Florence County Government

Procurement Department

July 20, 2016

ADDENDUM NO. 1- FRIENDFIELD FIRE STATION (BID NO. 2-16/17)

Florence County is sending to all interested firms clarification information and answers to questions concerning this Invitation to Bid. The answers are highlighted in blue and underlined. Please include this sheet with your proposal.

1. What is the site address? **The address is 2190 Hyman Road in Scranton, but it is currently an agricultural field. The parcel is on the south side of the road approximately 3000 feet east (0.6 miles) of the intersection of Hyman Road and Friendfield Road. The nearest residence is 2227 Hyman Road, about 200 feet west of the site.**

2. What is the height of the flagpole? **The flagpole is a one-piece, 33 foot pole. Specifications are attached.**

3. Is 120 days correct for the fill build-out time? **We are aware that it takes at least 8 weeks (60 days) for the building to arrive after the initial order, and have extended the time to 9 months (270 days).**

4. What information can you give regarding the metal building? **The metal building plans are attached. The design is by MESCO Building Solutions in Irving, Texas. The building as shown on the plans is MIRRORED – that is, it does not match the civil plans at this time. MESCO is working on the finalized plans.**

   We will consider other metal building manufacturers, but be aware that these particular plans are already designed and match the Foundation Plan, so the delivery process will be more streamlined. If a Contractor does choose an alternate metal building company, it is their responsibility to provide and pay for modifying the building plans.

5. Do you have a Foundation Plan? **Yes we do, and it is attached. Like the Building Plans above, it is a mirror of the civil plans, and we are working on getting it corrected.**

6. Who pays for the Foundation plan? **Please provide a $1,500 allowance in the bid for the Foundation Plan. Give it a new line on the Bid Tab.**

7. Is there a geotechnical report? **Yes, it is attached.**

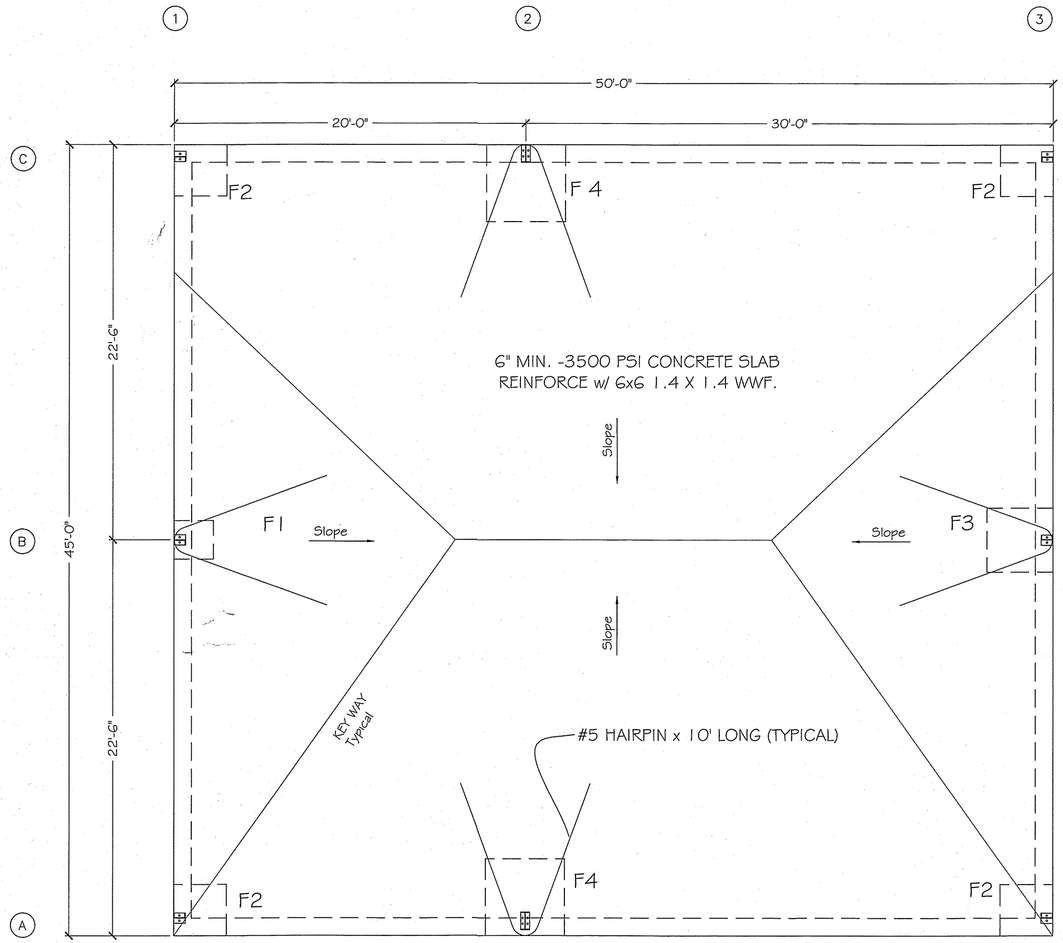
YOU MUST ACKNOWLEDGE THIS ADDENDUM BY SIGNING BELOW AND SUBMITTING IT WITH YOUR BID.

I have read and acknowledged this Addendum 1 for Bid No. 02-16/17.

_____ _____ _____

Authorized Signature Printed Name Date

Company Name: _____

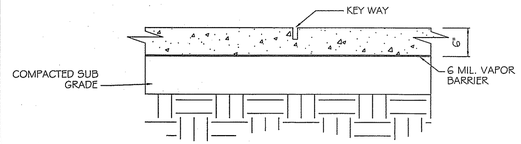


FOUNDATION PLAN
1/4" = 1'-0"

FOUNDATION DESIGN CONFORMS to the FOLLOWING DESIGN STANDARDS & SPECIFICATIONS.

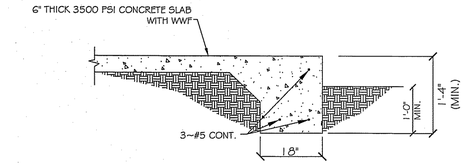
DESIGN CODE	-	2012 IBC
ROOF LIVE LOAD	-	20 PSF
COLLATERAL LOAD	-	1 PSF
GROUND SNOW LOAD	-	10 PSF
SNOW EXP. FACTOR	-	Ce 1.0
SNOW IMPORTANCE FACTOR	-	Is 1.2
WIND	-	150 MPH
EXPOSURE	-	C
MAPPED SPECTRAL RESPONSE, Ss	-	.7388
MAPPED SPECTRAL RESPONSE, S1	-	.2512
SEISMIC DESIGN CATEGORY	-	D
SPECTRAL RESPONSE COEFF. Sds	-	.5951
SPECTRAL RESPONSE COEFF. Sd1	-	.3175
ANALYSIS PROCEDURE	-	EQUIVALENT LATERAL FORCE METHOD
WIND ENCLOSURE	-	ENCLOSED

WILKES ENGINEERING LLC. HAS BEEN CONTRACTED ONLY TO PROVIDE FOUNDATION DESIGN FOR THE PRE-ENGINEERED METAL BUILDING. BUILDING DESIGN HAS NOT BEEN EVALUATED.

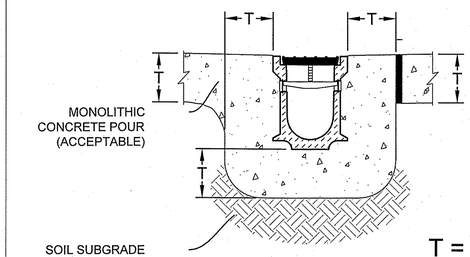


TYPICAL CONTROL JOINT

ADD CONTROL JOINTS AT 20' O/C MAX TO CONTROL CRACKING.

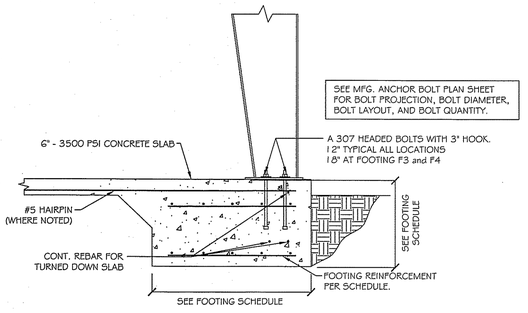


TYP. PERIMETER TURNED DOWN SLAB



T = 6" MIN.

