOW DESIGN OF NFPA 101 & (CURRENT APPLICABLE EDITIONS)

FIRE ALARM DESIGN BY:

SAFEGUARD SECURITY, INC.
528 W. MAIN ST.
P.O. BOX 2048
WAUCHULA, FLA. 33873

Sprinkler valve tamper switch and water flow switch to be connected to fire alarm.

Generator monitoring of :
(1) Generator running

(2) Generator fault

(3) Generator switch in nonautomatic position (Per NFPA 110) to be connected to fire alarm.

Input/output matrix, riser diagram, wire voltage drop and battery calcs to be included with permit application from fire alarm contractor of record.
Spec sheets of all equipment to be submitted at time of permit application.

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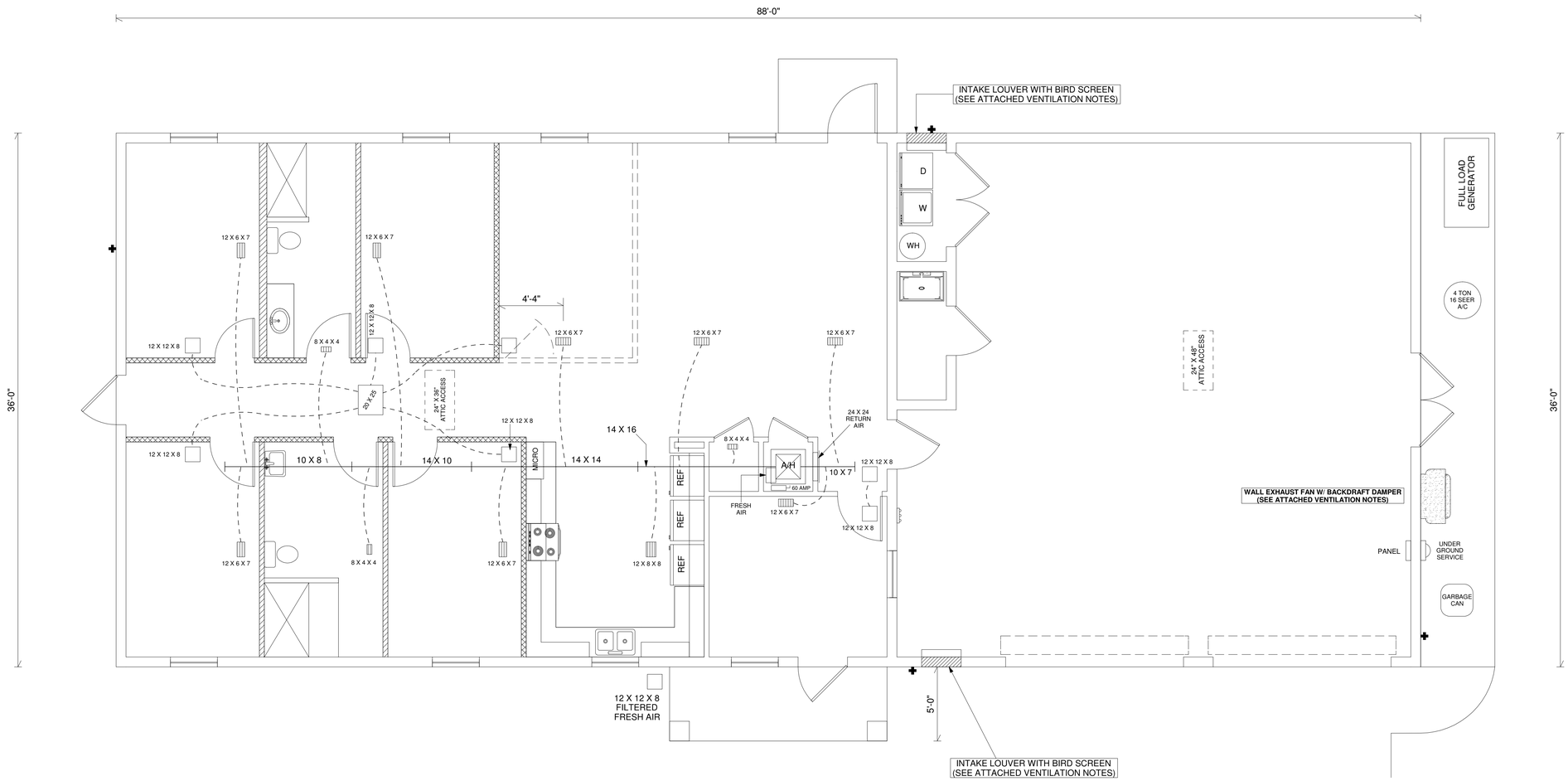
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
FIRE ALARM

SCALE:
1/4"=1'-0"

SHEET # 13



AIR CONDITIONING SPECIFICATIONS

1. AIR CONDITIONER TO BE 4 TON 16 SEER WITH 10 KW ELECTRIC HEAT.

2. ALL SUPPLY GRILLS AND FRESH AIRS TO HAVE ROUND DAMPERS AT DUCT TAKE OFFS FOR AIR BALANCING.

3. ALL SUPPLY GRILLES ARE TO BE CURVED BLADES AND FULLY ADJUSTABLE.

4. MAIN RETURN AIR TO HAVE WIDE LOUVERS AND NOT STAMPED LOUVERS. HOP OVER RETURNS NEED TO HAVE WIDE LOUVERS ALSO.

5. ALL TRUNKLINES TO BE 1 1/2" FIBROUS DUCTBOARD R-6 INSULATION.

6. DRAINLINE TO BE SLABBED IN GROUND AND REFRIGERANT LINES TO BE RAN OVERHEAD.

7. DRYER VENTING AND RANGE VENTING TO BE PROVIDED AND INSTALLED TO CODE.

8. ONE CASE OF 24" X 24" FILTERS TO BE PROVIDED TO OWNER WITH OWNER MANUAL.

GENERAL NOTES: FOR GARAGE VENTILATION

PROVIDE VENTILATION PER FMC 2014 SECTION 404. EXHAUST FAN AND LOUVER SIZE AND LOCATION SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SIZES AND LOCATIONS OF ALL ROUGH OPENINGS.

ALL INTAKE LOUVERS SHALL BE LARGE AND SMALL MISSILE IMPACT RATED. (INCLUDING WALL EXHAUST FAN AND BACKDRAFT DAMPER)

IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE CODE, THE CODE SHALL TAKE PRECEDENCE. THE MECHANICAL CONTRACTOR SHALL STUDY THE CONTRACT DOCUMENTS AND SUBMIT A BID BASED ON WORK WHICH COMPLIES WITH ALL CODE REQUIREMENTS. ANY CONFLICT BETWEEN THE CONTRACTOR DOCUMENTS AND THE CODE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER PRIOR TO BID. THE COST OF ANY WORK WHICH ARISES OUT OF ANY CHANGES DUE TO CODE REQUIREMENTS SHALL BE PAID BY THE MECHANICAL CONTRACTOR.

DATE:	DR	CH
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10-31-2016		

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2925 KENILWORTH BLVD. SEBRING FLORIDA 33870
863-385-1564 • 863-385-2462 FAX

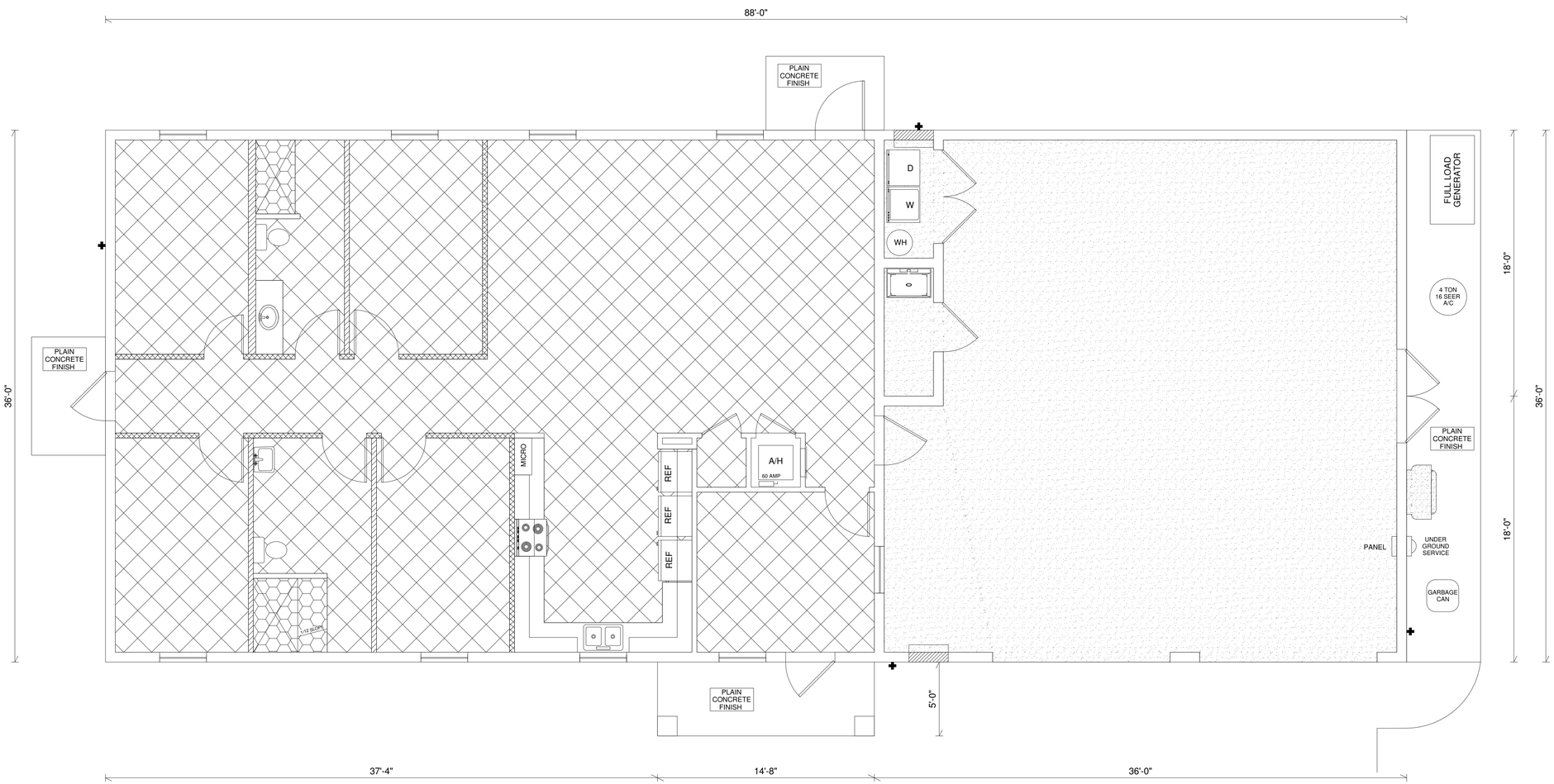
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
A/C PLAN

SCALE:
1/4"=1'-0"

SHEET # 14



FLOORING SPECIFICATIONS

6 X 6 NON-SLIP HEXAGON CERAMIC FLOOR TILE ON SHOWER FLOORS. PROVIDE ALLOWANCE OF $2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)

16 X 16 NON-SLIP CERAMIC FLOOR TILE ON FLOORS AS SHOWN. PROVIDE ALLOWANCE OF $2.50 PER SQ. FT. FOR TILE ONLY. ALL TILE SETTING MATERIAL & GROUT BY BUILDER. -TYPICAL- (COLOR TO BE SELECTED BY OWNER)

NON-SLIP EPOXY PAINT ON GARAGE FLOOR, LAUNDRY ROOM FLOOR & CLOSET AS SHOWN. (COLOR TO BE SELECTED BY OWNER)

STAINED CONCRETE

PLAIN CONCRETE FINISH

DATE:	DR	CH
9-8-2015		
9-25-2015		
10-15-2015		
2-25-2016		
8-5-2016		
8-16-2016		
10-31-2016		

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2925 KENILWORTH BLVD. SEBRING, FLORIDA 33870
863-385-5964 – 863-382-2462 FAX

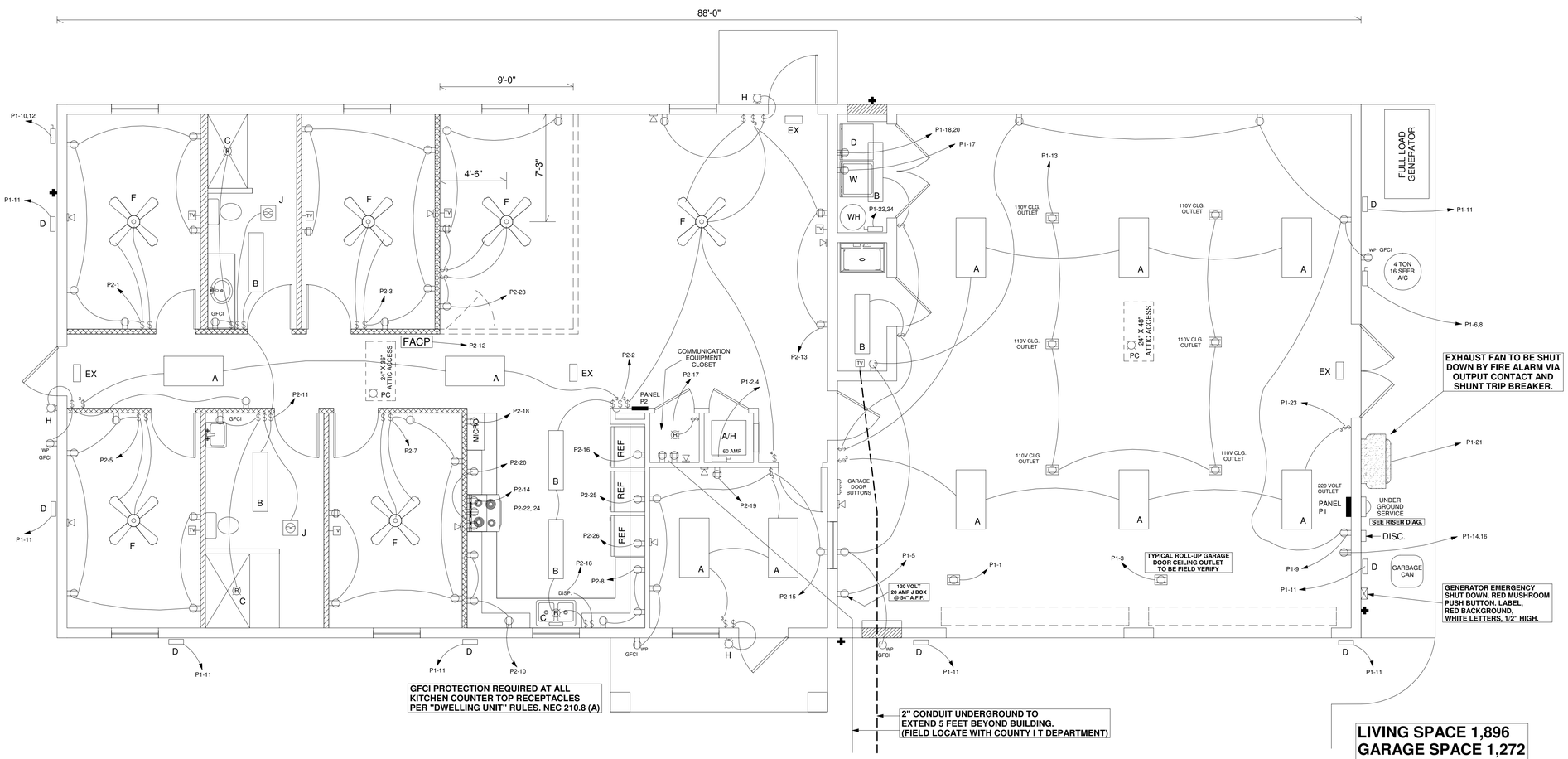
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
FLOORING PLAN

SCALE:
1/4"=1'-0"

SHEET # 15



ELECTRICAL NOTES:

1. All branch circuit wiring in MC cable.
2. All light fixtures supported per NEC.
3. All devices 15 amp, 125 volt. Receptacles to be tamper resistant, mounted 18" AFF to center, except mounted above counters to be 44" AFF to center. Switches are toggle, mounted 46" AFF to center. Color per Owner.
4. Exterior wall pack lights and sign lights are to be controlled by a photo cell facing north, with a switch to bypass the photocell should the photo cell fail. Switch to be located by Owner or GC. If necessary, shield the photo cell from lighting on Sebring Parkway.
5. Grounding system to be 24 ohms or less. If more ground rods are required, couple the existing rods with another 10' rod to drive deeper. Demonstrate to Owner the ground reading.
6. Lightning protection system to be priced separately. Design and installation by a certified and licensed contractor.
7. Surge protection device to be installed on panel P1, made by Eaton, Zoro #G3170851, mfr. #CVX050-208Y.
8. Three copies in three ring binders, and one disc shall be provided to the Owner for the operational, instructional, and maintenenace manuals for the electrical panels, surge arrestor, disconnect switches, generator, and automatic transfer switch.
9. Electrical panels, disconnect switches shall be labeled with 1" or higher black phenolic tags with 3/16" white lettering. Tags shall be fastened with screws or rivets. Disconnect switch tags shall state the panel and circuit number, and the equipment served. Panels shall state the panel name, voltage and phases. Auto transformer and generator will have red background with 3/16" high white letters.
10. Upon completion of the project, the electrical contractor shall review the function and operation of the equipment with the Owner, including shutting off power to the facility to demonstrate the operation of the standby generator. The time and frequency to exercise the generator shall be set per the Owners requirements.
11. All work per NEC and local codes.

FIXTURE SCHEDULE

TYPE	DESCRIPTION
A	2 X 4 FLUOR. LITHONIA 2GT8432A12120 GEB10IS, W/ PLASTER FRAME, W/ 4 EA. 32 WATT LAMPS
B	1 X 4 FLUOR. LITHONIA GT8232A12120 GEB10IS, W/ PLASTER FRAME, W/ 2 EA. 32 WATT LAMPS
C	RECESSED, LITHONIA L7XF W/ 6LF2, 26 WATT TRT LAMP
D	WALL PACK, RAB LIGHTING WP1CF42, BRONZE, W/ LAMPS
EX	EXIT LIGHT, LITHONIA, EXR LED EL M6 RED, W/ BATTERY BACK-UP
F	CEILING FAN, HAMPTON BAY SOUTHWIND 52", BRUSHED NICKLE, W/ REMOTE, MODEL 52379, W/ LIGHT KIT, 40 WATT LAMPS
G	SIGN LIGHT, RAB LIGHTING EZF32QT, BRONZE, W/ LAMP
H	EXTERIOR WALL MOUNT, PROGRESS P5721-71, W/ 60 WATT LAMP
J	BATH EXHAUST FAN, NUTONE QTXEN150, USE W/ TIMER SWITCH, LEVITON LTB30-1LZ **(WITH EXHAUST DUCTED TO SOFFIT GRILLE)**

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	Ventilation Fan: Ceiling Mounted
	Ceiling Mounted Light Fixture: Recessed
	Wall Mounted Light Fixtures: Flush Mounted
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacle: Quadruplex
WP GFCI	110V Receptacles: Duplex, Weather Proof, GFCI
S WP S 3 S 4	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
TV	SINGLE GANG BOX WITH 1" CONDUIT (WITH PULL STRING) RUN BACK TO CLOSET ON OPPOSITE WALL FROM UTILITY SINK. COUNTY I T DEPARTMENT WILL PROVIDE CABLING & JACKS.
	SINGLE GANG BOX WITH 1" CONDUIT (WITH PULL STRING) RUN BACK TO THE COMMUNICATIONS EQUIPMENT LOCATION IN THE OFFICE. COUNTY I T DEPARTMENT WILL PROVIDE THE VOICE/DATA CABLING & JACKS.