CROSS SECTIONAL VIEW



TYP. SPREAD FOOTING DETAIL

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	5'-0" x 5'-0" x 24"	5 - #5 REBAR EACH WAY - TOP & BOTTOM
F2	6'-6" x 6'-6" x 24"	7 - #5 REBAR EACH WAY - TOP & BOTTOM
F3	6'-6" x 6'-6" x 36"	7 - #5 REBAR EACH WAY - TOP & BOTTOM
F4	7'-0" x 7'-0" x 36"	7 - #5 REBAR EACH WAY - TOP & BOTTOM

REVISIONS
4-17-2016

Drawn by: TBW
2-9-2016

Drawn By Wilkes Engineering LLC
843-858-1074
Wilkestb@yahoo.com

Drawn For Florence County
Friendfield Road Fire Department
Florence, SC 29501

SOUTH CAROLINA WILKES ENGINEERING LLC. No. 4082 CERTIFICATE OF AUTHORIZATION

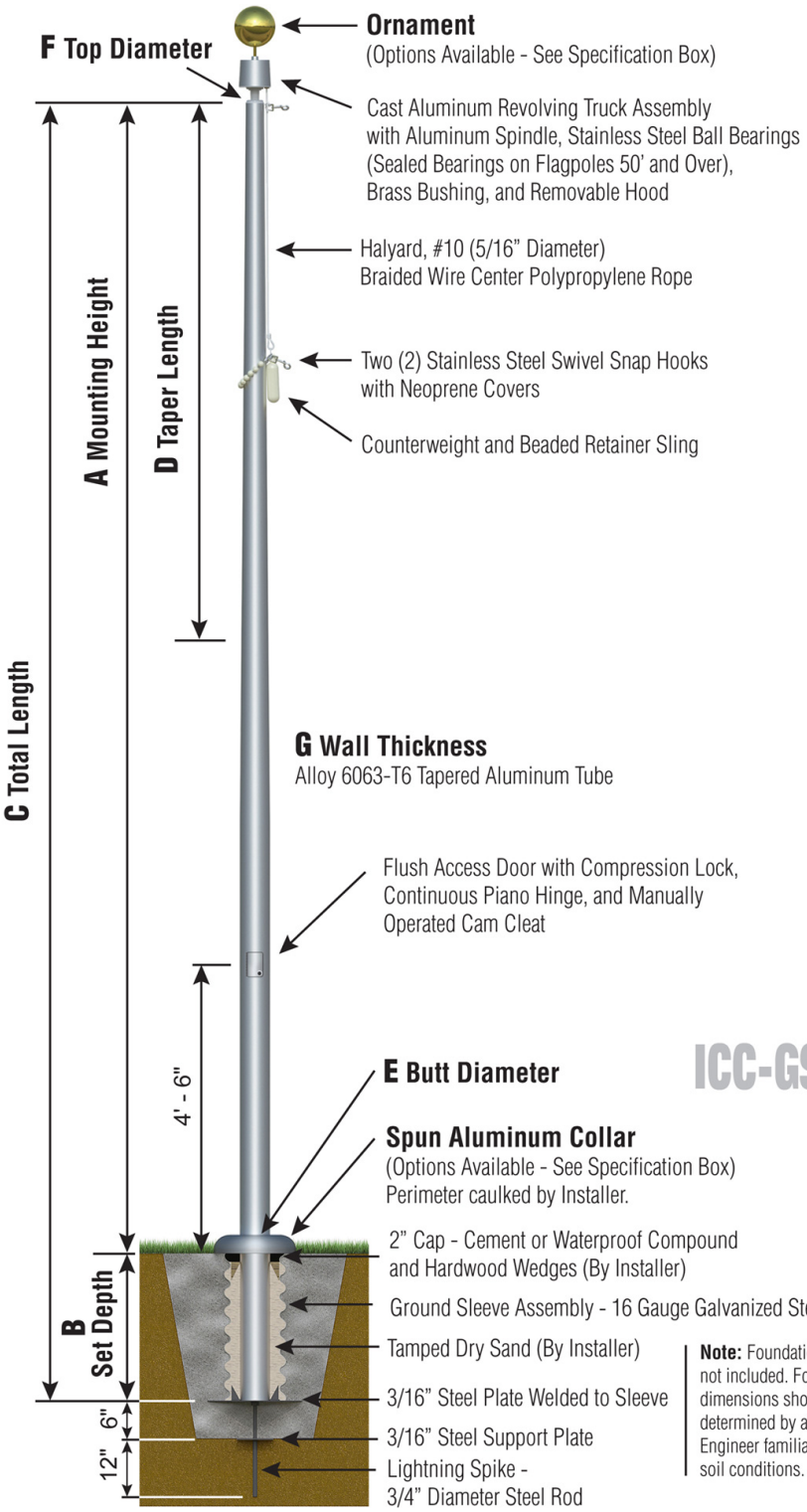
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 27433 TODD B. WILKES 4/17/16

SHEET:
FD1

Monarch Series - ICC
Internal Cam Cleat
Rope Halyard
Ground Set Installation

AMERICAN FLAGPOLE
PRIDE. QUALITY. TRADITION.

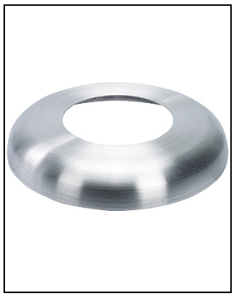
ICC30D61 - 02



Note: Foundation design not included. Foundation dimensions should be determined by a qualified Engineer familiar with site soil conditions.


Gold Anodized


Satin Aluminum


Spun Collar

Accessory Specifications
Satin Aluminum (02), Standard Gold Anodized Ball (90056-004), Standard Spun Collar (94508-004)

Specifications
A. Mounting Height: 30'
B. Set Depth: 3'-0"
C. Total Length: 33'-0"
D. Taper Length: 13'-9"
E. Butt Diameter: 6.000"
F. Top Diameter: 3.500"
G. Wall Thickness: 0.188"
Flagpole Sections: 1
Flagpole Weight: 209 lbs.
Max Flag Size: 6' x 10'
Max Wind Speed w/ Flag: 100 mph
Max Wind Speed No Flag: 165 mph

Notes

Customer Name:	
Dealer:	
Project:	Location:

REPORT OF SUBSURFACE EXPLORATION
AND
GEOTECHNICAL EVALUATION

HYMAN ROAD GEOTECHNICAL
HYMAN ROAD
FLORENCE, SOUTH CAROLINA
ECS PROJECT No.: 38:1457

Prepared For

FLORENCE COUNTY COMPLEX

Prepared By

MAY 18, 2016

ECS CAROLINAS, LLP

"Setting the Standard for Service"

Geotechnical • Construction Materials • Environmental • Facilities

SC Registered Engineering Firm 3240
NC Registered Engineering Firm F-1078
NC Registered Geologists Firm C-406

May 18, 2016

Ms. Wyneé Lybrand
Florence County Complex
180 N. Irby St. MSC-R, Rm, B-5
Florence, SC 29501

Reference: Report of Subsurface Exploration and Geotechnical Evaluation
Hyman Road Geotechnical
Hyman Road
Florence, South Carolina
ECS Project No.: 38:1457

Dear Ms. Lybrand:

As authorized by your acceptance of our Proposal Number 38-787-P, dated April 20, 2016, ECS Carolinas, LLP (ECS) has completed the subsurface exploration and geotechnical evaluation for the proposed Hyman Road site. This report contains the results of our subsurface exploration, as well as our recommendations regarding the geotechnical design and construction aspects of the project.

We appreciate the opportunity to be of service to you during the design phase of this project and look forward to our continued involvement during the construction phase. If you have any questions concerning the information and recommendations presented in the accompanying report, or if we can be of further assistance, please do not hesitate to contact us.

Sincerely,

ECS CAROLINAS, LLP represented by;

Brennan J. Hoy, E.I.
Project Manager

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 32695 5/18/16 WILLIAM M. PORTER, II

William M. Porter, P.E.
Branch Manager
South Carolina License No. 32695

Winslow E Goins, P.E.
Principal Engineer
South Carolina License No. 26758

SOUTH CAROLINA ECS CAROLINAS, LLP No. C3239 CERTIFICATE OF AUTHORIZATION

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1.0 EXECUTIVE SUMMARY

The proposed site is an approximately 1 acre (43,560 SF) lot located on Hyman Road in Florence County, South Carolina. The lot is part of a larger property designated as TM 00290-02-007 on the Florence County Tax Map. The proposed construction will consist of a pre-fabricated metal building on a 45 x 50 feet monolithic concrete slab foundation with a 20 psf maximum live load.

Based on our review of the Site Development Plan by Aligned Engineering and the Plat prepared by Nesbitt Surveying Co., INC., the proposed finished floor elevation is 90.0 feet and current site grades range from approximately 86 to 88 feet above mean sea level. We understand the maximum proposed cut/fill is on the order of approximately 2 feet.

Hand auger borings HA-1 through HA-4 encountered approximately 8 to 10 inches of topsoil at the existing ground surface. Natural Coastal Plan soils were encountered below the surficial materials in the hand auger borings performed. The natural soils sampled in the hand auger borings generally consisted of clayey sand (SC). WDCP blow counts recorded in these soils typically ranged from 3 to 25+ blows per increment (bpi).

Relatively loose near surface soils are present on the site. As such, the near surface soils should be densified in-place by multiple passes with a large vibratory roller after clearing, grubbing, and removal of the surficial materials but prior to placement of new fill or other at-grade construction. Loose subgrade materials that cannot be adequately densified in-place will require undercutting and replacement with new engineered fill. Partial undercutting up to a depth of approximately 2 feet below existing grade along with additional densification operations may also be required.

Provided the subgrades are prepared as recommended within this report, the proposed structure can be supported on conventional shallow foundations bearing in approved natural soils or new engineered fill proportioned for a net allowable bearing pressure of 2,000 pounds per square foot (psf). Concrete slabs-on-grade supported by properly prepared subgrades may be designed using a modulus of subgrade reaction of 150 pounds per cubic inch (pci).

Specific information regarding the subsurface exploration procedures, the site and subsurface conditions at the time of our exploration, and our conclusions and recommendations concerning the geotechnical design and construction aspects of the project are discussed in detail in the subsequent sections of this report. Please note this Executive Summary is an important part of this report but should be considered a ***"summary"*** only and is not intended to be used exclusive of the entire report. The subsequent sections of this report constitute our findings, conclusions, and recommendations in their entirety.

2.0 PROJECT INFORMATION

The proposed site is an approximately 1 acre (43,560 SF) lot located on Hyman Road in Florence County, South Carolina. The lot is part of a larger property designated as TM 00290-02-007 on the Florence County Tax Map. The proposed construction will consist of a pre-fabricated metal building on a 45 x 50 feet monolithic concrete slab foundation with a 20 psf maximum live load.

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3.0 EXPLORATION PROCEDURES

3.1 Hand Auger Borings

Four (4) hand auger borings with associated Wildcat© Dynamic Cone Penetrometer (WDCP) testing were performed at the project site as shown on the Boring Location Plan in the Appendix. The hand auger boring logs are included in the Appendix.

Representative soil samples for hand auger borings were obtained by means of the hand operated auger sampling procedure in general accordance with ASTM Specification D-1452. In this procedure, the auger boring was made by rotating and advancing the auger bucket to the desired depths while periodically removing the bucket from the hole to clear and examine the auger cuttings.

After recovery, each sample was removed from the sampler and visually classified. Representative portions of each sample were then sealed in air tight containers and brought to our laboratory for visual classification in general accordance with the Unified Soil Classification System (USCS as described in ASTM D 2487).

In WDCP testing, a cone with a diameter of 1.47 inches is driven into the soil by a 34.94-pound hammer falling 15 inches. The number of blows required to drive the cone through 10 centimeter intervals is recorded. The blows obtained from WDCP can be correlated to Standard Penetration Test (SPT) N-values. Soil samples were not collected during the WDCP testing and the logs are included in the Appendix.

4.0 SITE AND SUBSURFACE CONDITIONS

4.1 Site Observations

The project site is currently farmland which is relatively flat and clear except for a partially wooded area on the east side of the site. The property is bound by Hyman Road to the north, farmland to the south and west, and a wooded area to the east.

4.2 Area Geology

The site is located in the Coastal Plain Physiographic Province of South Carolina. The Coastal Plain is composed of seven terraces, each representing a former level of the Atlantic Ocean. Soils in this area generally consist of sedimentary materials transported from other areas by the ocean or rivers. These deposits vary in thickness from a thin veneer along the western edge of the region to more than 10,000 feet near the coast. The sedimentary deposits of the Coastal Plain rest upon consolidated rocks similar to those underlying the Piedmont and Mountain Physiographic Provinces.

4.3 Subsurface Conditions

4.3.1 Soil Test Borings

Surficial Materials: Approximately 8 to 10 inches of topsoil was encountered at the ground surface in the hand auger borings performed.

Natural Soils: Natural Coastal Plan soils were encountered below the surficial materials and extended to the termination depths of the hand auger borings performed. The natural soils sampled in the hand auger borings generally consisted of clayey sand (SC). WDCP blow counts recorded in these soils typically ranged from 3 to 25+ blows per increment (bpi).

4.3.2 Groundwater Conditions

Groundwater was encountered within the hand auger borings at a depth of approximately 3 feet below the existing ground surface. Groundwater elevations should be expected to vary depending on seasonal fluctuations in precipitation, surface water absorption characteristics, and other factors not readily apparent at the time of our exploration.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the subsurface conditions encountered in the test borings and our experience with similar soil conditions and construction, the proposed structure can be supported on monolithic slab bearing in approved existing fill, new engineered fill, or natural soils.

5.1 Site and Subgrade Preparation

The first step in preparing the site for the proposed construction should be to remove existing vegetation or topsoil, and other soft, unsuitable, or deleterious material from the existing ground surface. Existing utilities that traverse the planned building area should be removed, but may remain in place in planned pavement areas. These operations should extend at least 10 feet beyond the building area and 5 feet beyond the planned pavement areas, where practical.

Relatively loose near surface soils are present on the site. As such, the near surface soils should be densified in-place by multiple passes with a large vibratory roller after clearing, grubbing, and removal of the surficial materials but prior to placement of new fill or other at-grade construction. Loose subgrade materials that cannot be adequately densified in-place will require undercutting and replacement with new engineered fill.

Partial undercutting up to a depth of approximately 2 feet below existing grade along with additional densification operations may also be required.

The prepared subgrade should then be evaluated by an experienced geotechnical engineer or his authorized representative. The evaluation should include proofrolling the subgrade with an approved piece of equipment (such as a loaded dump truck, having an axle weight of at least 10 tons) to identify soft, loose and yielding areas. Based on the recommendations of the engineer, unsuitable materials encountered during the proofrolling operations should be repaired in-place by additional densification, or be removed and replaced with engineered fill that is placed and compacted in accordance with the recommendations of this report.

Backfill over existing utility lines warrants special attention during the subgrade evaluation. At the discretion of the geotechnical engineer, the evaluation of these areas may include test pits or hand auger borings to help assess the suitability of the soils.

The preparation of proposed building and pavement subgrades, as well as fill subgrades, should be observed on a full-time basis by a representative of ECS. These observations should be performed by an experienced geotechnical engineer, or his representative, to document that unsuitable materials have been removed and that the prepared subgrade is suitable for support of the proposed construction and/or fills.

Based on the results of the soil test borings, we expect that the soils encountered in the areas explored should generally be excavatable with conventional earth moving equipment such as pans/scrapers, loaders, bulldozers, rubber tired backhoes, etc.

5.2 Engineered Fill

Fill placed for support of the proposed structures and pavements, and for backfill of undercut areas and utility lines within expanded structure and pavement limits should consist of engineered fill. Engineered fill should be an approved material, free of organic matter and other deleterious materials, and have a Liquid Limit (LL) and a Plasticity Index (PI) less than 40 and 20, respectively. We also recommend that fills within structural areas have a standard Proctor (ASTM D 698) maximum dry density of at least 95 pounds per cubic foot (pcf).

Mass engineered fill placed within the building areas should be placed in lifts and moisture conditioned to within their working range of optimum moisture content, and compacted to a minimum of 95 percent of their standard Proctor maximum dry density, as determined in accordance with ASTM D 698. The upper one foot of soil supporting structures and slabs-on-grade should be compacted to a minimum of 98 percent of the maximum dry density obtained in accordance with ASTM D 698.

Similarly, isolated non-structural areas of engineered fill, such as trench line backfill, should be placed in lifts not exceeding 6 inches and moisture conditioned as mentioned above. The working range of optimum is typically within approximately 3 percent of the optimum moisture content.

On site natural soils should typically be suitable for re-use as engineered fill. Prior to the commencement of fill operations and/or utilization of off-site borrow materials, the contractor

should provide representative samples of the soil materials to ECS to assess the material's suitability for use as engineered fill, and to develop moisture-density relationships in accordance with the recommendations provided herein. Samples should be provided to the geotechnical engineer at least 3 to 5 days prior to their use to allow for the appropriate laboratory testing to be performed.

The maximum loose lift thickness depends upon the type of compaction equipment use. The table below provides maximum loose lifts that may be placed based on compaction equipment utilized.