DATE:	DR	CH
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863-385-5564 - 863-385-2462 FAX

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:
ELECTRICAL PLAN

SCALE:
1/4"=1'-0"

SHEET # 16

PANEL SCHEDULE

PANEL P 1

FEEDER 3 ea. 3/0 cu | NEUTRAL 3/0 thhn cu | E.G. #6 cu | 2 1/2" C

225A MLO

	DESCRIPTION					DESCRIPTION	
1	GARAGE DOOR OPENER	1127	20	50	5000	AIR HANDLER	2
3	GARAGE DOOR OPENER	1127	20		5000		4
5	SPRINKLER TAMPER/FLOW ALARM	180	20	40	4000	CONDENSING UNIT	6
7	SPARE	-0-	20		4000		8
9	GARAGE OUTLETS	1260	20	20	1380	IRRIGATION PUMP	10
11	EXTERIOR & SIGN LIGHTING	400	20		1380		12
13	GARAGE CEILING LIGHTS	720	20	30	2680	COMPRESSOR OUTLET	14
15	GENERATOR OUTLET & BATT. CHGR.	240	20		2680		16
17	WASHING MACHINE	1440	20	30	2640	DRYER	18
19	SPARE	-0-	20		2640		20
✳✳ 21	GARAGE EXHAUST FAN	1200	20	30	2250	WATER HEATER	22
23	GARAGE LIGHTING	896	20		2250		24
25	SUB PANEL "P2"	9264	100	30		SURGE PROTECTION DEVICE	26
27		9796	100				28
29		10,500	100				30
31							32
33							34
35							36
37							38
39							40
41							42

✳✳ SHUNT TRIP BREAKER

TOTAL LINE A	25,431
TOTAL LINE B	24,933
TOTAL LINE C	23,686
TOTAL A & B & C	74,050
25% LIGHTING	710
25% LARGEST MOTOR	1602
TOTAL DEMAND VA	68,362
TOTAL AMPS	189.8

PANEL SCHEDULE

PANEL P 2

FEEDER 3 ea. #3 thhn | NEUTRAL 1 ea. #3 thhn cu | E.G. #8 thhn cu | 1 1/4" C

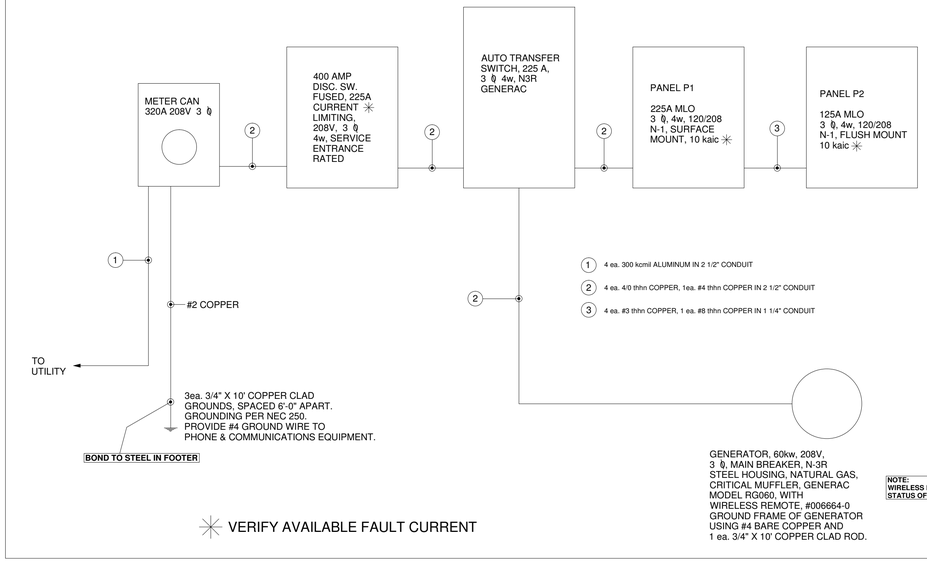
MLO, 125A

	DESCRIPTION					DESCRIPTION	
1	BEDROOM #1 ✳	1360	20	20	864	KITCHEN, HALL LIGHTING	2
3	BEDROOM #2 ✳	1360	20	20	-0-	SPARE	4
5	BEDROOM #3 ✳	1360	20	20	-0-	SPARE	6
7	BEDROOM #4 ✳	1360	20	20	540	KITCHEN OUTLETS	8
9	SPARE	-0-	20	20	540	KITCHEN OUTLETS	10
11	H.C. BATH & BATH #2	660	20	20	180	FACP	12
13	LIVING AREA ✳	1060	20	20	180	GUARDIAN FIRE SYSTEM	14
15	OFFICE	1396	20	20	1500	REFRIGERATOR #3	16
17	COMMUNICATIONS LIGHTING & RECEPTACLES	784	20	20	1760	MICROWAVE-GARBAGE DISPOSAL	18
19	COMMUNICATIONS OUTLET	360	20	20	540	KITCHEN OUTLETS & HOOD	20
21	SPARE	-0-	20	50	5000	RANGE	22
23	FUTURE BEDROOM ✳	1180	20	50	5000		24
25	REFRIGERATOR #1	1500	20	20	1500	REFRIGERATOR #2	26
27	SPACE					SPACE	28
29	SPACE					SPACE	30
31							32
33							34
35							36
37							38
39							40
41							42

TOTAL LINE A	9264
TOTAL LINE B	9,796
TOTAL LINE C	10,500
TOTAL A & B & C	29,560
25% LIGHTING	SEE PANEL P1 FOR TOTAL
25% LARGEST MOTOR	SEE PANEL P1
TOTAL DEMAND VA	29,560
TOTAL AMPS	82.1

✳ AFCI PROTECTION REQUIRED

ELECTRICAL RISER DIAGRAM



DATE:	DR	CH
9-8-2015		
9-25-2015		
10-15-2015		
2-25-2016		
8-5-2016		
8-16-2016		
10-31-2016		

CERTIFICATE OF AUTHORIZATION #5684
ROGER DALE POLSTON P.E. # 33222
MARVIN LUTHER WOLFE P.E. # 46650

Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD. SEBRING, FLORIDA 33870
863-385-5564 • 863-385-2465 FAX

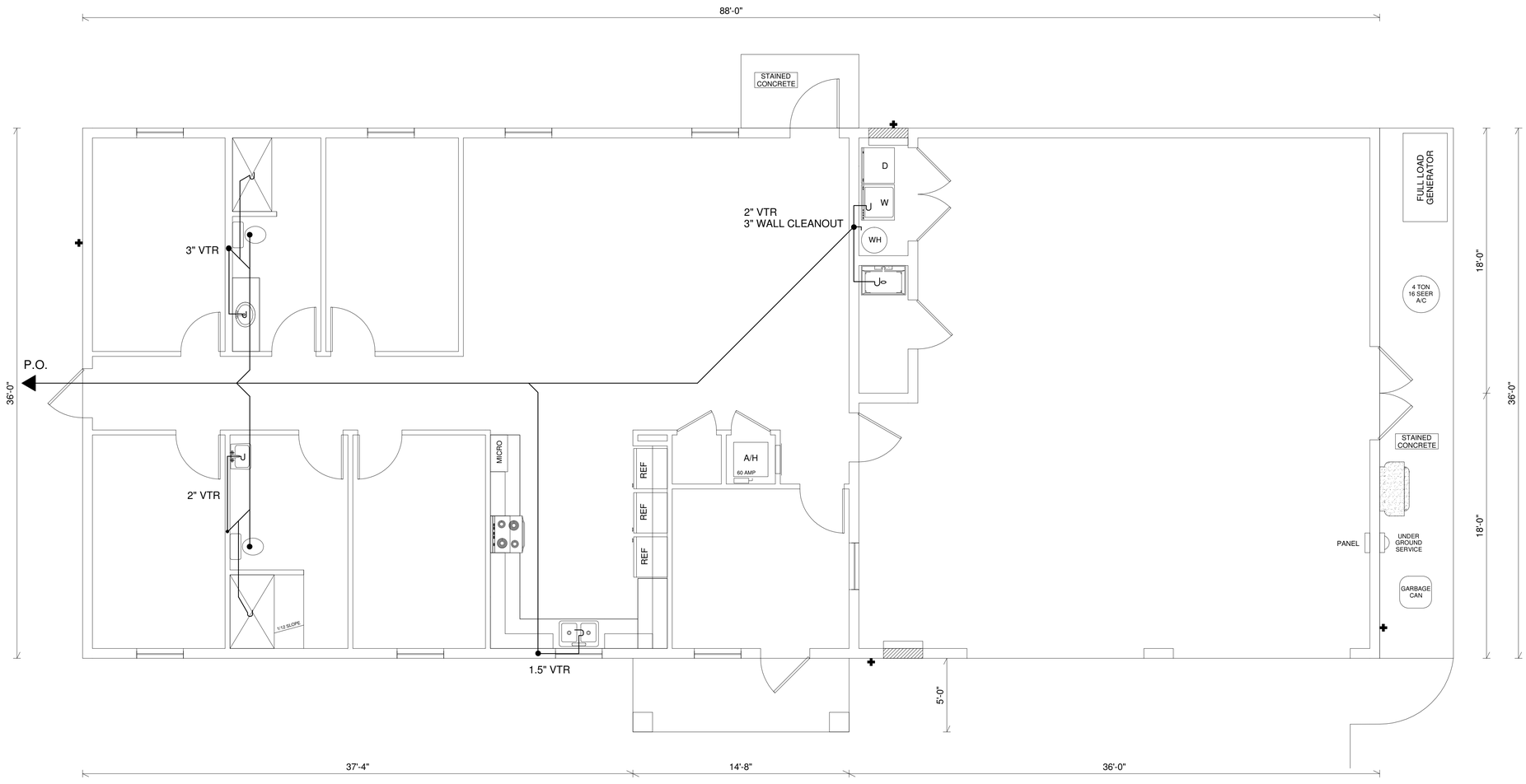
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
ELECTRICAL
RISER &
PANEL SCHEDULE

SCALE:
N/A

SHEET # 17



DR	CH	DATE:
		9-8-2015
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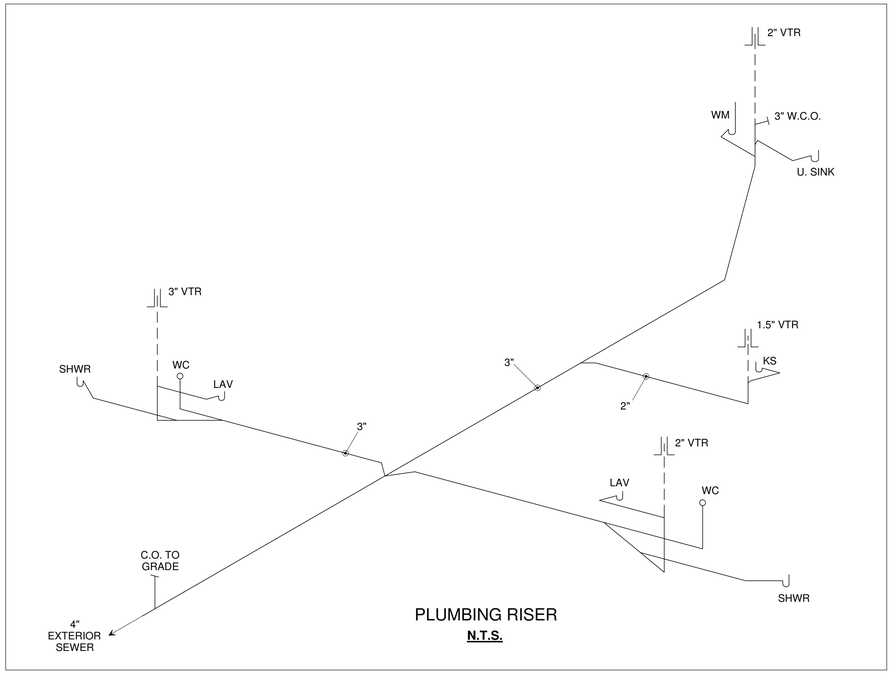
WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

DRAWING:
PLUMBING PLAN

SCALE:
1/4"=1'-0"

SHEET # 18



PLUMBING RISER

N.T.S.

PLUMBING NOTES & SPECS

Plumbing System to be installed in accordance with drawings herein, as well as FBC Plumbing and other applicable codes.

Drainage and vent piping to be schedule 40 PVC/ DWV, installed true to line and grade; joined according to FBC Plumbing.

Building Sewer to be 4" PVC 3034 unless routed under pavement/ concrete, in which case piping shall be PVC/DWV schedule 40.

Water system to be FBC approved plastic distribution system (PEX, CPVC) or copper tubing type L. Sized per FBC; not less than 3/4".

Exterior water service line to be PVC schedule 40, not less than 1", installed with minimum 12" clean soil cover; not to be routed within 10' of building sewer.

Floor drain: Zurn Z507-3NL Cast Iron medium duty deep flange drain with cast iron top & grate

Trap primer:Jones T74-011 1.5'x8" 17ga brass primer tailpiece

Utility sink: Mustee 17W, Delta 2131LF faucet

Kitchen sink: Dayton DSE233224 20 ga double bowl sink; Delta 400-DST faucet

ADA lavatory: Kohler K-2005-0 Kingston basin
Delta 501-DST faucet
Mainline ML10294 17 ga brass grid drain
Mainline ML102EZ Lav Guard trap & supply covers

ADA toilet: Kohler K-4199-0 Highline bowl
Kohler K-4468-0 Wellworth tank
Mainline ML1055SSC000 Open front, less cover solid plastic seat; SS hardware
Mainline ML8942 1.5" x 42" concealed flange grab bar
Mainline ML8936 1.5"x 36" concealed flange grab bar

Countertop lavatory is cultured marble
Delta 520-TPM_DST faucet

Elongated toilet, non ADA bath: Kohler K4198-0 Wellworth elongated bowl
Kohler K-4468-0 Wellworth tank
Mainline ML1055SSC000 Open front, less cover solid plastic seat; SS hardware

Shower valves (2) : Delta R10000 valve body, Delta T13220 trim

Water Heater: Rheem 656755 PROE40-T2-RH95 40 gallon tall, 240V 4.5KW/ 4.5 KW

DATE:	DR	CH
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10-31-2016		

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863-385-5964 ~ 863-385-2464 FAX

WO# 15071

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

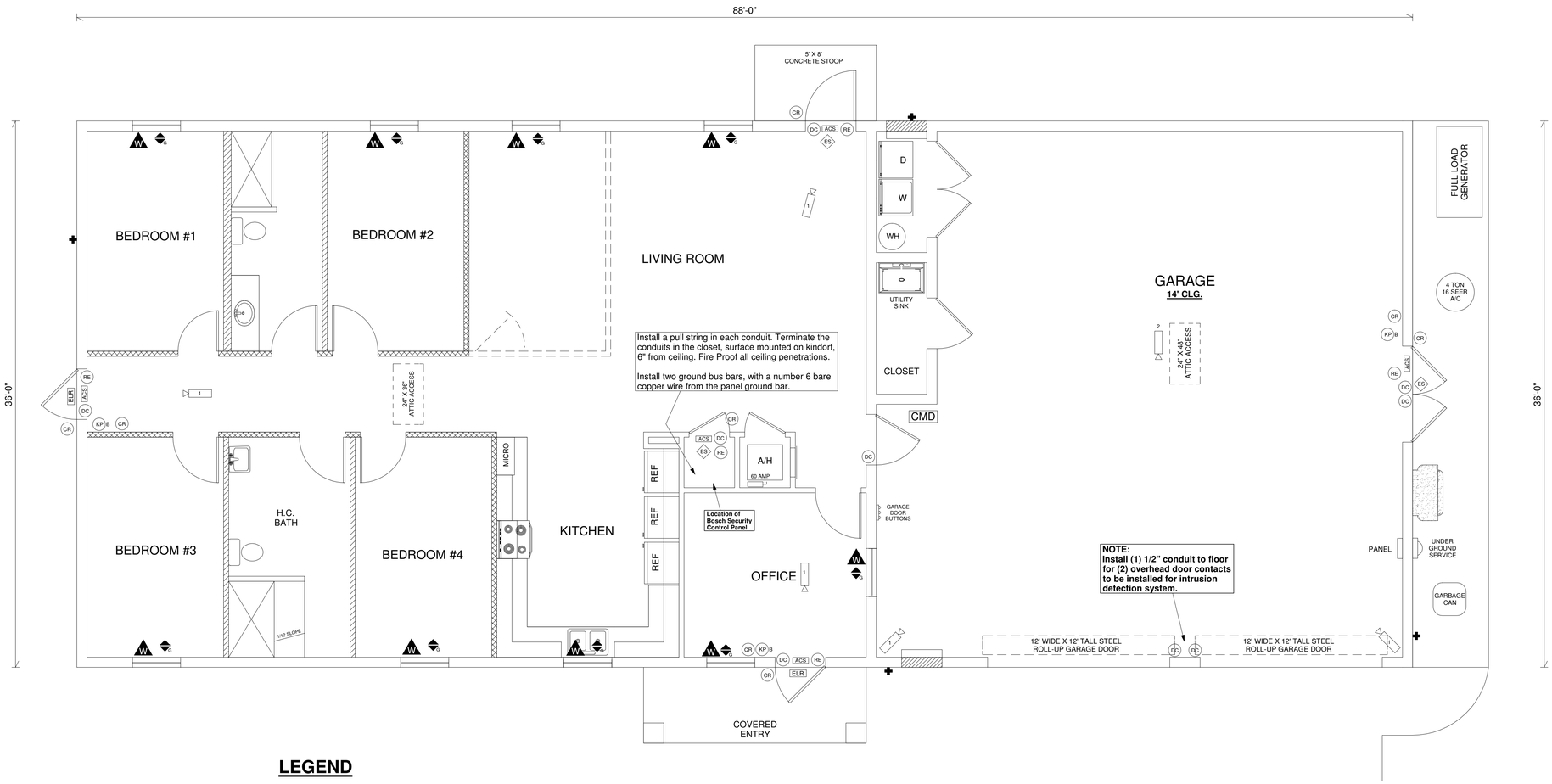
DRAWING:

PLUMBING
RISER & SPECS

SCALE:

AS SHOWN

SHEET # 19



LEGEND

DEVISE SYMBOL	MANUFACTURER	PART NUMBER	DESCRIPTION
CR	HID	RP40	Card Reader
ACS	HID	EH400-K	Door Controller
DC	GE Sentrol	Varies	Door Contacts
RE	Bosch	DS160	Request to exit
ES	HES	Varies	Electric Strike
ELR	TBD	TBD	Electric Latch Retraction
KP B	Bosch	D1260	Door Alarm Keypad
W	Bosch	ISN-C60-B	Window Contacts
G	Bosch	DS11011	Glass Break SEnsor
1	Axis Communications	M3006-V	Fixed IP Camera
2	Axis Communications	Q3709-PVE	180 Degree Camera

SECURITY NOTES:

1. ALL CCTV and Access Control shall be configured to existing Genetec Security Center County System.

2. Intrusion Detection System shall integrate with the Genetec Security Center System.

3. Intrusion Detection System shall be Bosch D7412GV4-C and shall also be monitored 24/7 365 Days a year.

4. Each door requires (1) 1/2" Conduit to lead back to the IDF Room with a 4 Square mounted above the door.

5. Each Camera requires (1) 1/2" Conduit to lead back to the IDF Room with a 4 Square mounted near the camera location.

6. Every Window Contact and Glass Break Sensor shall receive (1) 1/2" conduit for the cabling to these devices. I.E. one conductor per window with single gang box mounted above the window in the ceiling.

7. Install a pull string in each conduit. Terminate the conduits in the closet, surface mounted on kindorf, 6" from ceiling. Fire Proof all ceiling penetrations.

SECURITY PLAN DESIGN BY:

SiteSecure

111 Kelsey Lane Suite D, Tampa, Florida 33619

DR	CH	DATE:
		9-8-2015
		9-25-2015
		10-15-2015
		2-25-2016
		8-5-2016
		8-16-2016
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863-385-5564 - 863-385-2462 FAX

Highlands County
Board of County commissioners
SEBRING PARKWAY
EMS STATION BUILDING

WO# 15071

DRAWING:

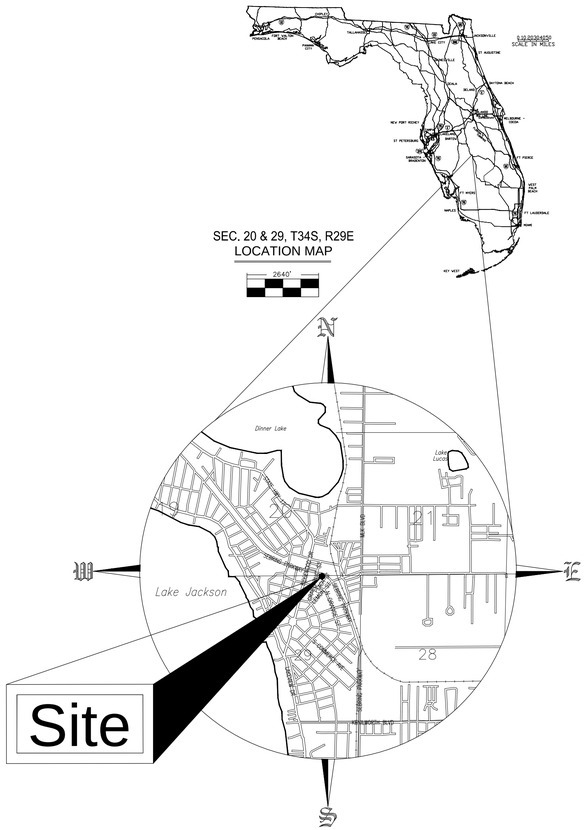
SECURITY PLAN

SCALE:

1/4"=1'-0"

SHEET # 20

HIGHLANDS COUNTY EMERGENCY MEDICAL SERVICES
PARKWAY SUBSTATION
SITE PLAN



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SHEET INDEX

DATE	REMARK	DR	CH
24-FEB-16	INITIAL SUBMITTAL	MLW	
12-APR-16	SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS	MLW	
21-APR-16	CHANGE OF SITE PAVEMENT REQUIREMENTS	MLW	
29-APR-16	DISCHARGE STRUCTURE CLARIFICATION	MLW	
27-JUN-16	PLANS FOR FINAL REVIEW	MLW	
18-AUG-16	PLANS FOR BID	MLW	
28-OCT-16	NOTES FOR TREE REMOVAL & UTILITY SERVICES	MLW	

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
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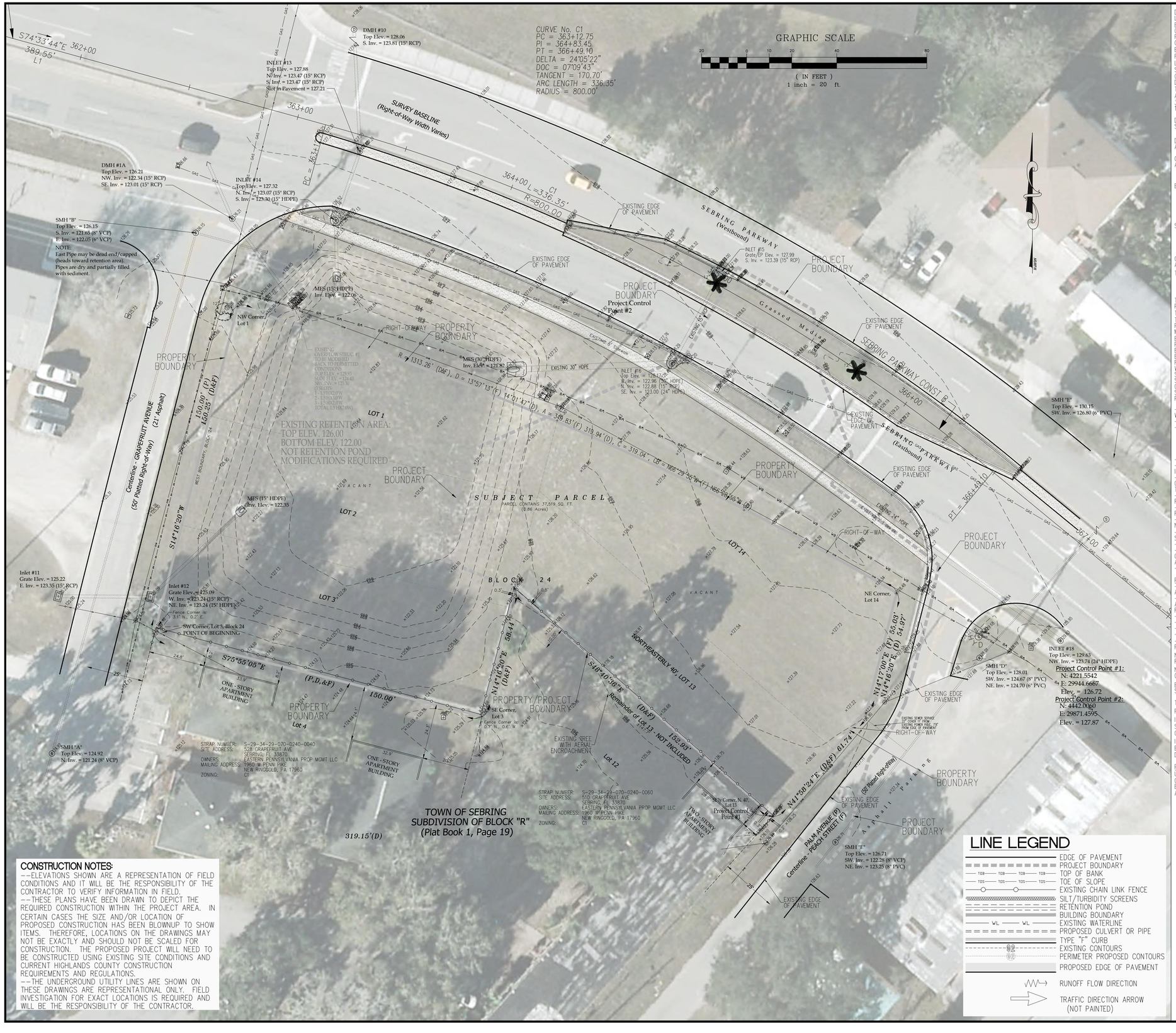
863-385-5564 PHONE – 863-385-2462 FAX

ENGINEER JOB # 15071

HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
COVER PAGE

DRAWING SCALE
NTS

SHEET
0 OF 6



CONSTRUCTION NOTES:

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--THESE PLANS HAVE BEEN DRAWN TO DEPICT THE REQUIRED CONSTRUCTION WITHIN THE PROJECT AREA. IN CERTAIN CASES THE SIZE AND/OR LOCATION OF PROPOSED CONSTRUCTION HAS BEEN BLOWNUP TO SHOW ITEMS. THEREFORE, LOCATIONS ON THE DRAWINGS MAY NOT BE EXACTLY AND SHOULD NOT BE SCALED FOR CONSTRUCTION. THE PROPOSED PROJECT WILL NEED TO BE CONSTRUCTED USING EXISTING SITE CONDITIONS AND CURRENT HIGHLANDS COUNTY CONSTRUCTION REQUIREMENTS AND REGULATIONS.
--THE UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS ARE REPRESENTATIONAL ONLY. FIELD INVESTIGATION FOR EXACT LOCATIONS IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

LINE LEGEND

- EDGE OF PAVEMENT
- PROJECT BOUNDARY
- TOB TOB TOB TOB — TOP OF BANK
- TOS TOS TOS TOS — TOE OF SLOPE
- EXISTING CHAIN LINK FENCE
- SILT/TURBIDITY SCREENS
- RETENTION POND
- BUILDING BOUNDARY
- WL WL — EXISTING WATERLINE
- PROPOSED CULVERT OR PIPE
- TYPE "F" CURB
- EXISTING CONTOURS
- PERIMETER PROPOSED CONTOURS
- PROPOSED EDGE OF PAVEMENT
- RUNOFF FLOW DIRECTION
- TRAFFIC DIRECTION ARROW (NOT PAINTED)

DESCRIPTION (OFFICIAL RECORDS BOOK 2083, PAGE 1477):
LOTS 1, 2, 3, 14 AND THE NORTHEASTERLY 40.00 FEET OF LOT 13 LYING ADJACENT TO SAID LOT 14, ALL IN BLOCK 24 OF THE TOWN OF SEBRING, SUBDIVISION OF BLOCK "R" AS RECORDED IN PLAT BOOK 1, PAGE 19 OF THE PUBLIC RECORDS OF HIGHLANDS COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHWEST CORNER OF LOT 3, BLOCK 24 OF THE TOWN OF SEBRING, SUBDIVISION OF BLOCK "R" AS RECORDED IN PLAT BOOK 1, PAGE 19 OF THE PUBLIC RECORDS OF HIGHLANDS COUNTY, FLORIDA, BEING THE POINT OF BEGINNING, THENCE RUNNING S 75°55'05" E, TO THE SOUTHEAST CORNER OF LOT 3, A DISTANCE OF 150.00 FEET; THENCE N 14°16'20" E, A DISTANCE OF 58.44 FEET TO A POINT; THENCE S 48°40'36" E, A DISTANCE OF 152.93 FEET TO THE SOUTHEAST CORNER OF THE NORTHEASTERLY 40 FEET OF LOT 13; THENCE N 41°58'24" E, A DISTANCE OF 61.74 FEET TO A POINT; THENCE N 14°16'20" E, A DISTANCE OF 54.97 FEET TO THE NORTHEAST CORNER OF LOT 14, SAID POINT LYING ON A CURVE CONCAVE TO THE SOUTH, HAVING THE FOLLOWING ELEMENTS: A RADIUS OF 1313.26 FEET, A DELTA ANGLE OF 14°01'47", AND LENGTH OF 319.94 FEET, RUNNING ALONG A CHORD BEARING OF N 66°28'55"W, A CHORD LENGTH OF 319.15 FEET TO THE NORTHWEST CORNER OF LOT 1; THENCE RETURNING S 14°16'20" W, A DISTANCE OF 150.25 FEET TO THE POINT OF BEGINNING.

DATE OF PREPARATION:	FEBRUARY 24, 2016
STRAP NUMBER:	S-29-34-29-070-0240-0010 S-29-34-29-070-0240-0130
DEVELOPMENT:	EMERGENCY MEDICAL SERVICES
ADDRESS:	230 PEACH ST SEBRING, FL 33870
OWNER:	HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS
ADDRESS:	PO BOX 1926 SEBRING, FL 33871-1926 (863) 402-6500
ENGINEER:	ROGER DALE POLSTON, P.E. POLSTON ENGINEERING, INC. P.O. BOX 588 SEBRING, FL 33871-0588 (863) 385-5564 (863) 385-2462 FAX
SURVEYOR:	R. WHISLER III, PLS HIGHLANDS COUNTY ENGINEERING DEPARTMENT 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870 (813) 402-6877
CONTRACTOR:	CONTRACTOR HAS NOT BEEN SELECTED AT
ADDRESS:	THIS TIME, PROJECT WILL BE PUT OUT FOR BID
TESTING LAB:	UNIVERSAL ENGINEERING SCIENCES 5971 COUNTRY LAKES DR FORT MYERS, FL 33905 (239) 995-1997

TOTAL PROPERTY OWNED:	GREATER THAN 10 ACRES
PROJECT AREA:	37519 SQ.FT., 0.86 AC.
TOTAL MAXIMUM ALLOWED IMPERVIOUS:	30015 SQ.FT. (80%)
TOTAL PROPOSED IMPERVIOUS AREA:	12136 SQ.FT., 0.28 AC.(32.3%)
PROPOSED TOTAL BUILDING AREA:	3168 SQ.FT.
MAXIMUM BUILDING HEIGHT:	50 FT.
BUILDING HEIGHT:	LESS THAN 25'
PARKING SPACES:	7 AND 1 H.C. = 8 TOTAL
EXISTING USE:	GRASSED PARKING
EXISTING ZONING:	C1
F.L.U. MAP DESIGNATION:	CITY
WATER:	CITY OF SEBRING
SANITARY:	CITY OF SEBRING
SOIL TYPES:	ASTATULA SAND
GROUND COVER:	GRASS
STATE AND FEDERAL	HIGHLANDS COUNTY
PERMITS REQUIRED:	SWFWMD

-THIS PROJECT AREA IS NOT LOCATED WITHIN 600 FEET OF ANY WELL HEADS SUPPLYING PUBLIC POTABLE WATER SYSTEMS AS DEFINED IN CHAPTER 17-550, F.A.C. AND REGULATED BY F.D.E.P.
-THIS PROJECT IS NOT SUBJECT TO FLOODING IN A 100-YEAR RECCURRENCE INTERVAL STORM.
-HIGHLANDS PARKWAY EMS SUBSTATION ELEVATION CONVERSION:
ELEVATION = HIGHLANDS PARKWAY EMS SUBSTATION SHOWN ON PLANS
NGVD 1929 = ELEVATION + 0.34'
NAVD 1988 = ELEVATION - 0.72'
SOURCE: NOAA ORTHOMETRIC HEIGHT CONVERSION (VERTCON).
-ALL UNDERGROUND UTILITIES WITHIN THE ROADWAY ARE TO BE INSTALLED PRIOR TO PLACEMENT OF BASE.
-ALL SWALES AND DITCHES, COMPLETE WITH EROSION CONTROLS, ARE TO BE CONSTRUCTED AS PART OF THE INITIAL IMPROVEMENTS.
-ALL CONSTRUCTION MATERIALS USED WITHIN THE COUNTY RIGHT-OF-WAY ARE TO BE TESTED AS PER COUNTY REQUIREMENTS AND ALL TEST RESULTS ARE TO BE SUBMITTED BY THE TESTING LAB DIRECTLY TO THE ENGINEER OF RECORD BEFORE ANY AS-BUILT INSPECTION AND SUBMITTALS WILL BE MADE.
-ALL DISTURBED AREAS IN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY WILL BE RESTORED AND SODDED.
-THERE ARE NO FLOODPLAINS, WETLANDS, CUTTHROAT GRASS SEEPS, HISTORICAL AND ARCHAEOLOGICAL RESOURCES, CONES OF INFLUENCE FOR POTABLE WELLS, OR AQUIFER RECHARGE AREAS WITHIN THIS PROJECT.
-THERE ARE NO EXTERIOR LIGHTS OR PERMANENT SIGNS PROPOSED FOR THIS SITE, UNLESS OTHERWISE NOTED.
-A MAINTENANCE OF TRAFFIC (MOT) SHALL COMPLY WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX FOR CONSTRUCTION WITHIN THE COUNTY RIGHT-OF-WAY.
-THERE ARE NO EASEMENTS UNLESS OTHERWISE SHOWN ON THESE PLANS.
-THERE ARE NO WATER COURSES, WATER BODIES, FLOODPLAINS, XERIC UPLANDS, WETLANDS, CUTTHROAT GRASS SEEPS, HISTORICAL AND ARCHAEOLOGICAL RESOURCES, CONES OF INFLUENCE FOR POTABLE WELLS, OR AQUIFER RECHARGE AREAS.
-THERE ARE NO PROPOSED PERMANENT SIGNS OR EXTERIOR LIGHTS, UNLESS OTHERWISE DENOTED ON PLANS.

POND AND SWALE CONSTRUCTION AND MAINTENANCE INSTRUCTIONS:
-ROUGH SIZING AND GRADING OF THE POND SHOULD BE MADE FIRST TO PROVIDE IMMEDIATE SEDIMENTATION AREA FOR STORM WATER RUNOFF FROM THE CONSTRUCTION AREA.
-DURING THE CONSTRUCTION PHASE CARE SHOULD BE TAKEN TO KEEP POND AREA AS FREE AS POSSIBLE OF ANY SEALANTS SUCH AS ASPHALT, SHELL, CONCRETE, MUCK, ETC. WHICH MAY SEAL THE POND BOTTOM AND REDUCE THE PERCOLATION RATE.
-SOD GROWN ON MUCK SHOULD NOT BE USED.
-POND BOTTOM SHOULD BE MADE AS ONE OF THE FINAL STEPS OF CONSTRUCTION.
-ROUTINE MOWING AND INSPECTION OF SWALES AND POND.
-REPAIR ANY EROSION DAMAGE FOUND.
-PERIODICALLY SWALES AND/OR POND MAY REQUIRE CLEANING OF SEDIMENTS IN ORDER TO MAINTAIN PERCOLATION VALUES. THIS COULD INCLUDE THE REMOVING OF THE POND BOTTOM.

NOTE: NO SURFACE RUNOFF FROM ADJOINING PROPERTY WILL FLOW ONTO THIS PROJECT AREA, POTENTIAL RUNOFF HAS BEEN DIVERTED AROUND THIS PROJECT.

NOTE: OPEN SPACE AREAS WITHIN THIS PROJECT AREA WILL BE UTILIZED AS LANDSCAPED AREAS, UNLESS OTHERWISE DENOTED ON PLANS.

BASIN 1/2" STORAGE 19.52 X 0.5 / 12 = 0.82 AC-FT
STORAGE PROPOSED = 0.83 AC-FT AT DISCHARGE, AND 1.54 AC-FT TOTAL

THEIR IS NO EXPECTED IMPACT ON THE WATER QUALITY OF THE SITE.

PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING THE SITE INCLUDING ALL OPEN SPACE AREAS

I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT IS IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS ESTABLISHED BY THE 2015, EDITION OF THE "MANUAL OF UNIFORM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE OF STREETS AND HIGHWAYS", AS REQUIRED BY FLORIDA STATUTE 336.045.

I HEREBY CERTIFY THAT THE DETAILS OF THE HANDICAP ACCESSIBILITY PLAN SHOWN HEREON ARE TO THE BEST OF MY KNOWLEDGE AND BELIEF IN FULL AND COMPLETE COMPLIANCE WITH THE "STATE OF FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS HANDICAP ACCESSIBILITY RULE."

PROPOSED SEPTIC SYSTEM CALCULATIONS

USE:	RESIDENTIAL (4 BEDROOMS) (CLOSEST USE)
GALLONS PER DAY:	100 G/D/BEDROOM
BEDROOMS:	4
AVERAGE SEWAGE FLOW = 100 X 4 =	400 GAL/DAY

EXISTING CONDITIONS

AREA	AREA (ACRES)
TOTAL AREA OWNED	GREATER THAN 10
PROJECT AREA	0.86
IMPERVIOUS (EXCLUDING PONDS)	0.20 (PREVIOUSLY PERMITTED)
PERVIOUS (GREEN)	0.16
LAKES, CANALS, STORAGE PONDS	0.50
ONSITE WETLANDS	0.00

PROPOSED CONDITIONS

AREA	AREA (ACRES)
PROJECT	0.86
IMPERVIOUS (EXCLUDING PONDS)	0.28
PERVIOUS (GREEN)	0.08
LAKES, CANALS, STORAGE PONDS	0.50
ONSITE WETLANDS	0.00

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DATE	REMARK	DR	CH
24-FEB-16	INITIAL SUBMITTAL	MLW	
12-APR-16	SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS	MLW	
21-APR-16	CHANGE OF SITE PAVEMENT REQUIREMENTS	MLW	
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ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 48030

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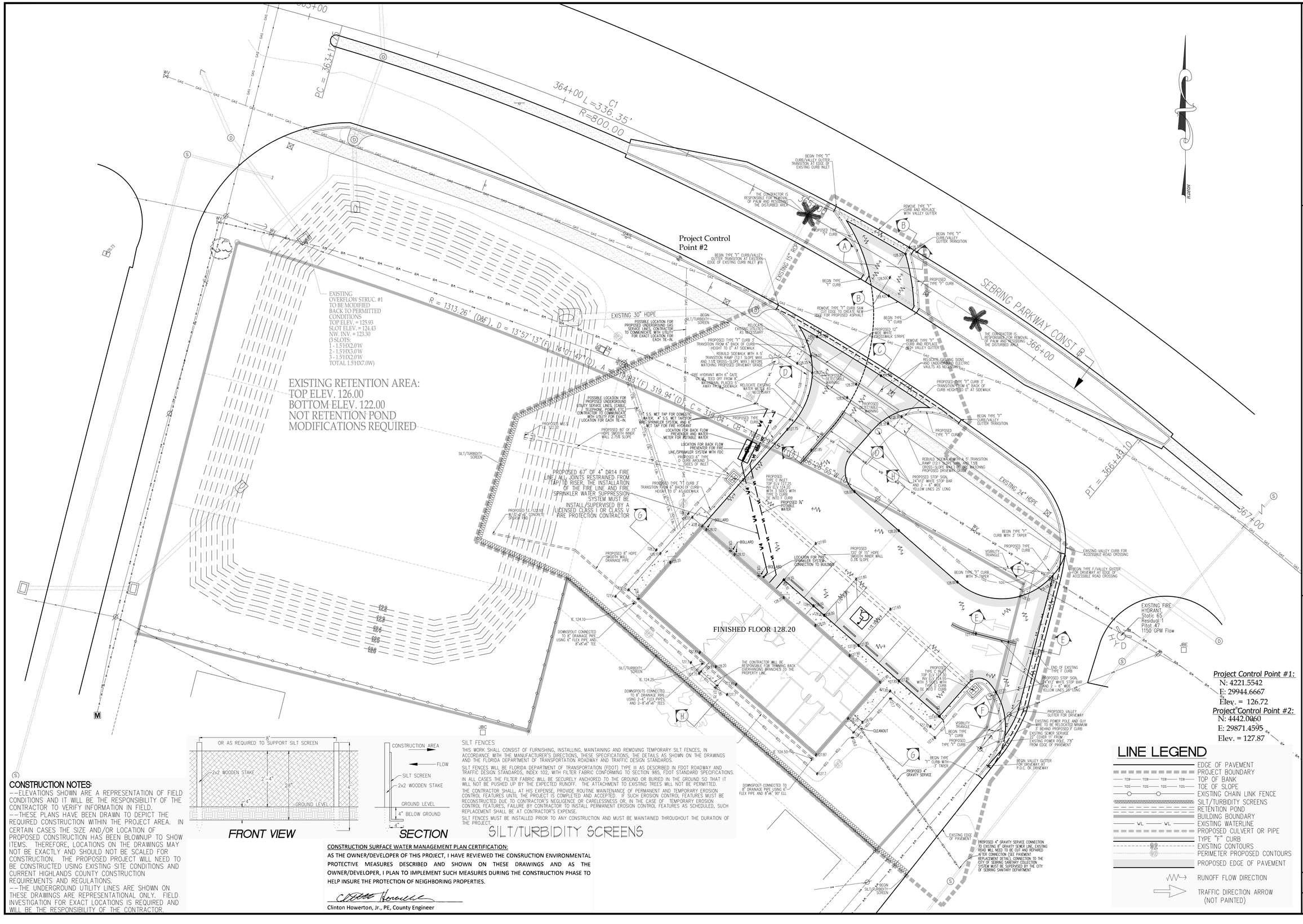
863-385-5564 PHONE -- 863-385-2462 FAX

HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
EXISTING CONDITIONS

ENGINEER JOB # 15071

DRAWING SCALE 1"=20'

SHEET 1 OF 6



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SILT FENCES

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING TEMPORARY SILT FENCES, IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS, THESE SPECIFICATIONS, THE DETAILS AS SHOWN ON THE DRAWINGS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS.

SILT FENCES WILL BE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) TYPE III AS DESCRIBED IN FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 102, WITH FILTER FABRIC CONFORMING TO SECTION 985, FDOT STANDARD SPECIFICATIONS.

IN ALL CASES THE FILTER FABRIC WILL BE SECURELY ANCHORED TO THE GROUND OR BURIED IN THE GROUND SO THAT IT WILL NOT BE PUSHED UP BY THE EXPECTED RUNOFF. THE ATTACHMENT TO EXISTING TREES WILL NOT BE PERMITTED.

THE CONTRACTOR SHALL, AT HIS EXPENSE, PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETED AND ACCEPTED. IF SUCH EROSION CONTROL FEATURES MUST BE RECONSTRUCTED DUE TO CONTRACTOR'S NEGLIGENCE OR CARELESSNESS OR, IN THE CASE OF TEMPORARY EROSION CONTROL FEATURES, FAILURE BY CONTRACTOR TO INSTALL PERMANENT EROSION CONTROL FEATURES AS SCHEDULED, SUCH REPLACEMENT SHALL BE AT CONTRACTOR'S EXPENSE.

SILT FENCES MUST BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

SILT/TURBIDITY SCREENS

CONSTRUCTION SURFACE WATER MANAGEMENT PLAN CERTIFICATION:

AS THE OWNER/DEVELOPER OF THIS PROJECT, I HAVE REVIEWED THE CONSTRUCTION ENVIRONMENTAL PROTECTIVE MEASURES DESCRIBED AND SHOWN ON THESE DRAWINGS AND AS THE OWNER/DEVELOPER, I PLAN TO IMPLEMENT SUCH MEASURES DURING THE CONSTRUCTION PHASE TO HELP INSURE THE PROTECTION OF NEIGHBORING PROPERTIES.