LIFT THICKNESS RECOMMENDATIONS

Equipment	Maximum Loose Lift Thickness, in.
Large, Self-Propelled Equipment (CAT 815, CAT CS56, etc.)	12
Small, Self-Propelled or Remote Controlled (Rammax, etc.)	8
Hand Operated (Plate Tamps, Jumping Jacks, Wacker-Packers)	6

ECS recommends that fill operations be observed and tested by an engineering technician to document that if compaction requirements are being met. The testing agency should perform a sufficient number of tests to document that compaction is being achieved. For mass grading operations we recommend a minimum of one density test per 2,500 SF per lift of fill placed or per 1 foot of fill thickness, whichever results in more tests. When dry, the majority of the site soil should provide adequate subgrade support for fill placement and construction operations. When wet, the soil may degrade quickly with disturbance from construction traffic. Good site drainage should be maintained during earthwork operations to prevent ponding water on exposed subgrades.

We recommend at least one test per 1 foot thickness of fill for every 100 linear feet of utility trench backfill. Where fill will be placed on existing slopes, we recommend that benches be cut in the existing slope to accept the new fill. Fill slopes should be overbuilt and then cut back to expose compacted material on the slope face. While compacting adjacent to below-grade walls, heavy construction equipment should maintain a horizontal distance of 1(H):1(V). If this minimum distance cannot be maintained, the compaction equipment should run perpendicular, not parallel to, the long axis of the wall.

The building areas should be well defined during fill placement by maintaining grade controls. Filling operations should be observed on a full-time basis by ECS to document that the recommended degree of compaction is achieved. The elevation and location of the in-place density tests should be accurately identified at the time of fill placement. Areas which fail to achieve the required degree of compaction should be re-compacted and re-tested until the recommended compaction is achieved. Failing test areas may require moisture adjustments or other suitable remedial activities in order to achieve the required compaction.

Fill materials should not be placed on frozen, frost-heaved or wet soils. Such materials should be removed prior to fill placement. Borrow fill materials should not contain wet or frozen materials at the time of placement. Wet or frost-heaved soils should also be removed prior to

placement of granular sub-base materials, foundation or slab concrete, and asphalt pavement materials.

If difficulties are encountered during the site grading operations, or if the actual site conditions differ from those encountered during our subsurface exploration, the geotechnical engineer should be notified immediately.

5.3 Foundation Design

Provided the foundation subgrades are prepared in strict accordance with the **Site and Subgrade Preparation** and **Engineered Fill sections** of this report, the proposed structure can be supported on conventional shallow foundations bearing in approved existing fill, new engineered fill, or natural Coastal Plain soils. Isolated column and continuous wall footings can be proportioned for a maximum net allowable soil bearing pressure of 2,000 pounds per square foot (psf). The net allowable soil bearing pressure refers to that pressure which may be transmitted to the foundation bearing soils in excess of the final minimum surrounding overburden pressure.

Footings should bear at a depth to provide adequate frost cover protection and develop the recommended soil bearing pressure. We recommend foundations bear at a minimum depth of 12 inches below the adjacent ground surface. To reduce the possibility of foundation bearing failure and excessive settlement due to local shear or "punching" failures, we recommend that continuous footings have a minimum width of 18 inches and isolated column footings have a minimum lateral dimension of 30 inches.

If independent shallow foundations are not desired for support of the structure, thickened turned-down edges may be incorporated into the design of the concrete slab-on-grade. The turned-down sections should extend at least 12 inches below the finished exterior grades and be at least 12 inches wide at their bearing elevation. Appropriate reinforcing steel should be incorporated into turned-down or thickened slab sections.

It is very important that the final bearing subgrades be evaluated by ECS personnel to document that the bearing soils are capable of supporting the recommended net allowable bearing pressure and suitable for construction. These evaluations should include visual observations, hand rod probing, and dynamic cone penetrometer (ASTM STP 399) testing, or other methods deemed appropriate by the geotechnical engineer at the time of construction.

Exposure to the environment may weaken the soils at the bearing elevation if the excavations remain exposed during periods of inclement weather. Therefore, foundation concrete should be placed the same day the foundations are excavated. If the bearing soils are softened by water or exposure to the environment, the softened soils must be removed from the foundation excavation bottoms prior to placement of concrete. If the excavation must remain open overnight, or if inclement weather is imminent while the bearing soils are exposed, we recommend that a 2 to 3-inch thick "mud-mat" of "lean" concrete be placed over the exposed bearing soils before the placement of reinforcing steel.

5.4 Floor Slab Design

Provided the slab subgrades are prepared in strict accordance with the **Site and Subgrade Preparation** and **Engineered Fill sections** of this report, a modulus of subgrade reaction value of 150 pci is appropriate. We recommend slabs-on-grade are underlain by a minimum of 4 inches of granular material having a maximum aggregate size of 1½ inches and no more than 2 percent fines. Prior to placing the granular material, the floor subgrade soil should be properly compacted, proofrolled, and free of standing water, mud and frozen soil.

A granular capillary break layer can often eliminate the need for a moisture/vapor retarder and can assist in more uniform curing of concrete. If a moisture/vapor retarder is used, special attention should be given to the surface curing of the slabs to minimize uneven drying of the slabs and associated cracking and/or slab curling. The use of a blotter or cushion layer above the vapor retarder can also be considered for project specific reasons. Please refer to ACI 302.1R96 Guide for Concrete Floor and Slab Construction and ASTM E 1643 “Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs” for additional guidance on this issue.

We recommend that slabs-on-grade be isolated from the foundation footings so settlement of the foundations will not induce shear stresses in the floor slab. However, appropriate reinforcement should be incorporated into turned-down or thickened slab section if a monolithic slab is used. In order to reduce the crack width of shrinkage cracks that may develop near the surface of the slab, we recommend mesh reinforcement be placed in the floor slab. The Wire Reinforcement Institute recommends the mesh reinforcement be placed 2 inches below the slab surface or upper one-third of slab thickness, whichever is closer to the surface. Adequate construction joints, contraction joints and isolation joints should also be provided in the slab to reduce the impacts of cracking and shrinkage. Please refer to ACI 302.1R96 Guide for Concrete Floor and Slab Construction for additional information regarding concrete slab joint design.

5.5 Site Drainage

Positive drainage should be provided around the perimeter of structures to minimize the potential for moisture infiltration into the foundation and slab subgrade soils. We recommend that landscaped areas adjacent to these structures be sloped away from the construction and maintain a fall of at least 6 inches for the first 10 feet outward from the structures. Any future paved areas should also be sloped to divert surface water away from the proposed building.

The proper diversion of surface water during site grading and construction will help reduce the potential for delays associated with periods of inclement weather. Please note that the need for construction dewatering should be determined at the time of construction. If grading operations are performed during the wet seasons (i.e. fall and winter) the use of gravity flow ditches may be necessary to divert precipitation and surface water away from the construction areas. The proper diversion of surface water is especially critical since portions of the site soils are expected to be moisture sensitive. Based upon our past experience, the use of “crowning” large areas of exposed soils should be useful to help divert surface water from the prepared subgrades.

5.6 Construction Considerations

It is imperative to maintain good site drainage during earthwork operations to help maintain the integrity of the surface soils. The surface of the site should be kept properly graded to enhance drainage of surface water away from the proposed construction areas during the earthwork phase of this project. We recommend that surface drainage be diverted away from the proposed building areas without significantly interrupting its flow. Other practices would involve sealing the exposed soils with a smooth-drum roller at the end of the day's work to reduce the potential for infiltration of surface water into the exposed soils.

The key to minimizing disturbance problems with the soils is to have proper control of the earthwork operations. Specifically, it should be the earthwork contractor's responsibility to maintain the site soils within a workable moisture content range to obtain the required in-place density and maintain a stable subgrade. Scarifying and drying operations should be included in the contractor's price and not be considered an extra to the contract. In addition, construction equipment should not be permitted to randomly run across the site, especially once the desired final grades have been established. Construction equipment should be limited to designated lanes and areas, especially during wet periods to minimize disturbance of the site subgrades.

6.0 CLOSING

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty is expressed or implied. Our evaluation of foundation support conditions is based on our understanding of the site and project information, and the data obtained in our exploration. The general subsurface conditions used in our foundation evaluation are based on interpolation of subsurface data between the borings. In evaluating the boring data, we have reviewed previous correlations between penetration resistance values and foundation bearing pressures observed in soil conditions similar to those at your site. Once the final project design criteria are established, please contact us so that our recommendations can be reviewed and modified, if necessary. The discovery of any site or subsurface conditions during construction which deviate from the data outlined in this exploration should be reported to us for our evaluation. *Furthermore, ECS should be provided a copy of the final plans and specifications in advance of construction to verify that our recommendations have been correctly interpreted.* The assessment of site environmental conditions for the presence of pollutants in the soil, rock, and groundwater of the site was beyond the scope of this exploration.

APPENDIX

Site Location Map

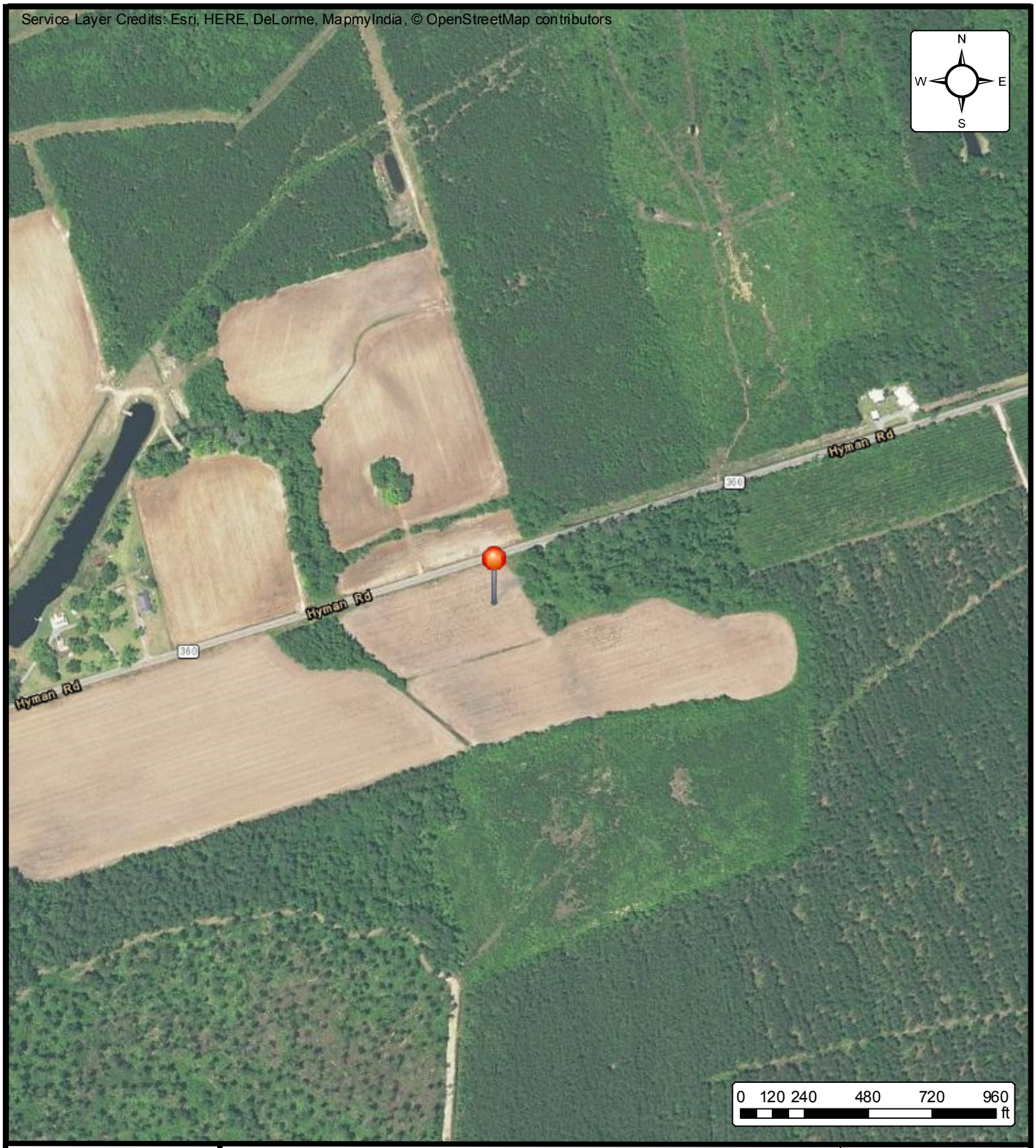
Boring Location Plan

Unified Soil Classification System

Reference Notes for Boring Logs

Hand Auger Logs (HA-1 to HA-4)

Wildcat Dynamic Cone Penetrometer Logs (HA-1 to HA-4)

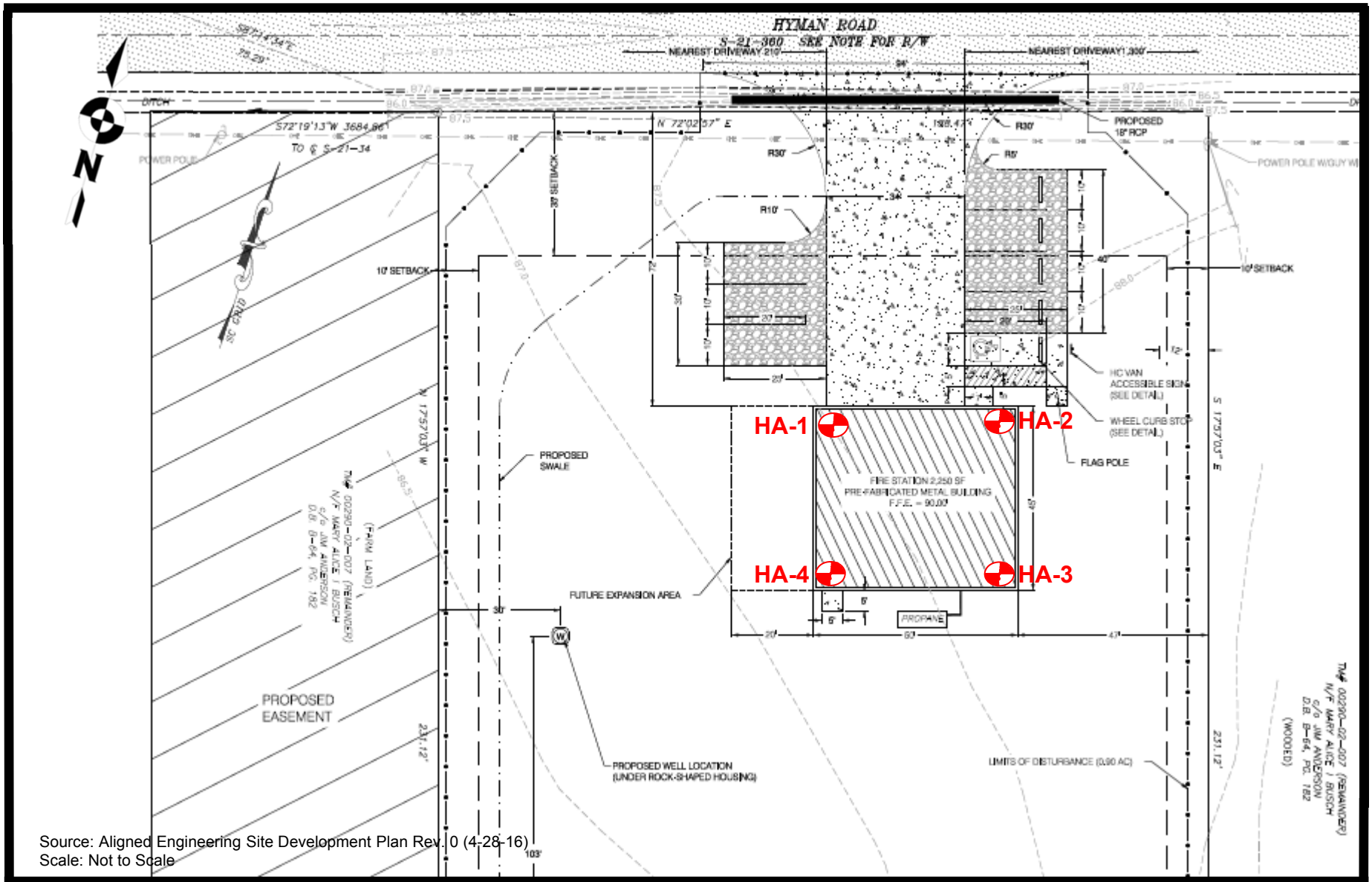


Site Location Diagram

HYMAN ROAD GEOTECHNICAL

FLORENCE COUNTY COMPLEX
FLORENCE, SC

ENGINEER	
SCALE	1 " = 500 '
PROJECT NO.	38:1457
SHEET	1 OF 1
DATE	5/9/2016



Source: Aligned Engineering Site Development Plan Rev. 0 (4-28-16)
Scale: Not to Scale

LEGEND

Hand Auger Boring Locations (Approximate)

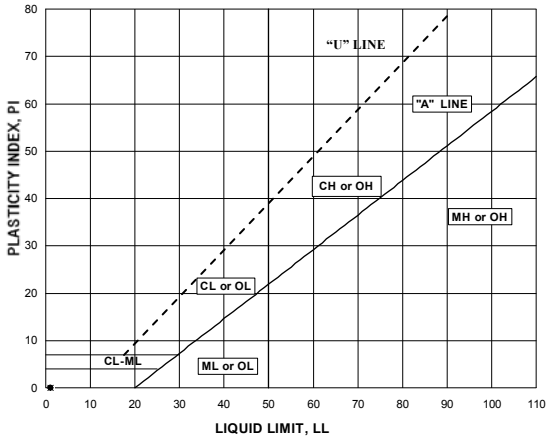
HA-# Hand Auger Boring Number

Boring Location Plan
Hyman Road Geotechnical
Florence, South Carolina
ECS Project No.: 38:1457