Clinton Howerton, Jr., PE, County Engineer

LINE LEGEND

- EDGE OF PAVEMENT
- PROJECT BOUNDARY
- TOB TOB TOB TOB — TOP OF BANK
- TOS TOS TOS TOS — TOE OF SLOPE
- EXISTING CHAIN LINK FENCE
- SILT/TURBIDITY SCREENS
- RETENTION POND
- BUILDING BOUNDARY
- WL WL — EXISTING WATERLINE
- PROPOSED CULVERT OR PIPE
- TYPE "F" CURB
- EXISTING CONTOURS
- PERIMETER PROPOSED CONTOURS
- PROPOSED EDGE OF PAVEMENT
- RUNOFF FLOW DIRECTION
- TRAFFIC DIRECTION ARROW (NOT PAINTED)

Project Control Point #1:
N: 4221.5542
E: 29944.6667
Elev. = 126.72

Project Control Point #2:
N: 4442.0060
E: 29871.4595
Elev. = 127.87

DATE	REMARK	DR	CH
24-FEB-16	INITIAL SUBMITTAL	MLW	
12-APR-16	SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS	MLW	
21-APR-16	CHANGE OF SITE PAVEMENT REQUIREMENTS	MLW	
29-APR-16	DISCHARGE STRUCTURE CLARIFICATION	MLW	
27-JUN-16	PLANS FOR FINAL REVIEW	MLW	
18-AUG-16	PLANS FOR BID	MLW	
28-OCT-16	NOTES FOR TREE REMOVAL & UTILITY SERVICES	MLW	

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

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Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5584 PHONE -- 863-385-2462 FAX

ENGINEER JOB # 15071

HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
PROPOSED ELEVATIONS

DRAWING SCALE 1"=15'

SHEET 2 OF 6

SEBRING PARKWAY CONST ℄

Project Control Point #2

Project Control Point #1:
N: 4221.5542
E: 29944.6667
Elev. = 126.72

Project Control Point #2:
N: 4442.0060
E: 29871.4595
Elev. = 127.87

FINISHED FLOOR 128.20

PROPOSED 67' OF 4" DR14 FIRE LINE. ALL JOINTS RESTRAINED FROM TAP TO RISER THE INSTALLATION OF THE FIRE LINE AND FIRE SPRINKLER WATER SUPPRESSION SYSTEM MUST BE INSTALL/SUPERVISED BY A LICENSED CLASS 'A' OR CLASS 'V' FIRE PROTECTION CONTRACTOR

EXISTING 15" RCP

EXISTING 30" HDPE

EXISTING 24" HDPE

PROPOSED 8" HDPE SMOOTH WALL DRAINAGE PIPE

PROPOSED 180' OF 8" HDPE SMOOTH WALL DRAINAGE PIPE FROM COLLECT DOWNSPOUTS FROM GUTTER AND DOWNSPOUTS

DOWNSPOUTS CONNECTED TO 8" DRAINAGE PIPE USING 6" FLEX PIPES AND 2-6"x8"x6" TEES

DOWNSPOUT CONNECTED TO 6" DRAINAGE PIPE USING 6" FLEX PIPE AND 8"x6" 90° ELL

DOWNSPOUT CONNECTED TO 8" DRAINAGE PIPE USING 6" FLEX PIPES AND 8"x8"x6" TEE

PROPOSED 4" GRAVITY SERVICE CONNECTION TO EXISTING 8" GRAVITY SEWER LINE. EXISTING ROAD NEED TO BE CUT AND REPAIRED AFTER CONNECTION OF SERVICE. EXISTING CITY OF SEBRING SANITARY COLLECTION SYSTEM MUST BE SUPERVISED BY THE CITY OF SEBRING SANITARY DEPARTMENT

CONSTRUCTION NOTES:

--ELEVATIONS SHOWN ARE A REPRESENTATION OF FIELD CONDITIONS AND IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY INFORMATION IN FIELD.
--THESE PLANS HAVE BEEN DRAWN TO DEPICT THE REQUIRED CONSTRUCTION WITHIN THE PROJECT AREA. IN CERTAIN CASES THE SIZE AND/OR LOCATION OF PROPOSED CONSTRUCTION HAS BEEN BLOWNUP TO SHOW ITEMS. THEREFORE, LOCATIONS ON THE DRAWINGS MAY NOT BE EXACTLY AND SHOULD NOT BE SCALED FOR CONSTRUCTION. THE PROPOSED PROJECT WILL NEED TO BE CONSTRUCTED USING EXISTING SITE CONDITIONS AND CURRENT HIGHLANDS COUNTY CONSTRUCTION REQUIREMENTS AND REGULATIONS.
--THE UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS ARE REPRESENTATIONAL ONLY. FIELD INVESTIGATION FOR EXACT LOCATIONS IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

LINE LEGEND

- EDGE OF PAVEMENT
- PROJECT BOUNDARY
- TOP OF BANK
- TOE OF SLOPE
- EXISTING CHAIN LINK FENCE
- SILT/TURBIDITY SCREENS
- RETENTION POND
- BUILDING BOUNDARY
- EXISTING WATERLINE
- PROPOSED CULVERT OR PIPE
- TYPE "F" CURB
- EXISTING CONTOURS
- PERIMETER PROPOSED CONTOURS
- PROPOSED EDGE OF PAVEMENT
- RUNOFF FLOW DIRECTION
- TRAFFIC DIRECTION ARROW (NOT PAINTED)

DATE	REMARK	DR	CH
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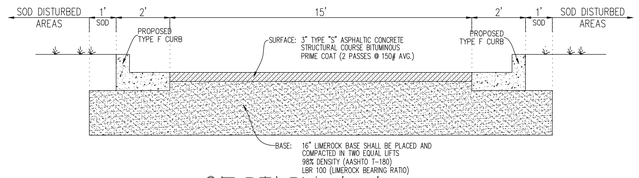
ENGINEER JOB # 15071

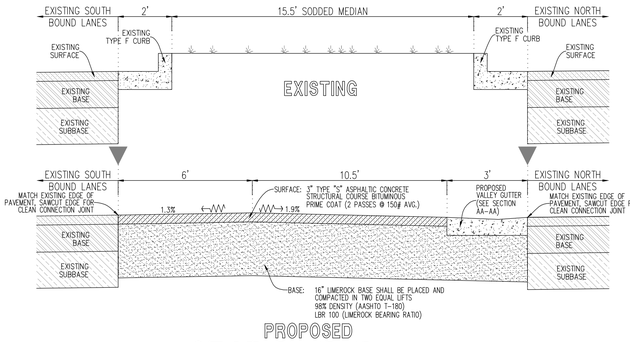
HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
PROPOSED DIMENSIONS

DRAWING SCALE 1"=10'

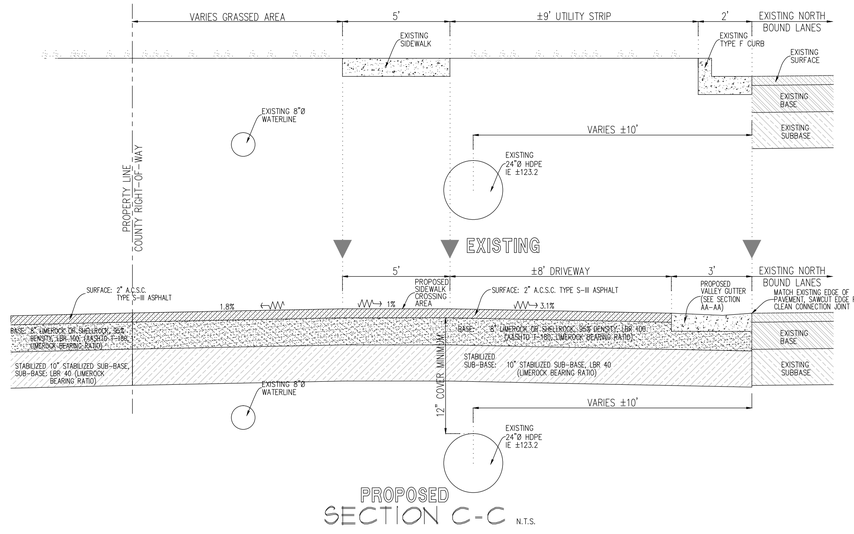
SHEET 3 OF 6



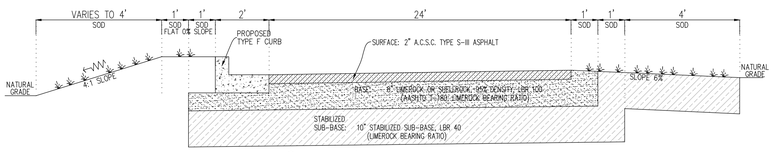
SECTION A-A N.T.S.



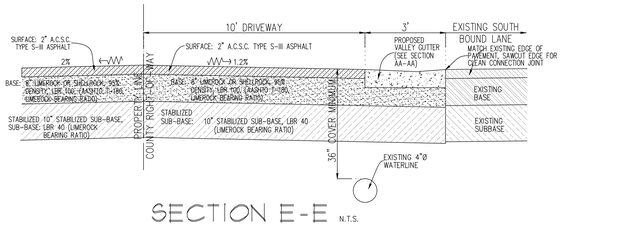
PROPOSED
SECTION B-B N.T.S.



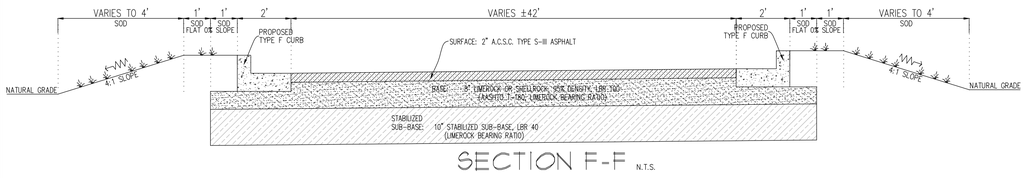
PROPOSED
SECTION C-C N.T.S.



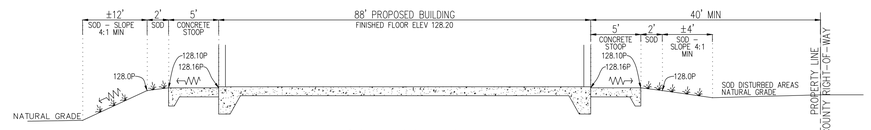
SECTION D-D N.T.S.



SECTION E-E N.T.S.

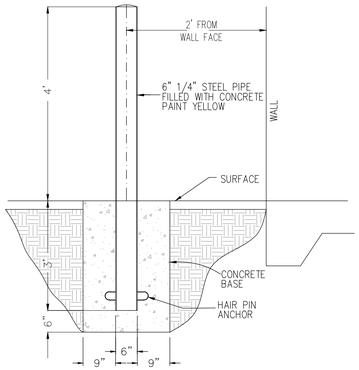


SECTION F-F N.T.S.

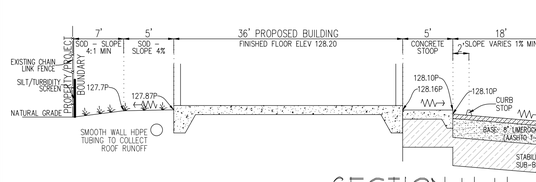


SECTION G-G N.T.S.

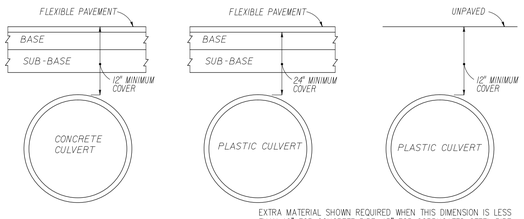
TESTING:
---TESTING IS REQUIRED ON ALL DRIVEWAY CONSTRUCTION MATERIALS PLACED IN THE COUNTY RIGHT-OF-WAY. NO ASBUILT PLANS WILL BE ISSUED UNTIL CERTIFIED TEST REPORTS FROM THE TESTING LAB SHOW THAT THE SPECIFICATIONS HAVE BEEN MET OR EXCEEDED.
---THE MATERIALS PLACED ON PRIVATE PROPERTY IN THE LOT SHALL ALSO BE TESTED TO SEE IF THE SPECIFICATIONS HAVE BEEN MET. TEST SHALL BE PERFORMED AT RANDOM LOCATIONS SPECIFIED BY THE ENGINEER AT THE RATE OF 1 TEST PER 4000 SQUARE FEET OF VEHICULAR SURFACE AREA. ANY FRACTIONS IN THE CALCULATION OF THE NUMBER OF TEST SHALL ALWAYS BE ROUNDED UP TO THE NEXT WHOLE NUMBER.
---NO ASBUILT WILL BE ISSUED UNTIL CERTIFIED TEST REPORTS FROM THE TESTING LAB SHOW THAT THE SPECIFICATIONS HAVE BEEN MET OR EXCEEDED.

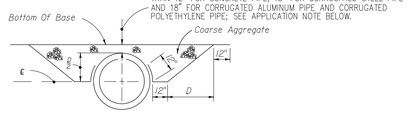


BOLLARD DETAIL



SECTION H-H N.T.S.





THE CONTRACTOR SHALL FURNISH AND INSTALL COARSE AGGREGATE ON FILTER FABRIC. THE COARSE AGGREGATE SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED SUFFICIENTLY AS TO BE FIRM AND UNYIELDING. THE COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF SECTION 901-2 OR 901-3 RESPECTIVELY. THE GRADATION SHALL MEET SECTION 901-6, GRADES 4, 467, 5, 56, OR 57 UNLESS RESTRICTED IN THE PLANS. THE FILTER FABRIC SHALL BE TYPE D-3 (SEE INDEX 199). THE COST OF FURNISHING AND INSTALLING THE COARSE AGGREGATE AND FILTER FABRIC SHALL BE INCLUDED IN THE COST OF THE CULVERT.

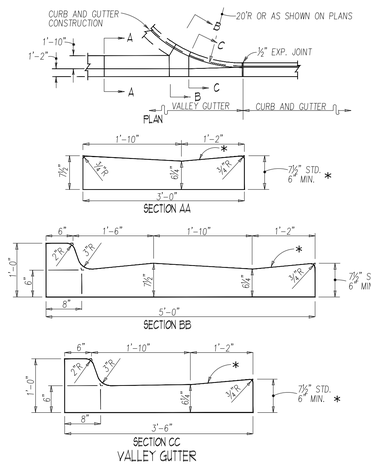
GENERAL NOTES

1. THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE SHEETS 2, 3, & 4.
2. LESS THAN THE TABULATED MINIMUM COVER MAY BE USED PROVIDED SUITABLE METHODS/ ARE DETAILED IN THE PLANS. THESE FEATURES MAY INCLUDE BUT ARE NOT LIMITED TO EXTRA STRENGTH PIPE, SELECT BEDDING, SELECT BACK FILL AND ENCASEMENT.
3. VALUES SHOWN IN PARENTHESES ARE FOR 3'x1" CORRUGATIONS WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
4. THE TABULATED VALUES IN THE BRACKETS [] APPLY TO TYPE I-R (SPIRAL RIB) PIPE WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
5. COMMERCIAL AND NONCOMMERCIAL REFERS TO TYPICAL VEHICULAR UTILIZATION OF UNPAVED ROADS AND DRIVES WHERE RUTTING AND COVER DISPLACEMENT MAY OCCUR.

ASPHALTIC CONCRETE BASE
NOTE: EXTRA BASE IS REQUIRED WHEN CROSS CULVERTS ARE LOCATED ON FACILITIES SUBJECT TO HIGH SPEED TRAFFIC (Ø45 MPH) OR HIGH TRAFFIC VOLUMES (Ø600 ADT) AND THE COVER IS WITHIN THE RANGES SPECIFIED IN THE NOTATIONS ABOVE.

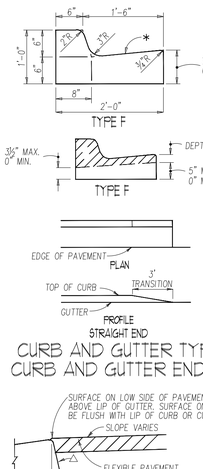
EXTRA BASE FOR CROSS CULVERTS UNDER FLEXIBLE PAVEMENTS

MINIMUM COVER FOR CONCRETE, STEEL, ALUMINUM AND POLYETHYLENE PIPE



* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON THE PLANS.

☑ ROTATE ENTIRE SECTION SO THAT GUTTER CROSS SLOPE MATCHES SLOPE OF ADJACENT CIRCULATING ROADWAY PAVEMENT.



CURB AND GUTTER TYPE F CURB AND GUTTER ENDINGS

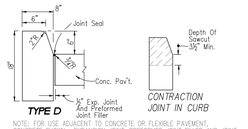
△ APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN. APPLIES TO SHOULDER GUTTER ONLY WHERE ADJOINING TRAFFIC LANES

CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT

GENERAL NOTES

1. FOR CURB, GUTTER AND CURB & GUTTER PROVIDE ⅜" - ¾" CONTRACTION JOINTS AT 10' CENTERS (MAX). CONSTRUCTION JOINTS ADJACENT TO CONCRETE PAVEMENT ON TANGENTS AND FLAT CURVES ARE TO MATCH THE PAVEMENT JOINTS, WITH INTERMEDIATE JOINTS NOT TO EXCEED 10' CENTERS. CURB, GUTTER AND CURB & GUTTER EXPANSION JOINTS SHALL BE LOCATED IN ACCORDANCE WITH SECTION 520 OF THE FDOT STANDARD SPECIFICATIONS.

CONCRETE CURB AND GUTTER



NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT. CONCRETE SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY.

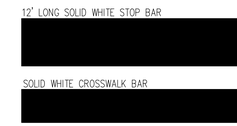
CONCRETE CURB

SPECIAL NOTES:
--MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CURRENT HIGHLANDS COUNTY LAND DEVELOPMENT REGULATIONS AND TECHNICAL STANDARDS.
--LIME ROCK AND/OR SHELL ROCK BASE COURSE CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 200 AND 250 OF FLORIDA D.O.T. SPECIFICATIONS, RESPECTIVELY.
--PRIME AND TACT COATS SHALL BE IN ACCORDANCE WITH FLORIDA D.O.T. SPECIFICATIONS, SECTION 300.
--ASPHALT CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH FLORIDA D.O.T. SPECIFICATION, 320, 330 AND 331.
--ALL DISTURBED AREAS WITHIN THE COUNTY R/W WILL BE RESTORED AND SODDED.
--ALL SAFETY PRECAUTIONS DURING CONSTRUCTION MUST MEET F.D.O.T. SPECIFICATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND IMPLEMENTING A TRAFFIC CONTROL PLAN DURING THE DURATION OF CONSTRUCTION WITHIN THE RIGHT OF WAYS.
--ALL CONCRETE USED WILL BE 3000 PSI (MINIMUM).
--ALL DISTURBED PAVEMENT WILL BE RESTRIPED PER D.O.T. REQUIREMENTS IN ACCORDANCE WITH SECTION 711 F.D.O.T. SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (THERMOPLASTIC PAINT ONLY)

CONSTRUCTION NOTES:
--TOPO ELEVATIONS SHOWN ARE A REPRESENTATION OF FIELD CONDITIONS AND IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY INFORMATION IN FIELD. THE INTENT FOR PROPOSED CONSTRUCTION IS TO MATCH THE EXISTING SLOPE OF THE ROADWAY AND SHOULDERS (UNLESS SHOWN OTHERWISE).
--THESE PLANS HAVE BEEN DRAWN TO DEPICT THE REQUIRED CONSTRUCTION WITHIN THE PROJECT AREA. IN CERTAIN CASES THE SIZE AND/OR LOCATION OF PROPOSED CONSTRUCTION HAS BEEN BLOWNUP TO SHOW ITEMS. THEREFORE, LOCATIONS ON THE DRAWINGS MAY NOT BE EXACT AND SHOULD NOT BE SCALED FOR CONSTRUCTION. ITEMS SUCH AS INLETS, CULVERTS, MITERED END SECTIONS, SIGNS, STRIPING, TURN LANES, SLOPES ETC. WILL NEED TO BE CONSTRUCTED USING EXISTING SITE CONDITIONS AND CURRENT F.D.O.T. CONSTRUCTION REQUIREMENTS AND REGULATIONS.

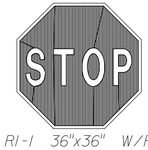
PAVEMENT AND CURB REMOVAL:
--SAW CUT AND REMOVE THE PORTIONS OF THE ASPHALT AND CURB WHICH ARE TO BE REMOVED. DEBRIS SHALL BE HAULED TO A SITE APPROVED FOR RECEIVING CONSTRUCTION DEBRIS.

PAINTING TRAFFIC STRIPES:
--ALL PAVEMENT MARKINGS WITHIN PROJECT AREA SHALL BE THERMOPLASTIC.
--ALL EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY HYDRO-BLASTING.
--PAVEMENT MARKINGS WITHIN THE STATE AND COUNTY RIGHT OF WAY SHALL CONFORM TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION", SECTION 710 AND SECTION 711.
--ALL CONSTRUCTION WITHIN THE PROJECT IS TO BE IN ACCORDANCE WITH THE CURRENT HIGHLANDS COUNTY LAND DEVELOPMENT REGULATIONS AND TECHNICAL STANDARDS.
--ALL SIGNING AND STRIPING WITHIN THE COUNTY RIGHT-OF-WAY IS TO BE IN ACCORDANCE WITH THE CURRENT HIGHLANDS COUNTY LAND DEVELOPMENT REGULATIONS AND TECHNICAL STANDARDS.



TYPES OF PERMANENT LONGITUDINAL LINES

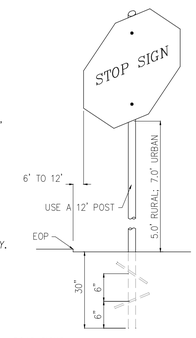
ALL PAVEMENT MARKINGS WILL BE THERMOPLASTIC PAINT ONLY.
WHITE LINES SEPARATE FLOWS IN THE SAME DIRECTION.
YELLOW LINES SEPARATE FLOWS IN THE OPPOSITE DIRECTION.
YELLOW DOTTED LINES MAY BE USED IN SPECIAL CASES.