Unified Soil Classification System
(ASTM Designation D-2487)

Major Division		Group Symbol	Typical Names	Classification on basis of percentage of fines		Classification Criteria
Coarse-grained soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Less than 5% Pass No. 200 sieve	GW, GP, SW, SP	$C_u = D_{60}/D_{10}$ Greater than 4 $C_z = (D_{30})^2/(D_{10}xD_{60})$ Between 1 and 3
		GP	Poorly graded gravels and gravel-sand mixtures, little or no fines			Not meeting both criteria for GW
		GM	Silty gravels, gravel-sand-silt mixtures	More than 12% Pass No. 200 sieve	GM, GC, SM, SC	Atterberg limits plot below "A" line or plasticity index less than 4
		GC	Clayey gravels, gravel-sand-clay mixtures			Atterberg limits plot above "A" line and plasticity index greater than 7
	Sands: More than 50% of coarse fraction passes No. 4 sieve	SW	Well-graded sands and gravelly sands, little or no fines	5% to 12% Pass No. 200 sieve	Borderline classification requiring use of dual symbol	$C_u = D_{60}/D_{10}$ Greater than 6 $C_z = (D_{30})^2/(D_{10}xD_{60})$ Between 1 and 3
		SP	Poorly graded sands and gravelly sands, little or no fines			Not meeting both criteria for SW
		SM	Silty sands, sand-silt mixtures			Atterberg limits plot below "A" line or plasticity index less than 4
		SC	Clayey sands, sand-clay mixtures			Atterberg limits plot above "A" line and plasticity index greater than 7
Fine-grained soils: 50% or more passing No. 200 sieve	Silts and Clays: Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands			
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
		OL	Organic silts and organic silty clays of low plasticity			
	Silts and Clays: Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts			
		CH	Inorganic clays of high plasticitiy, fat clays			
		OH	Organic clays of medium to high plasticity			
Highly organic soils		Pt	Peat, muck and other highly organic soils			Fibrous organic matter; will char, burn, or glow

Note: U-line represents approximate upper limit of LL and PI combinations for natural soils (empircally determined). ASTM-D2487.



Plasticity chart for the classification of fine-grained soils. Tests made on fraction finer than No. 40 sieve

UNIFIED SOIL CLASSIFICATION SYSTEM

REFERENCE NOTES FOR BORING LOGS

I. Drilling and Sampling Symbols:

SS:	Split Spoon Sampler	RB:	Rock Bit Drilling
ST:	Shelby Tube Sampler	BS:	Bulk Sample of Cuttings
RC:	Rock Core; NX, BX, AX	PA:	Power Auger (no sample)
PM:	Pressuremeter	HSA:	Hollow Stem Auger
DC:	Dutch Cone Penetrometer	WS:	Wash Sample

Standard Penetration (Blows/Ft) refers to the blows per foot of a 140 lb. hammer falling 30 inches on a 2 inch O.D. split spoon sample, as specified in ASTM D-1586. The blow count is commonly referred to as the N value.

II. Correlation of Penetration Resistances to Soil Properties:

Relative Density of Cohesionless Soils

SPT-N	Relative Density
0 - 4	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
51 or more	Very Dense

Consistency of Cohesive Soils

SPT-N	Consistency
0 - 2	Very Soft
3 - 4	Soft
5 - 8	Medium Stiff
9 - 15	Stiff
16 - 30	Very Stiff
31 - 50	Hard
50 or more	Very Hard

III. Unified Soil Classification Symbols:

GP:	Poorly Graded Gravel	ML:	Low Plasticity Silts
GW:	Well Graded Gravel	MH:	High Plasticity Silts
GM:	Silty Gravel	CL:	Low Plasticity Clays
GC:	Clayey Gravel	CH:	High Plasticity Clays
SP:	Poorly Graded Sands	OL:	Low Plasticity Organics
SW:	Well Graded Sands	OH:	High Plasticity Organics
SM:	Silty Sands	CL - ML:	Dual Classification (Typical)
SC:	Clayey Sands		

IV. Water Level Measurement Symbols:

WL:	Water Level	BCR:	Before Casing Removal
WS:	While Sampling	ACR:	After Casing Removal
WD:	While Drilling	WCI:	Wet Cave In
		DCI:	Dry Cave In

The water levels are those water levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when auguring, without adding fluids, in a granular soil. In clays and plastic silts, the accurate determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally applied.

The elevations indicated on the boring logs should be considered approximate and were not determined using accepted surveying techniques.

PROJECT NAME:		HAND AUGER #
Hyman Road Geotechnical		HA-1
CLIENT:	JOB #:	SURFACE ELEVATION
Florence County Complex	38:1457	87.5'
LOCATION: Hyman Road, Florence, SC	ARCH./ENG:	

DEPTH (FT.)	ELEV. (FT.)	DESCRIPTION OF MATERIAL	EXCAV. EFFORT	DCP	QP (TSF)	SAMPLE NO.	MOIST. CONT. (%)
0	87	Topsoil Depth [8"]					
1	86	(SC) CLAYEY SAND, Brown to Tan, Moist to Wet	E			S-1	
2	85						
3	84		E			S-2	
4	83						
5	82	END OF HAND AUGER @ 5.0'					
6	81						

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

GROUND WATER: While Drilling ▽ After Drilling ▼ EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

ECS REP.:	DATE:	UNITS:	Cave-in Depth:	Groundwater Before Drilling:	Groundwater:
JB/GC	05/06/16	Feet			3.0'

PROJECT NAME:		HAND AUGER #
Hyman Road Geotechnical		HA-2
CLIENT:	JOB #:	SURFACE ELEVATION
Florence County Complex	38:1457	87.5'
LOCATION: Hyman Road, Florence, SC	ARCH./ENG:	

DEPTH (FT.)	ELEV. (FT.)	DESCRIPTION OF MATERIAL	EXCAV. EFFORT	DCP	QP (TSF)	SAMPLE NO.	MOIST. CONT. (%)
0	87	Topsoil Depth [10"]					
1	86	(SC) CLAYEY SAND, Brown to Tan, Moist to Wet	E			S-1	
2	85						
3	84		E			S-2	
4	83						
5	82	END OF HAND AUGER @ 5.0'					
6	81						

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

GROUND WATER: While Drilling ▽ After Drilling ▼ EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

ECS REP.:	DATE:	UNITS:	Cave-in Depth:	Groundwater Before Drilling:	Groundwater:
JB/GC	05/06/16	Feet			3.0'

PROJECT NAME:		HAND AUGER #
Hyman Road Geotechnical		HA-3
CLIENT:	JOB #:	SURFACE ELEVATION
Florence County Complex	38:1457	87.5'
LOCATION: Hyman Road, Florence, SC	ARCH./ENG:	

DEPTH (FT.)	ELEV. (FT.)	DESCRIPTION OF MATERIAL	EXCAV. EFFORT	DCP	QP (TSF)	SAMPLE NO.	MOIST. CONT. (%)
0	87	Topsoil Depth [10"]					
1	86	(SC) CLAYEY SAND, Tan to Red, Moist to Wet	E			S-1	
2							
3	85						
4	84		E			S-2	
5	83	END OF HAND AUGER @ 5.0'					
6	82						
	81						

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

GROUND WATER: While Drilling ▽ After Drilling ▼ EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

ECS REP.:	DATE:	UNITS:	Cave-in Depth:	Groundwater Before Drilling:	Groundwater:
JB/GC	05/06/16	Feet			3.0'

PROJECT NAME:		HAND AUGER #
Hyman Road Geotechnical		HA-4
CLIENT:	JOB #:	SURFACE ELEVATION
Florence County Complex	38:1457	87.5'
LOCATION: Hyman Road, Florence, SC	ARCH./ENG:	

DEPTH (FT.)	ELEV. (FT.)	DESCRIPTION OF MATERIAL	EXCAV. EFFORT	DCP	QP (TSF)	SAMPLE NO.	MOIST. CONT. (%)
0	87	Topsoil Depth [8"]					
1	86	(SC) CLAYEY SAND, Tan to Red, Moist to Wet	E			S-1	
2	85						
3	84		E			S-2	
4	83						
5	82	END OF HAND AUGER @ 5.0'					
6	81						

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

GROUND WATER: While Drilling ▽ After Drilling ▼ EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

ECS REP.:	DATE:	UNITS:	Cave-in Depth:	Groundwater Before Drilling:	Groundwater:
JB/GC	05/06/16	Feet			3.0'

WILDCAT DYNAMIC CONE LOG

ECS Carolinas, LLP
2031 Industrial Boulevard
Lexington, SC 29072

PROJECT NUMBER: 38:1457
DATE STARTED: 05-06-2016
DATE COMPLETED: 05-06-2016

HOLE #: HA-1
CREW: JB/GC
PROJECT: Hyman Road Geotechnical
ADDRESS: Hyman Road
LOCATION: Florence, SC

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	8	35.5	••••••••••	10	LOOSE	STIFF
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
- 1 ft	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
- 2 ft	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	8	35.5	••••••••••	10	LOOSE	STIFF
- 3 ft	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
- 1 m	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 4 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	7	27.0	•••••••	7	LOOSE	MEDIUM STIFF
-	7	27.0	•••••••	7	LOOSE	MEDIUM STIFF
- 5 ft	8	30.9	••••••••	8	LOOSE	MEDIUM STIFF
-	11	42.5	•••••••••••	12	MEDIUM DENSE	STIFF
-	12	46.3	••••••••••••	13	MEDIUM DENSE	STIFF
- 6 ft	14	54.0	••••••••••••••	15	MEDIUM DENSE	STIFF
-	22	84.9	••••••••••••••••••••••	24	MEDIUM DENSE	VERY STIFF
- 2 m	24	92.6	••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 7 ft	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
-	21	71.8	•••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
- 8 ft	17	58.1	•••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	16	54.7	••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
- 9 ft	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	22	75.2	•••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
-						
-						
-						
- 11 ft						
-						
-						
- 12 ft						
-						
-						
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

ECS Carolinas, LLP
2031 Industrial Boulevard
Lexington, SC 29072

PROJECT NUMBER: 38:1457
DATE STARTED: 05-06-2016
DATE COMPLETED: 05-06-2016

HOLE #: HA-2
CREW: JB/GC
PROJECT: Hyman Road Geotechnical
ADDRESS: Hyman Road
LOCATION: Florence, SC

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
- 1 ft	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
- 3 ft	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
- 1 m	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
- 4 ft	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
-	7	27.0	•••••••	7	LOOSE	MEDIUM STIFF
-	8	30.9	••••••••	8	LOOSE	MEDIUM STIFF
- 5 ft	9	34.7	•••••••••	9	LOOSE	STIFF
-	9	34.7	•••••••••	9	LOOSE	STIFF
-	11	42.5	••••••••••••	12	MEDIUM DENSE	STIFF
- 6 ft	16	61.8	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	24	92.6	•••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 2 m	25	96.5	••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 7 ft	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 8 ft	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	17	58.1	•••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 9 ft	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	21	71.8	••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-						
-						
-						
- 11 ft						
-						
-						
- 12 ft						
-						
-						
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

ECS Carolinas, LLP
2031 Industrial Boulevard
Lexington, SC 29072

PROJECT NUMBER: 38:1457
DATE STARTED: 05-06-2016
DATE COMPLETED: 05-06-2016

HOLE #: HA-3
CREW: JB/GC
PROJECT: Hyman Road Geotechnical
ADDRESS: Hyman Road
LOCATION: Florence, SC

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	8	35.5	••••••••••	10	LOOSE	STIFF
- 1 ft	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
- 2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
-	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 ft	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
- 1 m	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
- 4 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
- 5 ft	8	30.9	••••••••	8	LOOSE	MEDIUM STIFF
-	9	34.7	•••••••••	9	LOOSE	STIFF
-	12	46.3	••••••••••••	13	MEDIUM DENSE	STIFF
- 6 ft	15	57.9	••••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	23	88.8	•••••••••••••••••••••••••	25	MEDIUM DENSE	VERY STIFF
- 2 m	22	84.9	••••••••••••••••••••••••	24	MEDIUM DENSE	VERY STIFF
- 7 ft	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
- 8 ft	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
- 9 ft	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	20	68.4	••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
-						
-						
-						
- 11 ft						
-						
-						
- 12 ft						
-						
-						
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

ECS Carolinas, LLP
2031 Industrial Boulevard
Lexington, SC 29072

PROJECT NUMBER: 38:1457
DATE STARTED: 05-06-2016
DATE COMPLETED: 05-06-2016

HOLE #: HA-4
CREW: JB/GC
PROJECT: Hyman Road Geotechnical
ADDRESS: Hyman Road
LOCATION: Florence, SC

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
- 1 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	3	13.3	•••	3	VERY LOOSE	SOFT
-	3	13.3	•••	3	VERY LOOSE	SOFT
- 2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	6	26.6	•••••••	7	LOOSE	MEDIUM STIFF
-	7	31.1	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 1 m	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
- 4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 5 ft	7	27.0	•••••••	7	LOOSE	MEDIUM STIFF
-	10	38.6	••••••••••	11	MEDIUM DENSE	STIFF
-	11	42.5	•••••••••••	12	MEDIUM DENSE	STIFF
- 6 ft	16	61.8	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	25	96.5	••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 2 m	25	96.5	••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 7 ft	22	75.2	••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 8 ft	21	71.8	••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	23	78.7	•••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
-	22	75.2	••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
- 9 ft	17	58.1	•••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
-	18	61.6	••••••••••••••••	17	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	21	71.8	••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-						
-						
-						
- 11 ft						
-						
-						
- 12 ft						
-						
-						
- 4 m 13 ft						

BUILDER/CONTRACTOR RESPONSIBILITIES

Drawing Validity – These drawings, supporting structural calculations and design certification are based on the order documents as of the date of these drawings. These documents describe the material supplied by the manufacturer as of the date of these drawings. Any changes to the order documents after the date on these drawings may void these drawings, supporting structural calculations and design certification. The Builder/Contractor is responsible for notifying the building authority of all changes to the order documents which result in changes to the drawings, supporting structural calculations and design certification.

Builder Acceptance of Drawings – Approval of the manufacturer's drawings and design data affirms that the manufacturer has correctly interpreted and applied the requirements of the order documents and constitutes Builder/Contractor acceptance of the manufacturer's interpretations of the order documents and standard product specifications, including its design, fabrication and quality criteria standards and tolerances. (AISC code of standard practice Sept 86 Section 4.2.1) (Mar 05 Section 4.4.1)

Code Official Approval – It is the responsibility of the Builder/Contractor to ensure that all project plans and specifications comply with the applicable requirements of any governing building authority. The Builder/Contractor is responsible for securing all required approvals and permits from the appropriate agency as required.

Builder is responsible for State, Federal and OSHA safety compliance – The Builder/Contractor is responsible for applying and observing all pertinent safety rules and regulations and OSHA standards as applicable.

Building Erection – The Builder/Contractor is responsible for all erection of the steel and associated work in compliance with the Metal Building Manufacturers drawings. Temporary supports, such as temporary guys, braces, false work or other elements required for erection will be determined, furnished and installed by the erector. (AISC Code of Standard Practice Sept 86 Section 7.9.1) (Mar 05 Section 7.10.3)

Discrepancies – Where discrepancies exist between the Metal Building plans and plans for other trades, the Metal Building plans will govern. (AISC Code of Standard Practice Sept 86 Section 3.3) (Mar 05 Section 3.3)

Materials by Others – All interface and compatibility of any materials not furnished by the manufacturer are the responsibility of and to be coordinated by the Builder/Contractor or A/E firm. Unless specific design criteria concerning any interface between materials if furnished as a part of the order documents, the manufacturers assumptions will govern.

Correction of Errors – Normal erection operations include the correction of minor misfits by moderate amounts of reaming, chipping, welding or cutting and the drawing of elements into line through the use of drift pins. Errors which cannot be corrected by the foregoing means or which require major changes in the member configuration should be reported immediately to the owner and fabricator by the erector, to enable whoever is responsible either to correct the error or to approve the most efficient and economical method of correction to be used by others. (AISC Code of Standard Practice Sept 86 Section 7.12)(Mar 05 Section 7.14)

Modification of the Metal Building from Plans – The Metal Building supplied by the manufacturer has been designed according to the Building Code and specifications and the loads shown on this drawing. Modification of the building configuration, such as removing wall panels or braces, from that shown on these plans could affect the structural integrity of the building. The Metal Building Manufacturer or a Licensed Structural Engineer should be consulted prior to making any changes to the building configuration shown on these drawings. The Metal Building Manufacturer will assume no responsibility for any loads applied to the building not indicated on these drawings.