R1-1 36"x36" W/R

COLOR CODES
Legend and/or Symbol Background
R-Red (Reflectorized) O-Orange (Reflectorized)
B-Black (Non-Reflectorized) Y-Yellow (Reflectorized)
W-White (Reflectorized) G-Green (Reflectorized)

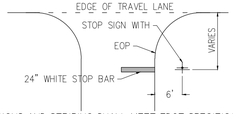
NOTE:
THE SIGN SHIELDS, SYMBOLS AND MESSAGES CONTAINED ON THIS SHEET ARE PROVIDED FOR READY REFERENCE TO THOSE SIGNS USED IN THE DEVELOPMENT OF THE 600 SERIES ROADWAY DESIGN STANDARDS AND ARE COMMONLY USED IN THE DEVELOPMENT OF TRAFFIC CONTROL PLANS.
FOR ADDITIONAL SIGNS AND SIGN DETAIL INFORMATION REFER TO THE STANDARD HIGHWAY SIGNS MANUAL AS SPECIFIED IN THE MUTCD. SPECIAL SIGNS FOR TRAFFIC CONTROL PLANS WILL BE AS APPROVED BY THE STATE TRAFFIC PLANS ENGINEER.



ROAD SIGNS
ALUMINUM PLATES – MINIMUM THICKNESS 0.080 INCHES, DIE CUT ALCOA ALLOY 6061-T6 OR EQUAL. WHITE LETTERS WITH GREEN REFLECTORIZED BACKGROUND.

STOP SIGN
ALUMINUM PLATES – MINIMUM THICKNESS 0.080 INCHES, DIE CUT ALCOA ALLOY 6061-T6 OR EQUAL. WHITE LETTERS WITH RED REFLECTORIZED BACKGROUND.
STANDARD SIZE: 36"

BASE DETAIL
CROSSPIN – (2) 3/8"x12" THROUGH PIPE, PERPENDICULAR TO EACH OTHER, REQUIRED.



ALL SIGNS AND STRIPING SHALL MEET FDOT SPECIFICATIONS

STOP SIGN DETAILS

DATE	REMARK	DR	CH
24-FEB-16	INITIAL SUBMITTAL	MLW	
12-APR-16	SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS	MLW	
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27-JUN-16	PLANS FOR FINAL REVIEW	MLW	
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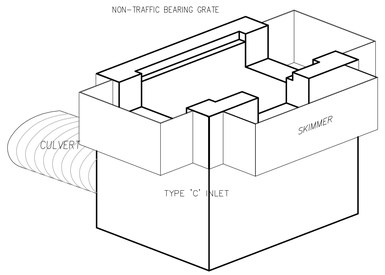
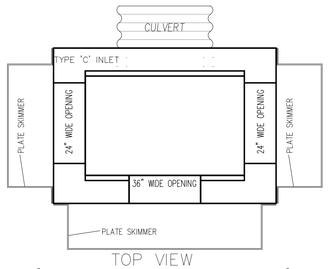
HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
DETAILS AND SECTIONS

ENGINEER JOB # 15071

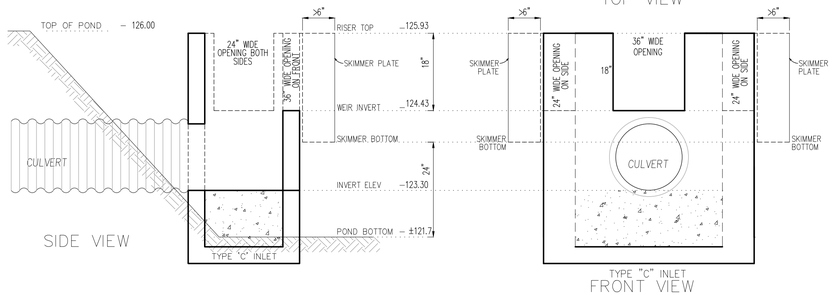
DRAWING SCALE NTS

SHEET 4 OF 6



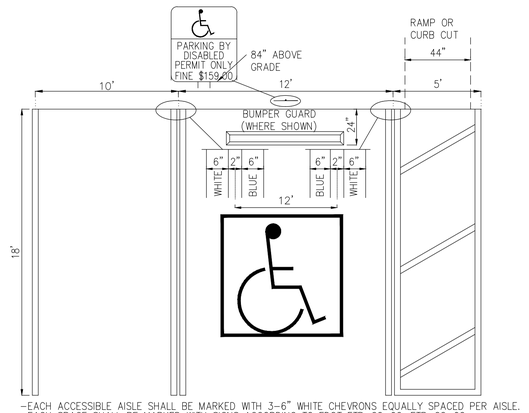


TOP VIEW



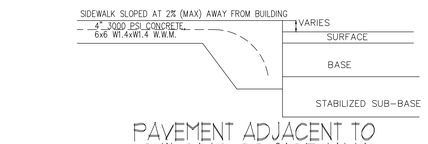
MODIFY EXISTING STRUCTURE BACK TO PERMITTED CONDITIONS
INFORMATION FOR EXISTING DISCHARGE STRUCTURE

EXISTING DISCHARGE STRUCTURE

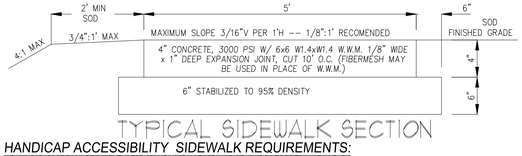


-EACH ACCESSIBLE AISLE SHALL BE MARKED WITH 3-6" WHITE CHEVRONS EQUALLY SPACED PER AISLE.
-EACH SPACE SHALL BE MARKED WITH SIGNS ACCORDING TO FDOT FTP-20-06, FTP-22-06
-FOR SIGN FTP-22-06, THE PENALTY IN HIGHLANDS COUNTY IS CURRENTLY $159.00

HANDICAP PARKING DETAILS SHALL BE IN ACCORDANCE TO ADA REQUIREMENTS



PAVEMENT ADJACENT TO BUILDING OR SIDEWALK



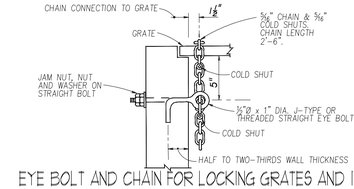
TYPICAL SIDEWALK SECTION

HANDICAP ACCESSIBILITY SIDEWALK REQUIREMENTS:

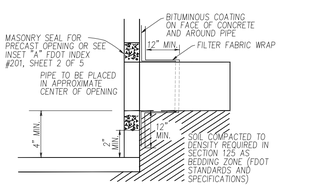
-RUNNING SLOPE MUST NOT EXCEED 5% (1:20), OTHERWISE IT IS CONSIDERED A 'RAMP'
-MAXIMUM CROSS SLOPE MUST NOT EXCEED 1.5% (3/8":1')

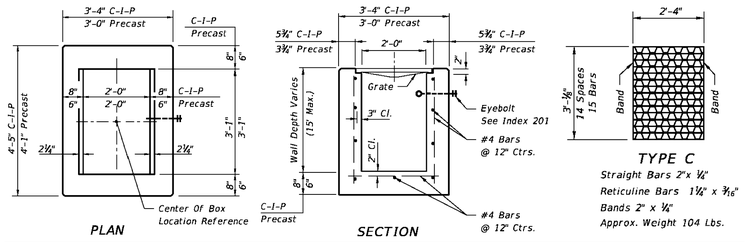
RAMPS (SLOPE GREATER THAN 1:20 OR 5%):
-RAMPS WITH SLOPE 1:20 (5%) TO 1:16(6.25%) CAN HAVE A MAXIMUM HORIZONTAL PROJECTION FOR 40'.
-RAMPS WITH SLOPE 1:16 (6.25%) TO 1:12(8.33%) CAN HAVE A MAXIMUM HORIZONTAL PROJECTION FOR 30'.
-RAMPS MUST HAVE A 5' LEVEL LANDING ABOVE AND A 5' LEVEL LANDING BELOW EACH RAMP.
-RAMPS HAVE A MAXIMUM SLOPE OF 1:12 (8.33%)

HANDRAIL REQUIREMENTS:
-IF A RAMP RUN HAS A RISE GREATER THAN 6" OR A HORIZONTAL PROJECTION GREATER THAN 72" A HANDRAIL WILL BE REQUIRED ON BOTH SIDES.
-HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
-A HANDRAIL WILL BE REQUIRED IF THERE IS A DROP-OFF GREATER THAN 10" CLOSER THAN 2' FROM THE THE EDGE OF SIDEWALK.
-A HANDRAIL WILL BE REQUIRED IF A SLOPE STEEPER THAN 1:2 THAT BEGINS CLOSER THAN 2' FROM THE EDGE OF SIDEWALK AND IS A DEPTH OF 30" OR GREATER.



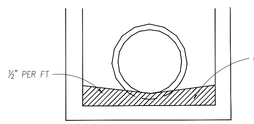
EYE BOLT AND CHAIN FOR LOCKING GRATES AND INLETS





TYPE C
Straight Bars 2"x ¼"
Reticuline Bars 1¼" x 3/16"
Bands 2" x ¼"
Approx. Weight 104 Lbs.

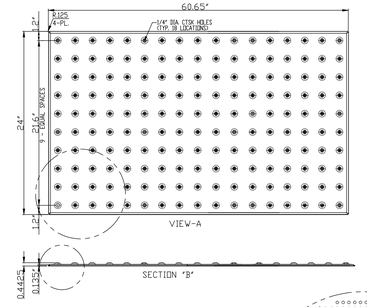
FDOT 2015 DESIGN STANDARDS	DITCH BOTTOM INLET TYPES C	INDEX NO. 232	SHEET NO. 1 of 7	SHEET NO. 3 of 7

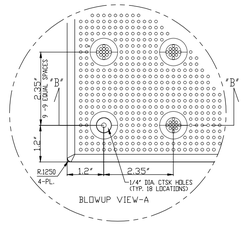


NOTE: GROUT TO CONSIST OF 3:1 SAND-CEMENT MIXTURE OR ANY CLASS CONCRETE. FOR ALL STRUCTURES UNLESS EXCLUDED BY SPECIAL DETAIL

ALL PIPE TYPES DRAINAGE STRUCTURE INVERT

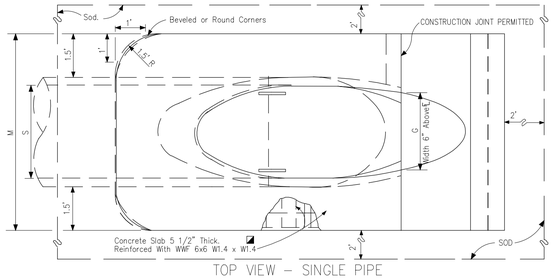
1. THESE INLETS ARE SUITABLE FOR BICYCLE TRAFFIC AND ARE TO BE USED IN DITCHES, MEDIANS AND OTHER AREAS SUBJECT TO INFREQUENT TRAFFIC LOADINGS BUT ARE NOT TO BE PLACED IN AREAS SUBJECT TO ANY HEAVY WHEEL LOADS. THESE INLETS MAY BE PLACED IN AREAS SUBJECT TO OCCASIONAL PEDESTRIAN TRAFFIC SUCH AS LANDSCAPED AREAS AND PAVEMENT AREAS WHERE PEDESTRIANS CAN WALK AROUND THE INLET.
2. INLETS SUBJECT TO MINIMAL DEBRIS SHOULD BE CONSTRUCTED WITHOUT SLOTS. WHERE DEBRIS IS A PROBLEM INLETS SHOULD BE CONSTRUCTED WITH SLOTS. SLOTTED INLETS LOCATED WITHIN ROADWAY CLEAR ZONES AND AREAS SUBJECT TO PEDESTRIANS SHALL HAVE TRAVERSABLE SLOTS. THE TRAVERSABLE SLOT MODIFICATION IS NOT ADAPTABLE TO INLET TYPE H. SLOTS MAY BE CONSTRUCTED AT EITHER OR BOTH ENDS AS SHOWN ON PLANS. TRAVERSABLE SLOTS SHALL NOT BE USED IN AREAS SUBJECT TO OCCASIONAL BICYCLE TRAFFIC.
3. STEEL GRATES ARE TO BE USED ON ALL INLETS WHERE BICYCLE TRAFFIC IS ANTICIPATED. STEEL GRATES ARE TO BE USED ON ALL INLETS WITH TRAVERSABLE SLOTS. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON INLETS WITHOUT SLOTS WHERE BICYCLE TRAFFIC IS NOT ANTICIPATED. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON ALL INLETS WITH NON-TRAVERSABLE SLOTS SUBJECT TO THE SELECTION DESCRIBED ABOVE. WHEN ALTERNATE G GRATE IS SPECIFIED IN THE PLANS, EITHER THE STEEL GRATE, NOT DIP GALVANIZED AFTER FABRICATION, OR THE CAST IRON GRATE MAY BE USED, UNLESS THE PLANS STIPULATE THE PARTICULAR TYPE.
4. RECOMMENDED MAXIMUM PIPE SIZES SHOWN ARE FAR CONCRETE PIPE. SIZE FOR OTHER TYPES OF PIPE MUST BE CHECKED FOR FIT.
5. ALL EXPOSED EDGES AND CORNERS SHALL BE ¾" CHAMFER OR TOOLED TO ¼" RADIUS.
6. CONCRETE INLET PAVEMENT TO BE USED ON INLETS WITHOUT SLOTS AND INLETS WITH NON-TRAVERSABLE SLOTS ONLY WHEN CALLED FOR IN THE PLANS; BUT REQUIRED ON ALL TRAVERSABLE SLOT INLETS.
7. SODDING TO BE USED ON ALL INLETS NOT LOCATED IN PAVED AREAS.
8. FOR SUPPLEMENTARY DETAILS SEE INDEX NO. 201.
9. ALL REINFORCING IS GRADE 60 BARS WITH 2" MIN. COVER UNLESS OTHERWISE NOTED. BARS TO BE CUT OR BENT FOR 1¼" CLEARANCE AROUND PIPE OPENING. PROVIDE ONE ADDITIONAL #4 BAR ABOVE AND AT EACH SIDE OF PIPE OPENING.



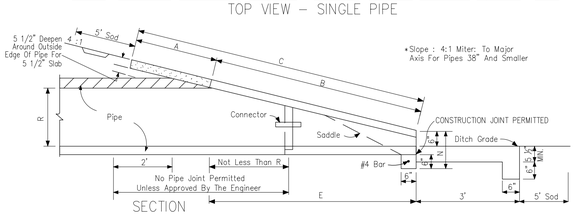


DETECTABLE WARNING DEVICE

GENERAL NOTES
1. SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED AT LOCATIONS THAT WILL PROVIDE CONTINUOUS UNOBSTRUCTED PEDESTRIAN CIRCULATION PATH TO PEDESTRIAN AREAS, ELEMENTS AND FACILITIES WITHIN THE RIGHT OF WAY AND TO ACCESSIBLE PEDESTRIAN ROUTES ON ADJACENT SITES. CURBED FACILITIES WITH SIDEWALKS AND THOSE WITHOUT SIDEWALKS ARE TO HAVE CURB RAMPS CONSTRUCTED FOR ALL INTERSECTIONS AND TURNOUTS WITH CURBED RETURNS, TO ACCOMMODATE CURB RAMPS, PARTIAL CURB RETURNS ARE TO EXTEND TO THE LIMITS PRESCRIBED IN INDEX NO. 515. RAMPS CONSTRUCTED AT LOCATIONS WITHOUT SIDEWALKS ARE TO HAVE A LANDING CONSTRUCTED AT THE TOP OF EACH RAMP. SEE LANDINGS FOR CURB RAMPS WITHOUT SIDEWALKS.
2. WHEN ALTERING EXISTING PEDESTRIAN FACILITIES, WHERE EXISTING RESTRICTED CONDITIONS PRECLUDE THE ACCOMMODATION OF A RAMP SLOPE OF 1:12, A RAMP SLOPE BETWEEN 1:12 AND 1:10 IS PERMITTED FOR A RISE OF 6" MAXIMUM. WHERE COMPLIANCE WITH THE REQUIREMENTS FOR CROSS SLOPE CANNOT BE FULLY MET, THE MINIMUM FEASIBLE CROSS SLOPE SHALL BE PROVIDED. RAMP SLOPES ARE NOT REQUIRED TO EXCEED 15' IN LENGTH.
3. IF SIDEWALK CURB RAMPS ARE LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, THEN PROVIDE TRANSITION SLOPES TO THE RAMP; OTHERWISE A SIDEWALK CURB MAY BE REQUIRED.
4. ALL SIDEWALKS, RAMPS, AND LANDINGS WITH A CROSS SLOPE OF 0.02 SHOWN IN THIS INDEX ARE 0.02 MAXIMUM. ALL RAMP SLOPES SHOWN IN THIS INDEX AS 1:12 ARE 1:12 MAXIMUM. LANDINGS SHALL HAVE SLOPES LESS THAN OR EQUAL TO 0.02 IN ANY DIRECTION.
5. GRADE BREAKS AT THE TOP AND BOTTOM OF RAMPS SHALL BE PARALLEL TO EACH OTHER AND PERPENDICULAR TO THE DIRECTION OF THE RAMP SLOPE.
6. WHERE A SIDEWALK CURB RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITION OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. EXISTING SIDEWALKS SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG. FOR CONCRETE SIDEWALK DETAILS REFER TO INDEX 310.
7. SIDEWALK CURB RAMP ALPHA-IDENTIFICATIONS ARE FOR REFERENCE PURPOSES (PLANS, PERMITS, ETC.). ALPHA-IDENTIFICATIONS CR-I AND CR-J WERE INTENTIONALLY OMITTED.
8. DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE RAMP AND TO A DEPTH OF 2'. DETECTABLE WARNINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION SECTION 527. FOR THE LAYOUT OF DETECTABLE WARNINGS, REFER TO THE TYPICAL PLACEMENT OF DETECTABLE WARNINGS DETAILS. DETECTABLE WARNINGS SHALL NOT BE PROVIDED ON TRANSITION SLOPES.
9. WHEN DETECTABLE WARNINGS ARE PLACED ON A SLOPE GREATER THAN 5%, DOMES SHALL BE ALIGNED WITH THE CENTERLINE OF THE RAMP; OTHERWISE DOMES ARE NOT REQUIRED TO BE AUGNED.
10. DETECTABLE WARNINGS SHALL BE REQUIRED ON SIDEWALKS AND SHARED USE PATHS AT:
A. INTERSECTING ROADS,
B. MEDIAN CROSSINGS GREATER THAN OR EQUAL TO 6' IN WIDTH,
C. RAILROAD CROSSINGS;
D. SIGNALIZED DRIVEWAYS.
11. DETECTABLE WARNINGS – ACCEPTANCE CRITERIA:
A. COLOR AND TEXTURE SHALL BE COMPLETE AND UNIFORM.
B. 90% OF INDIVIDUAL TRUNCATED DOMES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR TRANSPORTATION FACILITIES, SECTION 705.
C. THERE SHALL BE NO MORE THAN 4 NON-COMPLIANT DOMES IN ANYONE SQUARE FOOT.
D. NON-COMPLIANT DOMES SHALL NOT BE ADJACENT TO OTHER NON-COMPLIANT DOMES.
E. SURFACES SHALL NOT DEVIATE MORE THAN 0.10" FROM A TRUE PLANE.
12. DETECTABLE WARNINGS SHALL BE INSTALLED NO GREATER THAN 5' FROM THE BACK OF CURB OR EDGE OF PAVEMENT.
13. DETECTABLE WARNINGS SHALL NOT BE INSTALLED OVER GRADE BREAKS.



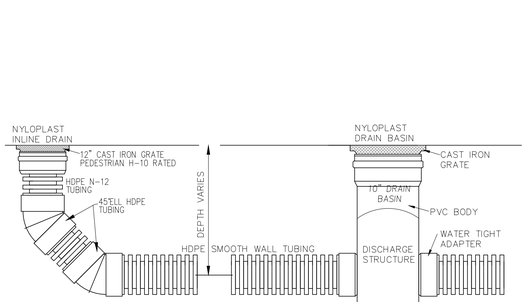
TOP VIEW – SINGLE PIPE



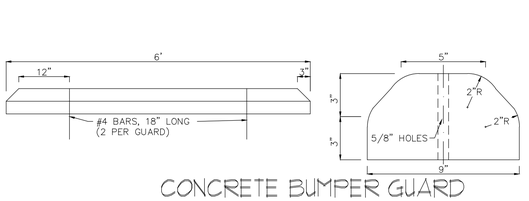
SECTION

DIMENSIONS & QUANTITIES												
	Rise R	Span S	X	A	B	C	E	F	G	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad Pipe	N
4 : 1 Slope	12"	18"	2'-10"	2.36'	3.06'	5.42'	3.03'	5"	1.50'	4.92'	7.75'	10.58'	13.42'	1.21'
4 : 1 Slope	15"	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8	1.22'	4.63'	7.21'	9.79'	15.38'	1.19'

MITERED END SECTION



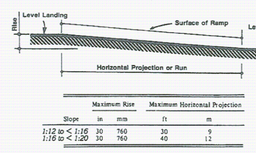
USE DRAIN BASIN WHEN CHANGING DRAIN PIPE SIZE
ROOF DRAIN COLLECTION DETAIL



DOWN SPOUT CONNECTOR DETAIL

CONCRETE BUMPER GUARD

HANDICAP ACCESSIBILITY REQUIREMENTS
Accessible Route Slope
Running Slope ≤ 1:20 (5%) max., otherwise it is considered a ramp.
Ramps
Running slope > 1:20 (5%)
Ramp slope 1:20 (5%) to 1:16 (6.25%) can have a max. horizontal projection for 40'.
Ramp slope 1:16 (6.25%) to 1:12 (8.33%) can have a max. horizontal projection for 30'.
Max. slope 1:12 (8.33%)
Ramps must have a 5' level landing above and a 6' level landing below ramp. ("level" means 1.5% or less slope)



	Maximum Rise		Maximum Horizontal Projection	
Slope	in	mm	ft	m
1:12 to < 1:16	30	760	30	9
1:16 to < 1:20	30	760	40	12

Cross-slope
Max. allowable cross-slope 1:67 (1.5%)

Handrails
If ramp run has a rise > 6" or a horizontal projection > 72", then it shall have handrails on both sides.
Handrails are not required on curb ramps.
Handrails are required where there are drop-offs. (Case I & II shown below)

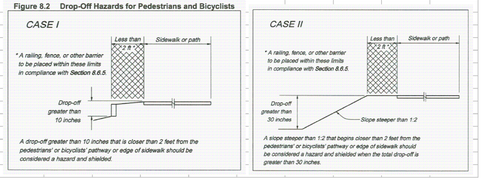


Figure 8.2 Drop-Off Hazards for Pedestrians and Bicyclists

DATE	DR	CH	REMARK
24-FEB-16	MLW		INITIAL SUBMITTAL
12-APR-16	MLW		SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS
21-APR-16	MLW		CHANGE OF SITE PAVEMENT REQUIREMENTS
27-JUN-16	MLW		PLANS FOR FINAL REVIEW
29-APR-16	MLW		DISCHARGE STRUCTURE CLARIFICATION
18-AUG-16	MLW		PLANS FOR BID
28-OCT-16	MLW		NOTES FOR TREE REMOVAL & UTILITY SERVICES

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

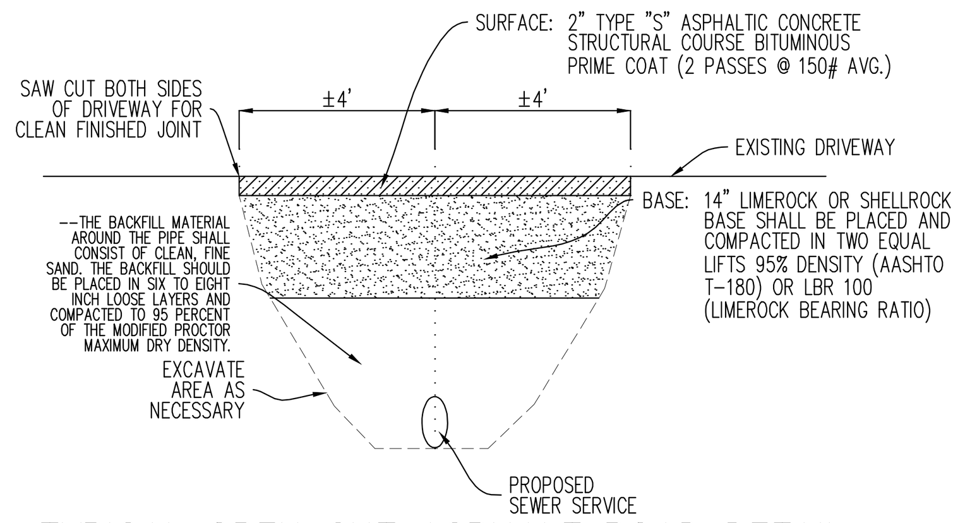
Polston Engineering Inc.
CIVIL ENGINEERING CONSULTANTS
2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870
863-385-5564 PHONE – 863-385-2462 FAX

ENGINEER JOB # 15071

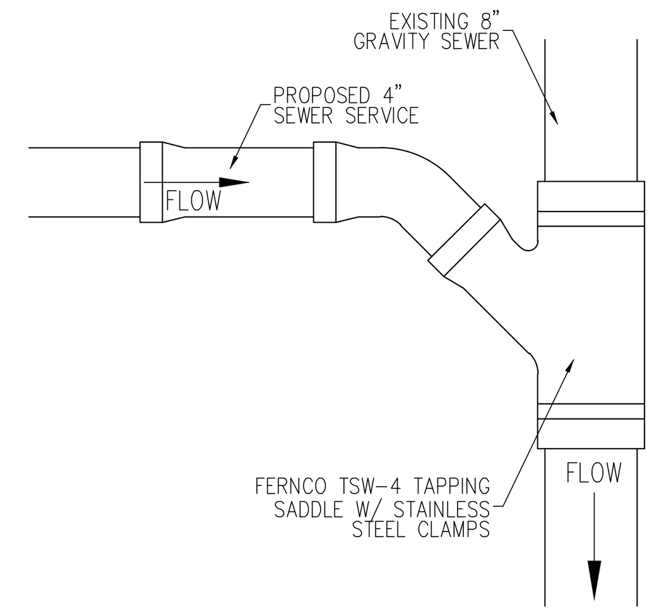
HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES
PARKWAY SUB-STATION
DETAILS AND SECTIONS

DRAWING SCALE NTS

SHEET 5 OF 6

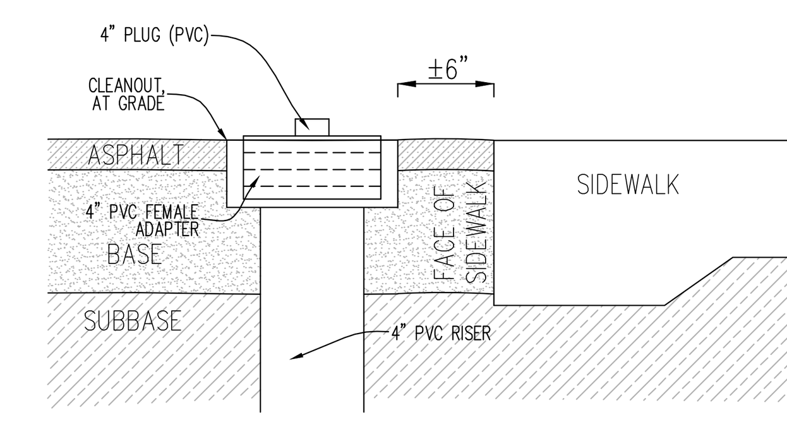


TYPICAL OPEN CUT ASPHALT ROAD DETAIL

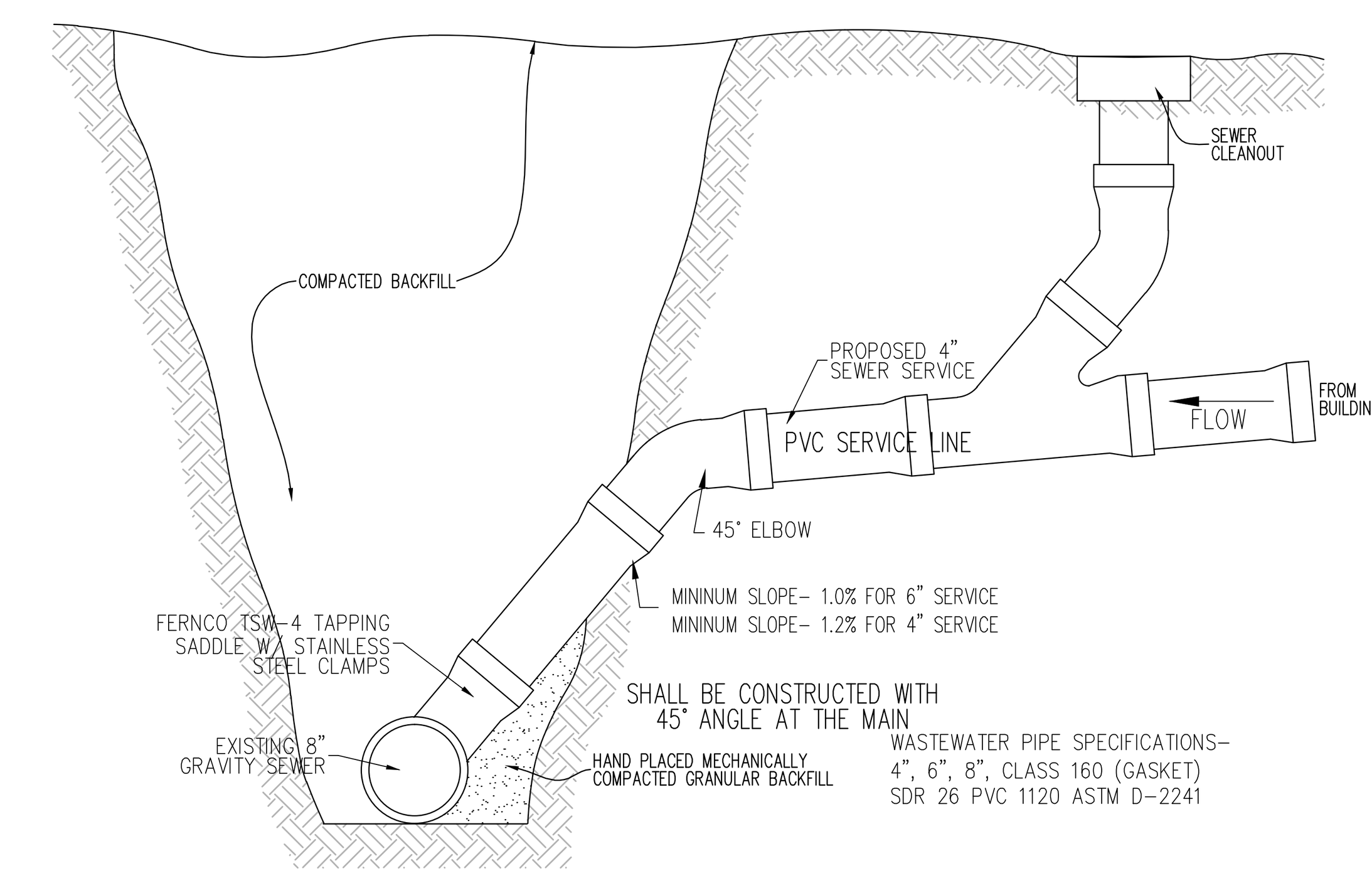


STANDARD SEWER SERVICE LATERAL

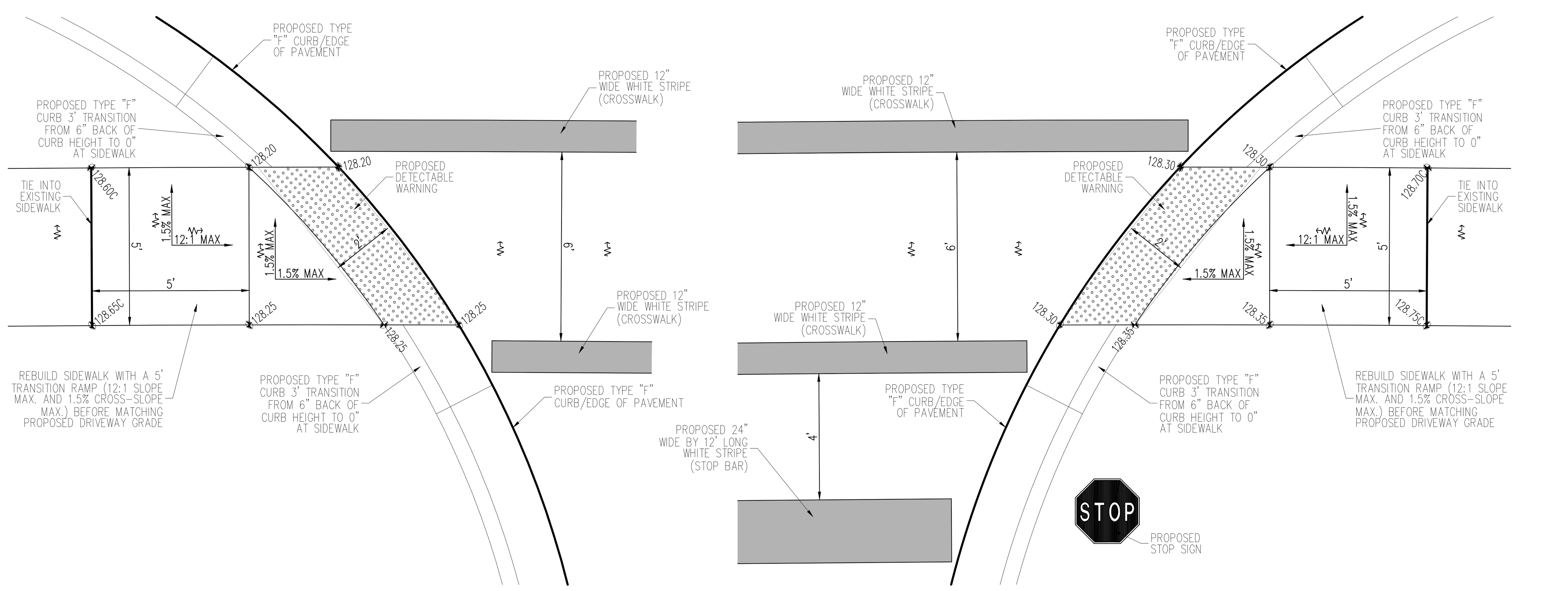
FERNCO TSW-4 TAPPING SADDLE
(ALL RECOMMENDATIONS FROM THE MANUFACTURER OF THE SADDLE SHALL BE FOLLOWED)
1. EXCAVATE THE TRENCH EXPOSING THE OUTSIDE DIAMETER OF THE SEWER MAIN
2. CORE A HOLE IN THE SEWER MAIN OF APPROPRIATE DIAMETER MATCHING THE CONTOUR OF THE TAP SADDLE LOCATING RING, THE INSPECTION OF THE TAP SHOULD BE SCHEDULED WITH THE ENGINEER OF RECORD AT LEAST 24 HOURS IN ADVANCE.
A. USE A 5" CORING BIT OR HOLE SAW FOR TST-4 AND TSW-4
B. USE A 7" CORING BIT OR HOLE SAW FOR TST-6 AND TSW-6
3. CLEAN THE PIPE SURFACE AND REMOVE ANY SHARP EDGES. OVER CUTTING THE HOLE OR OTHERWISE DAMAGING THE SEWER MAIN WILL BE CONSIDERED UNACCEPTABLE AND WILL WARRANT THE REPLACEMENT OF THE DAMAGED MAIN LINE SEGMENT AND THE INSTALLATION OF A FACTORY WYE.
4. WRAP THE CLAMPS AROUND THE PIPE, ENGAGE, AND SLIDE ONE TO EACH SIDE OF THE CORED HOLE
5. POSITION THE TAP SADDLE GASKET OVER THE PIPE WITH THE LOCATING RING INSIDE THE CORED HOLE
6. HOLDING THE TAP SADDLE FIRMLY AGAINST THE PIPE AND SLIDE CLAMPS IN PLACE AND SNUG THE CLAMPS BY PULLING ON THE TAIL
7. TIGHTEN CLAMPS TO 60 LBS. TORQUE
8. CONNECT LATERAL PIPE OF APPROPRIATE SIZE, TIGHTEN TO 60 LBS. TORQUE



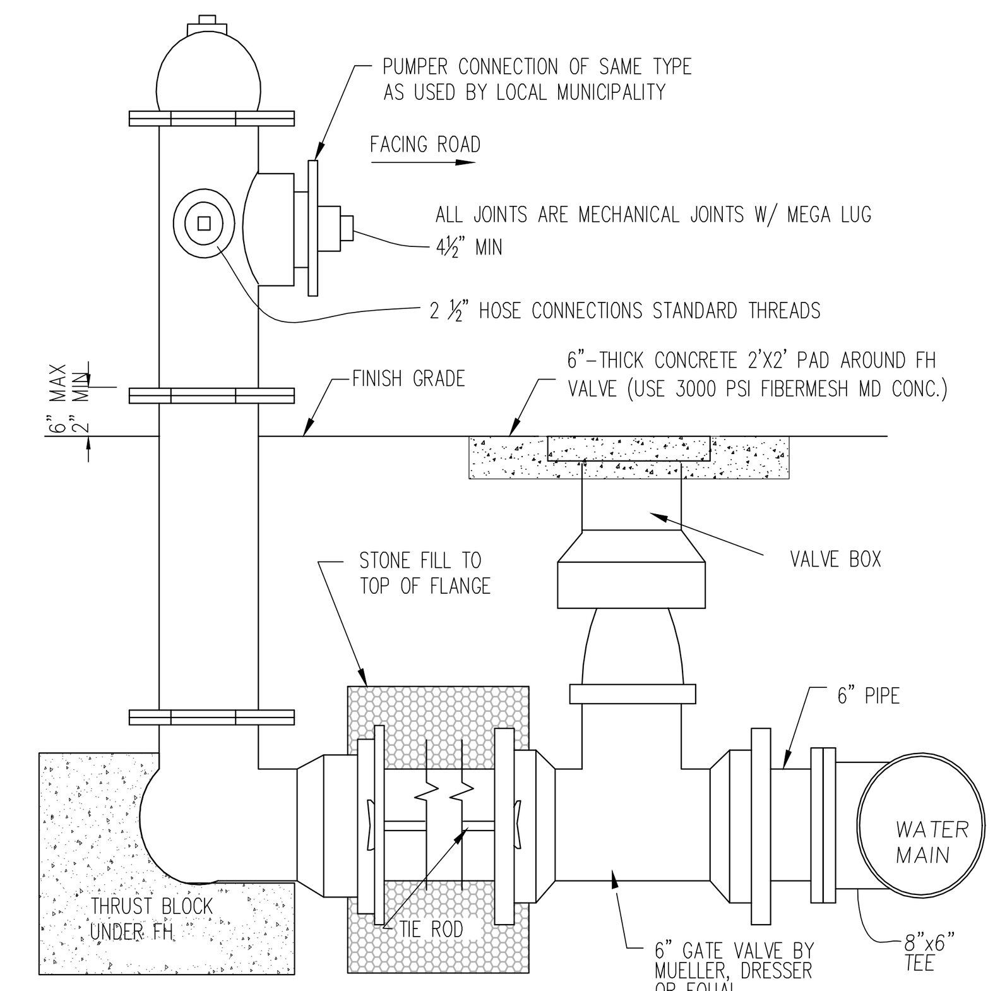
SEWER CLEAN-OUT DETAIL



DEEP SERVICE CONNECTION



CROSSWALK AND STRIPING DETAIL CROSSING PARKWAY DRIVEWAY ACCESS



FIRE HYDRANT DETAIL

FIRE HYDRANT NOTES

--FIRE HYDRANTS SHALL BE CAST IRON BODIED, FULLY BRONZE MOUNTED, TRAFFIC-TYPED, SUITABLE FOR WORKING PRESSURE OF 150 PSI, AND SHALL MEET ALL OF THE REQUIREMENTS OF THE AWWA SPECIFICATIONS C502-73. FIRE HYDRANT SHALL BE MUELLER CENTURION OR APPROVED EQUIVALENT MUELLER.
--THE WATERWAYS OF HYDRANT SHALL BE AS FREE AS POSSIBLE OF OBSTRUCTIONS, SHARP TURNS, CORNERS, OR OTHER CAUSES OF RESISTANCE.
--HYDRANTS SHALL HAVE TWO, TWO AND ONE HALF INCH BRASS NOZZLES AND ONE, FIVE AND ONE QUARTER INCH PUMPED NOZZLE WITH NATIONAL STANDARD FIRE HOSE COUPLING AND SCREW THREADS TOGETHER WITH CAPS FASTENED SECURELY TO EACH HYDRANT AND THREADED TO FIT NOZZLES. THE MAIN VALVE OPENING OF THE HYDRANT SHALL BE "DRY HEAD" TYPE. ALL HOSE THREADS SHALL CONFORM TO COUNTY FIRE PROTECTION STANDARDS.
--HYDRANTS SHALL HAVE A SAFETY "BREAKABLE FLANGE" SECTION LOCATED ABOVE THE GROUND LINE. THE DISTANCE FROM THE FINISH GROUND LINE AROUND THE HYDRANT TO THE "BREAKABLE FLANGE" SHALL BE NOT LESS THAN TWO (2") INCHES OR MORE THAN SIX (6") INCHES.
--AFTER INSTALLATION, EXPOSED SURFACES OF HYDRANT SHALL BE PAINTED WITH TWO (2) COATS OF FIRE HYDRANT PAINT. PAINT SELECTION SHALL BE APPROVED BY THE COUNTY. THE HYDRANT OPERATING AND OUTLET NOZZLE CAP NUTS, SHALL BE PENTAGONAL IN SHAPE. THE PENTAGON SHALL MEASURE ONE TO ONE AND ONE HALF INCHES FROM POINT TO FLAT AT THE BASE OF THE NUT AND ONE AND SEVEN SIXTEENTH INCHES AT THE TOP. NUT FACES SHALL TAPER UNIFORMLY AND THE HEIGHT OF THE NUT SHALL BE NO LESS THEN ONE (1") INCH. THE HYDRANT SHALL BE OPENED BY TURNING THE OPERATING NUT COUNTER CLOCKWISE. A CLEARLY VISIBLE ARROW AND THE WORD "OPEN" SHALL BE CAST IN RELIEF ON THE TOP OF THE HYDRANT SO AS TO DESIGNATE THE DIRECTION OF THE OPENING.

PIPE SPECIFICATION:

WATER MAINS -	4", 6", 8", 10"AND 12" AWWA APPROVED AWWA C-900 PVC DR 18 ASTM D1784 (BLUE COLOR)
WATER MAIN -	SMALLER THAN 4" AWWA APPROVED RING-TITE PVC CLASS 200, ASTM D2241 (COLOR BLUE)
FITTINGS -	4" AND LARGER- CLASS 250 (MINIMUM) DUCTILE IRON MEG-A-LUG ACCESSORIES (EBAA MEG-A-LUG ONLY)
TAPPING SLEEVE -	STAINLESS STEEL, JCM 432

1. ALL PIPE MATERIAL WILL BE AWWA OR ASTM STANDARD.
2. ALL WATERLINE 4" - 12" WILL BE AWWA C-900 DR 18.
3. ALL PVC WATERLINE SMALLER THAN 4" WILL MEET THE REQUIREMENTS OF ASTM D-1785
4. ALL POLYETHYLENE PIPE FOR PIPE SIZES 1/2" TO 3" SHALL MEET THE REQUIREMENTS OF AWWA C-901
5. POLYETHYLENE PIPE SIZES 4" TO 63" SHALL MEET THE REQUIREMENTS OF AWWA C-906.
6. ALL MEGA-LUG RESTRAINTS WILL BE DOMESTIC EBAA ONLY.

NOTE: EACH SUBCONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES EFFECTED BY HIS WORK.

INSTALLATION INSTRUCTIONS:
--THE SUBCONTRACTOR WILL BE RESPONSIBLE FOR TAKING ALL STEPS NECESSARY INCLUDING SHORING TO INSURE THE INTEGRITY OF THE ALL EX PAVEMENTS, UTILITIES AND STRUCTURES AND BE RESPONSIBLE FOR REPLACEMENT OR REPAIR OF ANY DAMAGE CAUSED BY OR RELATED TO CONSTRUCTION OF WATERLINE.
--THE PIPE SHALL BE BEDDED IN COMPACTED CLEAN SAND WITH ALL ORGANIC MATTER AND DEBRIS REMOVED.
--BACK FILL SHALL BE OF SIMILAR MATERIAL AND PLACED BY HAND AND COMPACTED BY TAMPING TO AT LEAST 12" OVER THE TOP OF THE PIP
--ALL FILL TO BE CLEAN SAND AND TO BE PLACED IN APPROXIMATE 12" LAYERS AND IS TO BE COMPACTED BY ROLLING OR TAMPING.
--PIPE IS TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS, USING THE MANUFACTURER SPECIFIED JOINT LUBRICANTS AND CEMENTS IF REQ
--ALL DISTURBED AREAS WITHIN THE CITY, COUNTY AND STATE R/W ARE TO BE RESTORED AND SODDED.
--THE CONNECTION TO THE CITY OF SEBRING UTILITIES WATER DISTRIBUTION SYSTEM WILL BE DONE TO THE CITY OF SEBRING UTILITIES SPECIFICAT UNDER THE UTILITY DEPARTMENT SUPERVISION REQUIREMENTS.
--THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ALL UTILITIES, ROADS AND STRUCTURES DAMAGED DURING THE DIRECTIONAL BORE OR AND BORE CONSTRUCTION PHASE.

TESTING:
--ALL TESTS WILL REQUIRE THE PRESENCE OF THE ENGINEER, CONTRACTOR OR HIS DESIGNATED INSPECTOR.
--ALSO PRESENT WILL BE A DESIGNATED INSPECTOR FROM THE CITY OF SEBRING UTILITIES WATER DISTRIBUTION PLANT.
--THE SUBCONTRACTOR SHALL TAKE ALL PRECAUTIONS TO SECURE A WATERTIGHT WATER LINE UNDER ALL CONDITIONS.
--ALL VISIBLE DAMAGE FLAWS SHALL BE REPAIRED OR REPLACED REGARDLESS OF THE OUT COME OF ANY TESTING PERFORMED.
--TEST SHALL BE PERFORMED PRIOR TO CONNECTION TO THE CITY OF SEBRING UTILITIES WATER DISTRIBUTION SYSTEM.

WATER LINES:
--THE WATER LINES SHALL BE TESTED UNDER A HYDROSTATIC PRESSURE OF 150 PSI FOR AT LEAST 2 HOURS.
--THE WATER LINE SHALL BE CHLORINATED AND SAMPLES TAKEN AT TEMPORARY SAMPLING POINTS ON 2 CONSECUTIVE DAYS, AND TESTED PER HIGHLANDS COUNTY HEALTH DEPARTMENT REQUIREMENTS. THE TESTS SHALL INCLUDE, BUT NOT LIMITED TO, BACTERIOLOGICAL, PH AND CHLORINE RESIDUAL.

THE SUBCONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT TO PERFORM ALL TESTS.

HYDROSTATIC TESTS:
1) ALL COMPONENTS OF THE WATER DISTRIBUTION SYSTEM, INCLUDING FITTINGS, HYDRANTS, SERVICES, CONNECTIONS, AND VALVES SHALL BE HYDROSTATIC TESTED. SPECIFIC DISTRIBUTION SYSTEM COMPONENTS INCLUDING FITTINGS, VALVES, AND HYDRANTS, SHALL REMAIN UNCOVERED UNTI TESTED AND APPROVED, PROVIDED, HOWEVER, THAT PIPE TRENCHES UNDER TRAVELED STREETS OR ROADS MAY BE BACKFILLED WITH THE PERMISS OF THE PROJECT ENGINEER. NO TESTING SHALL BE DONE UNTIL ALL CONCRETE THRUST BLOCKING IS IN PLACE AND SET. IF HIGH EARLY STRENGTH CONCRETE IS USED, TESTING MAY BE CONDUCTED 48 HOURS AFTER THE CONCRETE IS PLACED; OTHERWISE, THRUST BLOCK CONCRETE MUST CURE DAYS BEFORE PRESSURE TESTING COMMENCES. IN TESTING, THE PART OF THE SYSTEM UNDER TEST SHALL BE FILLED WITH POTABLE WATER AND SUBJECTED TO A SUSTAINED PRESSURE OF 150 PSI. THE PIPING SHALL BE TESTED IN SECTIONS, THEREBY TESTING EACH VALVE FOR SECURE CLOS WHILE THE SYSTEM IS BEING FILLED, AIR SHALL BE CAREFULLY AND COMPLETELY EXHAUSTED. IF PERMANENT AIR VENTS ARE NOT LOCATED AT AL HIGH POINTS, THE CONTRACTOR SHALL INSTALL CORPORATION STOPS OR FITTINGS AND VALVES AT SUCH POINTS SO THE AIR CAN BE EXPELLED A PIPE SYSTEM IS SLOWLY FILLED WITH WATER.
2) TEST PRESSURE SHALL BE MAINTAINED BY PUMPING FOR AT LEAST TWO HOURS AND UNTIL ALL SECTIONS UNDER TEST HAVE BEEN CHECKED F EVIDENCE OF LEAKAGE. RATE OF LOSS SHALL NOT EXCEED THAT SPECIFIED BELOW, "ALLOWABLE LIMITS FOR LEAKAGE". VISIBLE LEAKS SHALL BE CORRECTED REGARDLESS OF TOTAL LEAKAGE SHOWN BY TEST.
3) THE SYSTEM AS A WHOLE, OR ANY PART, SHALL BE TESTED PRIOR TO CONSTRUCTION OF ANY SUBDIVISION ROADWAY OR PAVEMENT OVER THE WATER SYSTEM.
4) THE SYSTEM AS A WHOLE, OR ANY PART, SHALL BE RETESTED AFTER COMPLETION OF BACKFILLING WHEN IT IS BELIEVED NECESSARY, AS DIREC BY THE PROJECT ENGINEER. THE SYSTEM SHALL ALSO BE RETESTED UPON COMPLETION OF SUBDIVISION ROADWAY OR OTHER PAVEMENT CONSTRUC THAT IS CONSTRUCTED OVER THE WATER SYSTEM.
5) ALL PUMPS, GAUGES, AND MEASURING DEVICES SHALL BE FURNISHED, INSTALLED, AND OPERATED BY THE CONTRACTOR AND ALL SUCH EQUIPM AND DEVICES AND THEIR INSTALLATION SHALL BE APPROVED BY THE PROJECT ENGINEER. ALL PRESSURES AND LEAKAGE TESTING SHALL BE DONE THE PRESENCE OF A REPRESENTATIVE OF THE ENGINEER.
6) WATER FOR TESTING AND FLUSHING SHALL BE POTABLE WATER PROVIDED BY THE CONTRACTOR FROM A SOURCE APPROVED BY THE PROJECT ENGINEER.

THE HYDROSTATIC PRESSURE TESTS SHALL BE PERFORMED AS SPECIFIED AND NO INSTALLATION, OR SECTION THEREOF, WILL BE ACCEPTABLE UNTI LEAKAGE IS LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

$$L = \frac{N*D*\sqrt{P}}{7400}$$

IN WHICH,

L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
N = APPROXIMATE NUMBER OF JOINTS IN THE SECTION OF MAIN BEING TESTED
D = PIPE DIAMETER; IN INCHES
P = THE AVERAGE TEST PRESSURE DURING THE TEST, IN GAUGE PSI

DIVISION 2: TECHNICAL SPECIFICATIONS

SEC. 02.200. GENERAL: THE SPECIFICATIONS AND DRAWINGS ARE AN INTEGRATED PART OF THE CONTRACT DOCUMENTS AND AS SUCH WILL NOT STAND ALONE IF USED INDEPENDENTLY AS INDIVIDUAL PARTS, PARAGRAPHS, OR DRAWING SHEETS. THE DRAWINGS AND SPECIFICATIONS ESTABLISH MINIMUM STANDARDS OF QUALITY FOR A PROJECT. THEY DO NOT PURPORT TO COVER ALL DETAILS ENTERING INTO ITS DESIGN AND CONSTRUCTION OR OF ALL MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THE WORK.

SEC. 02.201. MAINTENANCE OF TRAFFIC:
A. CONTROL DEVICES: THE CONTRACTOR SHALL BE REQUIRED TO KEEP THE ENTIRE WORK SITE IN FULL COMPLIANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, CURRENT EDITION AND THE USDOT, FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
B. DETOURS: DETOURS SHALL REQUIRE APPROVAL BY THE COUNTY ENGINEER. ANY DETOURS APPROVED AS A PART OF THE TRAFFIC CIRCULATION PLAN, SHALL BE REQUIRED TO BE PROPERLY POSTED AND A MINIMUM OF 48-HOURS ADVANCE NOTICE SHALL BE GIVEN TO THE COUNTY ENGINEER'S OFFICE, LAW ENFORCEMENT AGENCIES, FIRE DEPARTMENT, SCHOOL BOARD AND EMERGENCY SERVICES. ADVANCE NOTICE SHALL ALSO BE PLACED AT THE LAST INTERSECTION BEFORE THE DETOUR.
C. DRIVEWAYS KEPT OPEN: NO BUSINESS WILL HAVE VEHICULAR ACCESS TOTALLY BLOCKED AT ANY TIME. DRIVEWAY ACCESS TO PROPERTY WILL NOT BE BLOCKED FOR MORE THAN 8 HOURS ON ANY DAY PROPERTY OWNERS WILL BE NOTIFIED IN WRITTEN FORM BY THE CONTRACTOR 24 HOURS PRIOR TO THE BLOCKING OF ANY DRIVEWAY, BUSINESS, OR PROPERTY ACCESS. BLOCKING OF DRIVEWAYS WILL REQUIRE ADVANCE APPROVAL BY THE COUNTY ENGINEER.
D. MAINTENANCE OF TRAFFIC VIOLATIONS: THE COUNTY WILL REPORT ANY KNOWN VIOLATION OF THE REQUIRED MAINTENANCE OF TRAFFIC TO THE OWNER, PROJECT ENGINEER, OR CONTRACTOR. THE CONTRACTOR WILL HAVE 4 HOURS OF REGULARLY SCHEDULED WORK TIME TO BRING THE SITE INTO FULL COMPLIANCE. IF THIS IS NOT DONE, THE COUNTY WILL HAVE THE OPTION TO TAKE ANY CORRECTIVE MEASURES IT FEELS NECESSARY AND TO BILL THE OWNER FOR THE COST OF THESE MEASURES.
E. TRAFFIC CONTROL PLAN APPROVAL: PRIOR TO THE COMMENCEMENT OF WORK AT THE JOB SITE, THE PROJECT ENGINEER SHALL RECEIVE APPROVAL OF HIS TRAFFIC CONTROL PLAN FROM THE COUNTY ENGINEER ACCESS FOR LOCAL TRAFFIC SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD OF THE PROJECT.

SEC. 02.202. DRIVEWAY INGRESS AND EGRESS MAINTENANCE: THIS SPECIFICATION SHALL ONLY APPLY WHERE RESIDENCES, BUSINESSES, AND OTHER TYPES OF PROPERTY FRONT ON THE ROAD TO BE CONSTRUCTED OR RECONSTRUCTED, AND DRIVEWAY CONNECTIONS ARE TO BE DISTURBED.
A. CONTRACTOR WILL BE REQUIRED TO PLACE COMMERCIAL BASE MATERIAL IN DRIVEWAYS AND/OR ACCESS POINTS AFFECTED BY THE PROJECT, WHERE CONSIDERED NECESSARY BY THE PROJECT ENGINEER TO PROVIDE SAFE, STABLE AND REASONABLE ACCESS TO RESIDENCES, BUSINESSES, AND PROPERTY.
B. THE MATERIALS TO BE USED FOR DRIVEWAY MAINTENANCE SHALL BE LIMEROCK, STONE OR OYSTER SHELL. THE GRADE AND QUALITY OF THE MATERIAL SHALL BE THAT OFFERED FOR COMMERCIAL SUPPLY IN THE AREA. COMMERCIAL MATERIALS USED IN LOCATIONS WHICH HAVE INADEQUATE DRAINAGE OR ARE PRONE TO BE WET, SHALL BE OF A STABLE CHARACTER, UNAFFECTED BY WET CONDITIONS.
C. THE MATERIAL SHALL BE PLACED IN THE DRIVEWAY AS DIRECTED BY THE PROJECT ENGINEER. THE MATERIAL SHALL BE LEVELED, MANIPULATED, COMPACTED AND MAINTAINED, TO THE EXTENT APPROPRIATE FOR THE INTENDED USE OF THE PARTICULAR DRIVEWAY.
D. AS PERMANENT DRIVEWAY CONSTRUCTION IS ACCOMPLISHED AT A PARTICULAR LOCATION, PREVIOUSLY PLACED COMMERCIAL MATERIALS WHICH ARE SUITABLE FOR REUSE MAY BE SALVAGED AND REUSED ON OTHER DRIVEWAYS AS DIRECTED.

SEC. 02.203. CLEARING AND GRUBBING:
A. CLEARING AND GRUBBING SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TIMBER, BRUSH, VEGETATION, STUMPS, ROOTS, BOULDERS, PAVEMENT, RUBBISH AND DEBRIS AND ALL OTHER MATERIALS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND AND THE SURFACE OF WORK AREAS. MATERIAL RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF BY THE CONTRACTOR IN A PROPER PLACE.
B. AS AN EXCEPTION TO THE ABOVE PROVISIONS, WHERE SO DIRECTED BY THE PROJECT ENGINEER AND APPROVED BY THE COUNTY ENGINEER, DESIRABLE TREES WITHIN THE ROADWAY SHALL BE TRIMMED, PROTECTED AND LEFT STANDING. BRANCHES OF TREES EXTENDING OVER THE AREA OCCUPIED BY THE ROADWAY SHALL BE TRIMMED AS DIRECTED, TO GIVE A CLEAR HEIGHT OF 16 FEET ABOVE THE ROADWAY.
C. WITHIN THE RIGHT-OF-WAY AND WITHIN ALL SWALES AND DITCHES, ALL STUMPS, ROOTS, ETC., PROTRUDING THROUGH OR APPEARING ON THE SURFACE OF THE COMPLETED EXCAVATION SHALL BE REMOVED OR CUT OFF BELOW THE FINISHED EXCAVATION SURFACE. WITHIN ALL OTHER AREAS WHERE CLEARING AND GRUBBING IS TO BE DONE, ROOTS AND OTHER DEBRIS, PROJECTING THROUGH OR APPEARING ON THE SURFACE OF THE ORIGINAL GROUND, SHALL BE REMOVED TO A DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE SUBGRADE.
D. BURNING OF SUCH MATERIALS WILL ONLY BE ALLOWED WHEN A PROPER BURN PERMIT CAN BE OBTAINED AND ALL SUCH BURNING SHALL BE SUBJECT TO APPLICABLE LAWS, ORDINANCES AND REGULATIONS AND SHALL BE DONE AT LOCATIONS WHERE TREES AND SHRUBS ADJACENT TO THE CLEARED AREA WILL NOT BE HARMED. BURNING MAY BE REQUIRED TO CEASE IMMEDIATELY IF COMPLAINTS ARE RECEIVED BY THE PROJECT ENGINEER OR THE COUNTY ENGINEER.

SEC. 02.204. EARTHWORK: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND ALL ACTIVITIES PERFORMED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.205. RIGID DITCH CHECKS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.206. RIPRAP (SAND-CEMENT): ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.207. INSPECTIONS, FIELD MEASUREMENTS AND LABORATORY TESTS:
A. GENERAL: THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN ADVANCE OF THE TIME AND DATE WHEN ANY TESTS CAN BE CONDUCTED, SO THAT THE PROJECT ENGINEER MAY SCHEDULE THE REQUIRED TESTING WITH THE INDEPENDENT TESTING LABORATORY. THE TEST SAMPLES SHALL BE TAKEN BY EITHER AN EMPLOYEE OF THE INDEPENDENT TESTING LABORATORY OR THE PROJECT ENGINEER OR HIS REPRESENTATIVE. IN NO CASE SHALL THE CONTRACTOR TAKE THE SAMPLES OR TRANSPORT THE SAMPLES TO THE LABORATORY. THE PROJECT ENGINEER SHALL INSPECT ALL CONSTRUCTION AND IS AUTHORIZED TO CALL TO THE ATTENTION OF THE CONTRACTOR ANY FAILURE OF WORK OR MATERIALS TO CONFORM WITH THE PLANS AND SPECIFICATIONS. THE FOLLOWING LABORATORY TESTS OR FIELD MEASUREMENTS AND FREQUENCY OF SUCH SHALL BE MADE IN ACCORDANCE WITH THE PROJECT ENGINEER'S DIRECTION BY THE INDEPENDENT TESTING LABORATORY, AT THE PROJECT EXPENSE, AND IN KEEPING WITH GOOD ENGINEERING PRACTICES. THE CONTRACTOR IS REQUIRED TO CONDUCT AND/OR STOP HIS WORK SO THAT THE APPROPRIATE TESTS, SAMPLES AND MEASUREMENTS CAN BE MADE INA SAFE AND PROPER MANNER. THE CONTRACTOR SHALL RECEIVE COPIES OF THE TEST REPORTS FROM THE PROJECT ENGINEER. THE INDEPENDENT TESTING LABORATORY SHALL MAIL OR HAND DELIVER COPIES OF ALL TESTS DIRECTLY TO THE OFFICE OF THE COUNTY ENGINEER.
B. SUB-BASE AND SHOULDER: SUB-BASE AND SHOULDER TESTS SHALL BE MADE AS FOLLOWS:
1. PROCTOR: ONE PER MILE UNLESS THE NATIVE SOILS ARE SIGNIFICANTLY DIFFERENT. IN THAT CASE, ONE PER EVERY MAJOR SOILS TYPE. SAMPLE SHALL BE TAKEN FROM THE ROADWAY AFTER SCARIFYING AND MIXING.
2. WIDTH: EVERY 200 FEET AFTER SUB-BASE AND SHOULDERS HAVE BEEN MIXED, AND COMPACTED AND PRIOR TO ANY "BOXING OUT" OPERATION.
3. DEPTH:
A. SUB-BASE: EVERY 200 FEET WITHIN THE AREA TO BE COVERED BY THE BASE MATERIAL AFTER FINAL GRADING AND COMPACTION; JUST PRIOR TO THE PLACEMENT OF THE BASE MATERIAL. TESTS WILL BE CONDUCTED IN A ZIG-ZAG PATTERN COVERING THE ENTIRE AREA DESCRIBED ABOVE.
B. SHOULDER: EVERY 400 FEET, EACH SIDE, WITHIN THE SHOULDER AREAS PRIOR TO ANY "BOXING OUT" OPERATION, BUT AFTER MIXING AND COMPACTION.
1. FLORIDA BEARING VALUE (FBV): AT 200 FOOT INTERVALS TAKE THREE SAMPLES. SAMPLES SHALL BE TAKEN FROM ONE FOOT IN FROM EACH OUTSIDE EDGE OF THE SHOULDER AND ONE FROM WITHIN THE TRAFFIC LANE (AREAS). COMBINE THE TOP 1/2 OF THREE CONSECUTIVE SAMPLES INTO ONE COMPOSITE SAMPLE AND COMBINE THE BOTTOM 1/2 OF THE SAME THREE SAMPLES INTO ANOTHER SINGLE COMPOSITE SAMPLE MINIMUM ACCEPTABLE FBV IS 60 PSI. (NO TOLERANCE ACCEPTABLE.)
2. DENSITY:
A. SUB-BASE: EVERY 200 FEET, IN A ZIG-ZAG PATTERN, AND JUST PRIOR TO THE PLACEMENT OF THE BASE. EVERY OTHER TEST WILL BE MADE AT THE PROPOSED EDGE OF THE PAVEMENT. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
B. SHOULDER: EVERY 400 FEET, ONE TO TWO FEET IN FROM THE OUTSIDE EDGE OF THE SHOULDER, ON EACH SIDE OF THE ROAD. DENSITY SAMPLES SHALL BE TAKEN JUST PRIOR TO THE "BOXING OUT" OPERATION FOR THE BASE. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
3. FAILURES: ANY FAILURE REVEALED BY THE REQUIRED FIELD MEASUREMENTS AND LABORATORY TESTS REQUIRING ADDITIONAL MATERIAL SHALL REQUIRE THE CONTRACTOR TO SCARIFY THE EXISTING MATERIAL, PLACE THE ADDITIONAL MATERIAL AND THEN RE-SHAPE AND RE-COMPACT THE SUB-BASE FOR A MINIMUM DISTANCE OF 50 FEET EACH SIDE OF THE FAILURE. DEFICIENT DENSITY WILL REQUIRE ADDITIONAL COMPACTION A MINIMUM OF 50 FEET EACH SIDE OF THE FAILURE.
4. PLACEMENT OF THE BASE: THE BASE SHALL BE PLACED ON THE SUB-BASE ONLY AFTER COPIES OF THE RESULTS OF THE REQUIRED FIELD MEASUREMENTS AND LABORATORY TESTS FOR THE SUB-BASE HAVE BEEN RECEIVED AND APPROVED BY THE PROJECT ENGINEER.
C. BASE (LIMEROCK OR SHELLROCK): TESTS FOR THE BASE SHALL BE MADE AS FOLLOWS:
1. MATERIAL: FOR MATERIAL WHOSE SOURCE IS AN FDOT APPROVED AND CERTIFIED MINING PIT, SUBMITTAL OF COPIES OF THE PIT CERTIFICATION SHALL BE REQUIRED; FOR MATERIAL FROM ANY OTHER SOURCE, SUBMITTAL OF TEST RESULTS FROM AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH A BASE MATERIAL TESTING PLAN, APPROVED IN ADVANCE BY THE COUNTY ENGINEER, SHALL BE REQUIRED.
2. PROCTOR: ONE PER MILE UNLESS THE BASE MATERIAL CHANGES IN QUALITY; SAMPLE MUST BE TAKEN FROM AN ON-SITE STOCKPILE.
3. WIDTH, DEPTH, CROWN: EVERY 200 FEET AS SHOWN ON PLANS. SEE TYPICAL SECTIONS IN SECTION SIX: ILLUSTRATIONS FOR MINIMUM REQUIREMENTS.
4. DENSITY: EVERY 200 FEET IN A ZIG-ZAG PATTERN WITHIN THE AREAS TO BE COVERED BY PAVEMENT. MINIMUM ACCEPTABLE VALUE: 95% DENSITY AS PER AASHTO T-180.
5. BASE FAILURES: ANY FAILURES OF THE BASE REVEALED BY THE REQUIRED FIELD MEASUREMENT AND LABORATORY TESTS REQUIRING ADDITIONAL BASE MATERIAL SHALL REQUIRE THE CONTRACTOR TO SCARIFY THE EXISTING BASE MATERIAL, PLACE THE ADDITIONAL MATERIAL AND THEN RE-SHAPE AND RE-COMPACT THE BASE FOR A MINIMUM DISTANCE OF 50 FEET EACH SIDE OF THE FAILURE. DEFICIENT DENSITY OF THE BASE WILL REQUIRE ADDITIONAL COMPACTION A MINIMUM OF 50 FEET EACH SIDE OF FAILURE.
6. BASE PRIMING: ONCE THE BASE IS APPROVED BY THE TESTING LABORATORY, THE CONTRACTOR SHALL AS SOON AS POSSIBLE PRIME AND SAND-SEAL THE BASE. APPROVAL MUST BE OBTAINED FROM THE PROJECT ENGINEER. THIS APPROVAL CAN BE GRANTED ONLY AFTER THE PROJECT ENGINEER RECEIVES THE RESULTS OF THE FIELD MEASUREMENTS AND LABORATORY TESTS DIRECTLY FROM THE INDEPENDENT TESTING LABORATORY.
D. SHOULDER: THE FINISHED SHOULDER AREA IS INTENDED TO BE COMPACTED TO A SMOOTH, FIRM CONDITION THAT CAN ACCOMMODATE VEHICLES WITHOUT RUTS BEING CREATED. IF IN THE OPINION OF THE PROJECT ENGINEER, EXCESS UNSUITABLE MATERIAL HAS BEEN INCORPORATED INTO THE TOP 6 INCHES OF THE SHOULDER, HE MAY REQUIRE THAT STABILIZING MATERIAL BE ADDED AND MIXED TO PRODUCE A FBV OF 60 PSI, AND BE COMPACTED TO A MINIMUM DENSITY OF 95% AS PER AASHTO T-180.
E. TRENCHES FOR UNDERGROUND PIPES OR STRUCTURES: THE FOLLOWING TESTS SHALL BE MADE:
1. PROCTOR: ONE PER MILE OF TRENCH UNLESS THE MATERIAL CHANGES; IF MATERIAL CHANGES ONE PER EACH DIFFERENT SOIL OR MATERIAL ALLOWED FOR BACKFILL.
2. DENSITY: EVERY 200 FEET OUTSIDE AREAS OF VEHICULAR TRAFFIC AND EVERY 10 FEET WHERE THE TRENCH CROSSES AN AREA OF VEHICULAR TRAVEL, INCLUDING DRIVEWAYS. FREQUENCY OF TESTING WILL BE THE SAME FOR EACH LIFT. EACH COMPACTED ONE FOOT DEPTH OF BACKFILL IS A LIFT. TESTING OF DENSITY WILL START WHEN BACKFILL IS 12 INCHES OVER THE TOP OF THE PIPE. TESTS WILL BE DONE WITHIN THE WIDTH OF THE TRENCH AS INDICATED BY THE PROJECT ENGINEER.
3. DENSITY REQUIREMENTS: THE DENSITY REQUIREMENTS ARE THAT:
A. IN AREAS OF PROPOSED OR EXISTING PAVEMENT OR VEHICULAR TRAFFIC ALL BACKFILL, SUB-BASE, AND BASE MATERIAL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY AS PER AASHTO T-180; AND
B. IN OTHER AREAS NOT UNDER PROPOSED OR EXISTING PAVING OR IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, THE BACKFILL SHALL BE COMPACTED TO 90% DENSITY AS PER AASHTO T-180.

SEC. 02.208. TOLERANCES: THE REQUIRED THICKNESSES AND WIDTHS SHALL BE THE ABSOLUTE MINIMUM ALLOWABLE. NO ALLOWANCE WILL BE MADE FOR FAILURE IN A WIDTH OR DEPTH DIMENSION. FLORIDA BEARING VALUE AND DENSITY REQUIREMENTS SHOWN ON THE PLANS AND SPECIFICATIONS ARE THE ABSOLUTE MINIMUM ALLOWABLE AND NO VALUES LESS THAN THOSE SPECIFIED WILL BE ACCEPTED. GRADES ON ROADWAY CENTERLINE AND DITCH INVERTS SHALL BE PLUS OR MINUS 0.05 OF A FOOT FROM PLAN DIMENSIONS.

SEC. 02.209. STABILIZED SUBBASE AND SHOULDERS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.210. LIMEROCK OR SHELLROCK BASE: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.211. ASPHALT: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, TYPE S ASPHALT CONCRETE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF, TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2000 EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.212. PAVEMENT MARKING: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.213. SIGNS: ALL MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, USDOT, FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.214. CULVERTS/STORM SEWERS: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.215. GRASSING: ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION. THE AREAS ON WHICH THE SOD IS TO BE PLACED SHALL CONTAIN SUFFICIENT MOISTURE FOR OPTIMUM RESULTS AFTER BEING PLACED. THE SOD SHALL BE WATERED AND KEPT IN A MOIST CONDITION FOR NO LESS THAN TWO WEEKS (MINIMUM) OR UNTIL THE ENTIRE PROJECT IS ACCEPTED BY THE PROJECT ENGINEER AND THE COUNTY ENGINEER THE MOISTENED CONDITION SHALL EXTEND AT LEAST TO THE FULL DEPTH OF THE ROOTING ZONE. WATER SHALL NOT BE APPLIED, HOWEVER, WHEN THERE IS DANGER OF A FREEZING CONDITION.

SEC. 02.216. STAKED SILT FENCES: ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.217. TEMPORARY PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION: ALL MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.218. FENCING: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

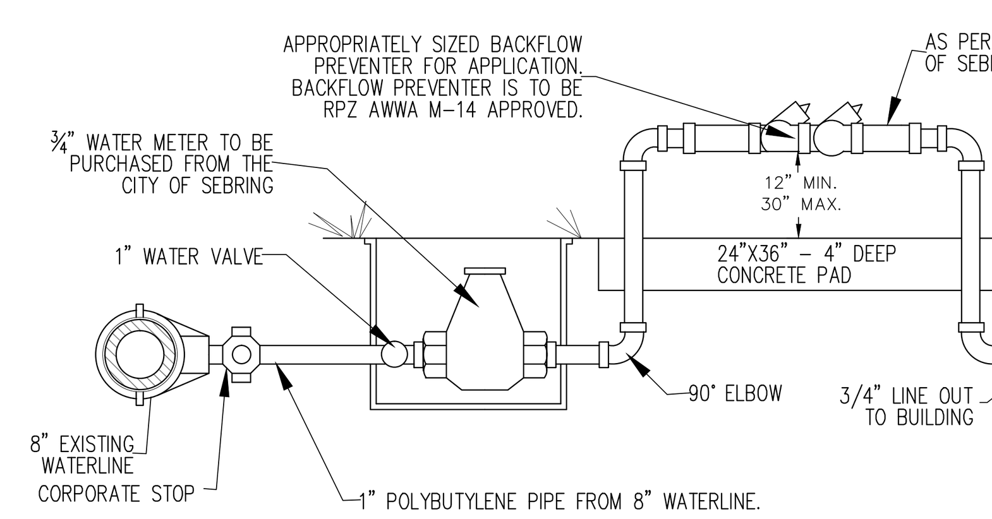
SEC. 02.219. GUARDRAIL: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.220. CONCRETE: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

SEC. 02.221. FIELD ENGINEERING, SURVEYING AND RIGHT-OF-WAY STAKING:
A. FIELD ENGINEERING AND SURVEYING SERVICES SHALL INCLUDE SURVEY WORK TO ESTABLISH RIGHT-OF-WAY LINES AND LEVELS AND TO LOCATE AND LAY OUT SITE IMPROVEMENTS, STRUCTURES, AND CONTROLLING LINES AND LEVELS REQUIRED FOR THE CONSTRUCTION OF THE WORK. ALSO INCLUDED ARE SUCH ENGINEERING SERVICES AS ARE SPECIFIED OR REQUIRED TO EXECUTE CONTRACTOR'S CONSTRUCTION METHODS. ENGINEERS AND SURVEYORS SHALL BE LICENSED PROFESSIONALS IN THE STATE OF FLORIDA.
B. EXISTING BASIC HORIZONTAL AND VERTICAL CONTROL POINTS FOR THE PROJECT ARE THOSE DESIGNATED ON THE DRAWINGS. CONTRACTOR SHALL LOCATE AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK AND SHALL PRESERVE ALL PERMANENT REFERENCE POINTS DURING CONSTRUCTION. IN WORKING NEAR ANY PERMANENT PROPERTY CORNERS OR REFERENCE MARKERS, CONTRACTOR SHALL USE CARE NOT TO REMOVE OR DISTURB ANY SUCH MARKERS. IN THE EVENT THAT MARKERS MUST BE REMOVED OR ARE DISTURBED DUE TO PROXIMITY OF THE CONSTRUCTION WORK, CONTRACTOR SHALL HAVE THEM REFERENCED AND RESET BY A LAND SURVEYOR QUALIFIED UNDER THE LAWS OF THE STATE OF FLORIDA.
C. CONTRACTOR SHALL LAY OUT THE WORK AT THE LOCATION AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. SURVEY NOTES INDICATING THE INFORMATION AND MEASUREMENTS USED IN ESTABLISHING LOCATIONS AND GRADES SHALL BE KEPT IN NOTEBOOKS AND COPIES FURNISHED TO PROJECT ENGINEER AND THE COUNTY ENGINEER. AS A MINIMUM THE FOLLOWING ITEMS WILL BE STAKED:
1. RIGHT-OF-WAY, STAKED AT EACH STATION OR WHEREVER THE RIGHT-OF-WAY CHANGES WIDTH OR DIRECTION, AT ANY OFFSET DESIRED;
2. CUT OR FILL TO CENTERLINE GRADE AND SWALE GRADE AT EACH STATION OR WHEREVER CHANGES OCCUR AT POINTS OF VERTICAL INTERSECTION; AND
3. SET PROPOSED CENTERLINE ELEVATION OF ALL INTERSECTING ROADS ONE TIME AND NOTE THOSE ELEVATIONS IN FIELDBOOK; COMPARE THOSE ELEVATIONS AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE PROJECT ENGINEER.
ALL THE ABOVE MENTIONED SURVEY WORK WILL BE DONE BY A SURVEYOR LICENSED TO PRACTICE IN THE STATE OF FLORIDA.

SEC. 02.222. OBSTRUCTIONS IN RIGHT-OF-WAY:
A. HEADWALLS, FENCES, MAIL BOXES, STATUES, WALKWAYS, AND OTHER OBSTRUCTIONS PLACED IN THE RIGHT-OF-WAY WILL BE REMOVED FROM THE WORK AREA, AS REQUIRED TO KEEP THE WORK PROGRESSING, BY THE CONTRACTOR. IN THE EVENT THAT THE OWNER CANNOT BE IDENTIFIED OR IS UNABLE OR UNWILLING TO REMOVE SAID OBSTRUCTIONS THEMSELVES, THE OBSTRUCTION WILL BE POSTED WITH A NOTICE, IN WRITING, BY THE CONTRACTOR 24 HOURS PRIOR TO ANY REMOVAL, THAT SAID OBJECT WILL BE REMOVED. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR ANY DAMAGE TO SAID OBJECTS THAT OCCURS WHILE BEING MOVED BY THE CONTRACTOR, AFTER PROPER NOTIFICATION AND THE APPROVAL OF THE PROJECT ENGINEER. ANY OBJECTS THAT ARE REMOVED FROM WITHIN THE RIGHT-OF-WAY, EXCEPT MAILBOXES, WILL BE HAULED AWAY AND DISPOSED OF BY THE CONTRACTOR IN A PROPER LANDFILL.
B. MAILBOXES MOVED DURING CONSTRUCTION, WILL BE REPLACED AT A LOCATION 3 FEET FROM THE EDGE OF PAVEMENT BY THE CONTRACTOR, PROVIDING THE SUPPORT POLE IS WOOD AND LESS THAN 4 INCHES IN DIAMETER OR IS A BREAKAWAY TYPE POLE. IF THE ORIGINAL SUPPORT POLE IS DAMAGED OR UNSATISFACTORY, THE CONTRACTOR WILL NOT BE REQUIRED TO REPLACE OR RELOCATE THE MAILBOX.

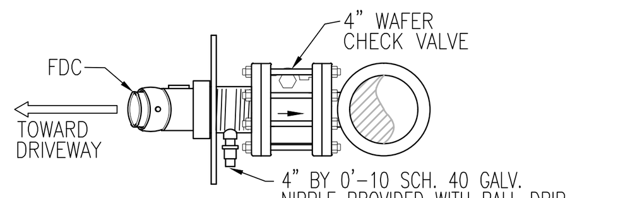
SEC. 02.223. SHOP DRAWING SUBMITTALS: THE FOLLOWING INFORMATION AND/OR DRAWINGS SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO BEGINNING WORK:
A. INFORMATION ON THE PIPE AND CULVERTS, INDICATING THE TYPE, CLASS, SIZE, AND OTHER RELEVANT INFORMATION;
B. ASPHALT MIX DESIGN;
C. DOCUMENTATION ON ALL OTHER MATERIALS USED INCLUDING, BUT NOT LIMITED TO, FILTER FABRIC, GUARDRAILS, CONCRETE, STEEL POSTS, CURING COMPOUND, AND JOINT MATERIAL;
D. SAMPLE OF TAG FOR WRITTEN NOTIFICATION OF OWNERS; AND
E. TRAFFIC PLAN (A DRAWING TO SCALE OF EACH PHASE SHOWING ALL BARRICADES, SIGNS AND FLAGMEN IS REQUIRED).



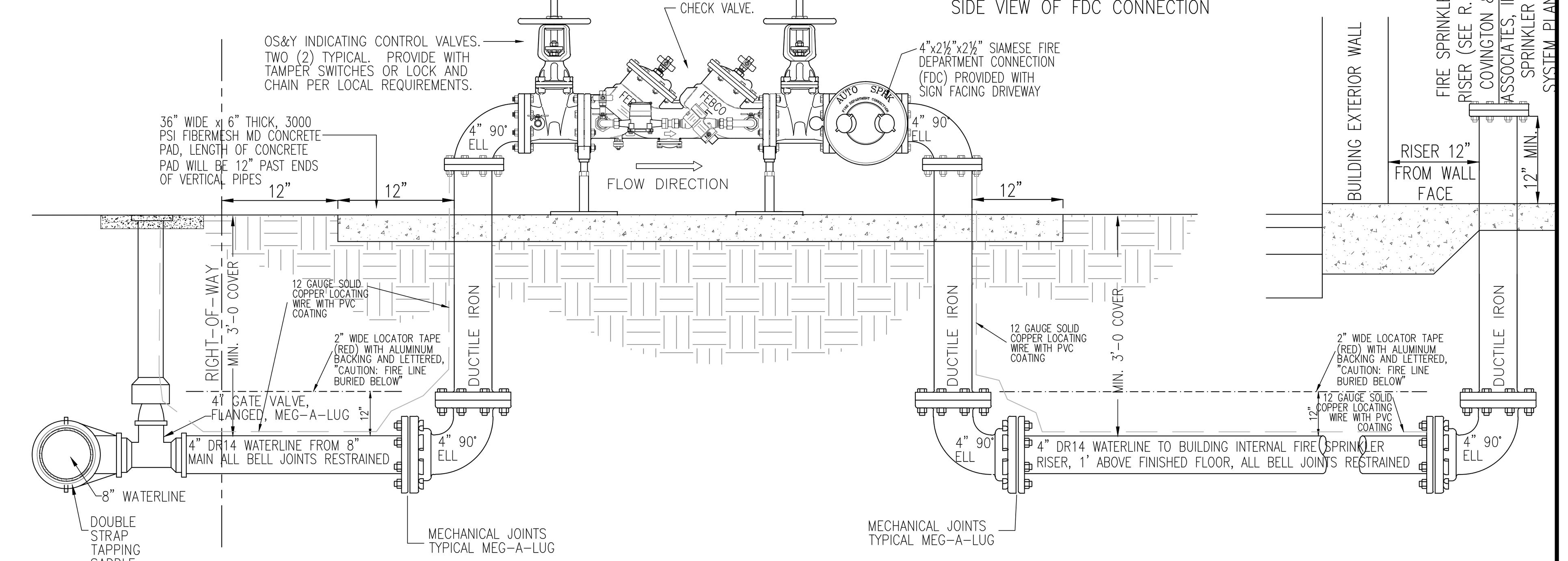
NOTE:
BACKFLOW PREVENTER SHOWN IS TYPICAL. OWNER, CONTRACTOR, OR ARCHITECT DISCRETION NEEDED ON ACTUAL TYPE OF PREVENTER FOR SITE. BACKFLOW PREVENTER SHALL BE RPZ AWWA M-14 APPROVED.

BACKFLOW PREVENTER DETAIL

REDUCED PRESSURE BACKFLOW PREVENTERS SHOULD BE INSTALLED WITH A SUGGESTED MINIMUM CLEARANCE OF 12" BETWEEN PORT AND FLOOR GRADE. THEY MUST BE INSTALLED WHERE ANY DISCHARGE WILL NOT BE OBJECTIONABLE AND CAN BE POSITIVELY DRAINED AWAY. THEY SHOULD BE INSTALLED WHERE EASEILY ACCESSIBLE FOR TESTING AND MAINTENANCE AND MUST BE PROTECTED FROM FREEZING. LARGER SIZES SHOULD HAVE SUPPORT BLOCKS TO PREVENT FLANGE DAMAGE. THERMAL WATER EXPANSION AND/OR WATER HAMMER DOWN STREAM OF THE BACKFLOW PREVENTER CAN CAUSE EXCESSIVE PRESSURE. EXCESSIVE PRESSURE SITUATIONS SHOULD BE ELEMINATED TO AVOID POSSIBLE DAMAGE TO THE SYSTEM AND ASSEMBLY.



SIDE VIEW OF FDC CONNECTION



DOUBLE DETECTOR CHECK VALVE FIRE PROTECTION BACK FLOW PREVENTER NTS

NOTE:
-BACK FLOW PREVENTER CONFORMS WITH AWWA C510-89 AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES. SHUT-OFF VALVES ARE OS & Y RESILIENT WEDGE GATE VALVES CONFORMING w/ AWWA C550-90.
-ALL PIPES ABOVE GROUND WILL BE DUCTILE IRON.
-THE FIRE PROTECTION LINE FROM THE 4" GATE VALVE AT THE MAIN LINE CONNECTION TO THE BUILDING INTERNAL FLANGE 1' ABOVE THE FINISHED FLOOR WILL BE TESTED AT 200 PSI FOR 2 HOURS WITH NO LOSS.
-THE TEST WILL BE REQUIRED TO BE OBSERVED BY REPRESENTATIVES OF THE GOVERNING FIRE SERVICE, ENGINEER, WATER DISTRIBUTION SYSTEM AND FIRE INSTALLATION CONTRACTOR.

DATE	REMARK	DR	CH
24-FEB-16	INITIAL SUBMITTAL	MLW	
12-APR-16	SWFWMD ELEVATION AND DISCHARGE CLARIFICATIONS	MLW	
21-APR-16	CHANGE OF SITE PAVEMENT REQUIREMENTS	MLW	
29-APR-16	DISCHARGE STRUCTURE CLARIFICATION	MLW	
27-JUN-16	PLANS FOR FINAL REVIEW	MLW	
18-AUG-16	PLANS FOR BID	MLW	
28-OCT-16	NOTES FOR TREE REMOVAL & UTILITY SERVICES	MLW	

CERTIFICATE OF AUTHORIZATION # 5684
ROGER DALE POLSTON P. E. # 33222
MARVIN LUTHER WOLFE P.E. # 46030

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ENGINEER JOB # 15071

HIGHLANDS COUNTY
EMERGENCY MEDICAL SERVICES PARKWAY SUB-STATION
DETAILS AND SECTIONS

DRAWING SCALE
NTS