Safety Commitment – The Metal Building Manufacturer has a commitment to manufacture quality building components that can be safely erected. However, the safety commitment and job site practices of the erector are beyond the control of the building manufacturer. It is strongly recommended that safe working conditions and accident prevention is the top priority of any job site. Local, State and Federal safety and health standards, whether standard statutory or customary, should always be followed to help ensure worker safety. Make certain all employees know the safest and most productive way to erect a building. Emergency procedures should be known to all employees. Daily meetings highlighting safety procedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended. For purposes of determining lift requirements, no bundles supplied by the manufacturer will exceed 4000 lbs. For further information also reference the bill of materials for individual member weights of other structural members. If additional information is required contact the customer service department.

Foundation Design – The Metal Building Manufacturer is not responsible for the design, materials and workmanship of the foundation. Anchor rod plans prepared by the manufacturer are intended to show only location, diameter and projection of the anchor rods required to attach the Metal Building System to the foundation. It is the responsibility of the end customer to ensure that adequate provisions are made for specifying rod embedment, bearing values, tie rods and or other associated items embedded in the concrete foundation, as well as foundation design for the loads imposed by the Metal Building System, other imposed loads, and the bearing capacity of the soil and other conditions of the building site. (MBMA 06 Sections 3.2.2 and A3)

Dissimilar Materials – Never allow your roof to come in contact with, or water runoff from, any dissimilar metal including but not limited to: Copper and Arsenic Salts used in treated lumber, Calcium used in concrete, mortar and grout.

Debris Removal – Any foreign debris such as sawdust, dirt, animal droppings, etc. will cause corrosion of the roof, gutters, trim, etc. if left on building surfaces for a long enough time. The roof should be periodically inspected for such conditions and if found, they should be removed.

Shop Primed Steel – All structural members of the Metal Building System not fabricated of corrosion resistant material or protected by a corrosion resistant coating are painted with one coat of shop primer meeting the performance requirements of SSPC Paint Specification No. 15. All surfaces to receive shop primer are cleaned of loose rust, loose mill scale and other foreign matter by using, as a minimum, the hand tool cleaning method SSPC-SP2 (Steel Structures Painting Council) prior to painting. The coat of shop primer is intended to protect the steel framing for only a short period of exposure to ordinary atmospheric conditions. Shop Primed steel stored in the field pending erection should be kept free of the ground and so positioned as to minimize water-holding pockets, dust, mud and other contamination of the primer film. Repairs of damage to primed surfaces and/or removal of foreign material due to improper field storage or site conditions are not the responsibility of the manufacturer. The Manufacturer is not responsible for deterioration of the shop coat of primer or corrosion that may result from exposure to atmospheric and environmental conditions, nor the compatibility of the primer to any field applied coating. Minor abrasions to the shop coat (including galvanizing) caused by handling, loading, shipping unloading and erection after painting or galvanizing are unavoidable. Touch-up of these minor abrasions is the responsibility of the End Customer (MBMA 06 IV 4.2.4)

PROJECT NOTES

Material properties of steel bar, plate, and sheet used in the fabrication of built-up structural framing members conform to ASTM A529, ASTM A572, ASTM A1011 SS, or ASTM A1011 HSLAS with a minimum yield point of 50 ksi. Material properties of hot rolled structural shapes conform to ASTM A992, ASTM A529, or ASTM A572 with a minimum specified yield point of 50 ksi. Hot rolled angles, or other than flange braces, conform to ASTM 36 minimum. Hollow structural shaped conform to ASTM A500 grade b, minimum yield point is 42 ksi for round HSS and 46 ksi for rectangular HSS. Material properties of cold form light gage steel members conform to the requirements of ASTM A1011 SS Grade 55 or ASTM A1011 HSLAS Class 1 Grade 55, with a minimum yield point of 55 ksi.

All bolt joints with A325 Type 1 bolts are specified as snug-tightened joints, unless noted otherwise, in accordance with the "Specification for Structural Joints using ASTM A325 or A490 bolts, June 30, 2004". Pretensioning methods, including turn-of-nut and calibrated wrench are not required unless noted otherwise.

The manufacturer does not assume any responsibility for the erection nor field supervision of the structure and or any special inspections (including inspection of the high strength bolts or field welds) as required during erection. The coordination and the costs associated for setting up and Special Inspections are the responsibility of the Erector, Owner, Architect, or Engineer of Record.

Design is based upon the more severe loading of either the roof snow load or the roof live load.

Loads, as noted, are given within order documents and are applied in general accordance with the applicable provisions of the model code and/or specification indicated. Neither the manufacture nor the certifying engineer declares or attests that the loads as designated are proper for the local provisions that may apply or for site specific parameters. The manufacturer's Engineer's certification is limited to design loads supplied by an Architect and/or engineer of record for the overall construction project.

This project is designed using manufacture's standard serviceability standards. Generally this means that all stresses and deflections are within typical performance limits for normal occupancy and standard metal building products. If special requirements for deflections and vibrations must be adhered to, then they must be clearly stated in the contract documents.

X-bracing (if applicable) is to be installed to a taut condition with all slack removed. Do not tighten beyond this state.

The design collateral load has been uniformly applied to the design of the building. Hanging loads are to be attached to the purlin web. This may not be appropriate for heavily concentrated loads. Any attached load in excess of 150 pounds shall be accounted for by special design performed by a licensed engineer using concentrated loads and may require separate support members within the roof system.

This metal building system is designed as enclosed. All exterior components (i.e. doors, windows, vents, etc.) must be designed to withstand the specified wind loading for the design of components and cladding in accordance with the specified building code. Doors are to be closed when a maximum of 50% of design wind velocity is reached.

DESIGN LOADING

THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED AND APPLIED AS REQUIRED BY:

IBC 12

THE BUILDER IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT.

FRAME / ROOF DEAD LOAD	
SUPERIMPOSED	2.730 PSF
COLLATERAL (LIGHTS)	1 PSF
FRAME / ROOF LIVE LOAD	12 /20.00 PSF
RISK CATEGORY	IV – Post
SNOW LOAD	
GROUND SNOW LOAD (Pg)	10.0000PSF
SNOW LOAD IMPORTANCE FACTOR (Is)	1.2000
FLAT ROOF SNOW LOAD (Pf)	12 PSF
SNOW EXPOSURE FACTOR (Ce)	1.0
THERMAL FACTOR (Ct)	1.00
WIND LOAD	
ULTIMATE WIND SPEED	150 MPH
WIND EXPOSURE CATEGORY	C
TOPOGRAPHICAL FACTOR	1.0
INTERNAL PRESSURE COEFFICIENT (GCpi)	0.18 /-0.18

ZONE 4, COMPONENT WIND LOAD ≤ 10FT²

46.532 PSF PRESSURE -50.409 PSF SUCTION

ZONE 5, COMPONENT WIND LOAD < 10FT²

46.532 PSF PRESSURE -61.926 PSF SUCTION

ZONES PER ASCE 7-10; FIG. 30.4-1
ZONES PRESSURES SHOWN ARE UN-FACTORED

RAIN INTENSITY	
5-MINUTE DURATION, 5-YEAR RECURRENCE (I1)	8.0000 IN/HOUR
5-MINUTE DURATION, 25-YEAR RECURRENCE (I2)	11.0000 IN/HOUR
SEISMIC LOAD	
SEISMIC IMPORTANCE FACTOR (Ie)	1.50
S_s 0.7388	S_{Ds} 0.5951
S1 0.2512	S_{D1} 0.3176
SITE CLASS	D
SEISMIC DESIGN CATEGORY	D

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

	TRANSVERSE	LONGITUDINAL FRONT	LONGITUDINAL BACK
BASIC FORCE RESISTING SYSTEM*	C4	G2	B3
RESPONSE MODIFICATION COEFFICIENT(R)	3.25	1.25	3.25
SYSTEM OVER-STRENGTH FACTOR(Ω_0)	3.0000	1.2500	2.0000
SEISMIC RESPONSE COEFFICIENT(C_s)	0.275	0.715	0.275
BLDG DESIGN BASE SHEAR (V)	5.63 (k)	9.17 (k)	

THE TRANSVERSE DIRECTION IS PARALLEL TO THE RIGID FRAMES
THE LONGITUDINAL DIRECTION IS PERPENDICULAR TO THE RIGID FRAMES

BASIC FORCE RESISTING SYSTEM*
C4. STEEL ORDINARY MOMENT FRAME
B3. STEEL ORDINARY CONCENTRIC BRACED FRAMES
H. STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
G2. INVERTED PENDULUM SYSTEMS CANTILEVERED COLUMN SYSTEMS

DRAWING INDEX

ISSUE	PAGE	DESCRIPTION
A	C1	COVER SHEET
0	F1	ANCHOR BOLT PLAN
0	F2	ANCHOR BOLT REACTIONS
0	F3	ANCHOR BOLT DETAILS
A	E1	ROOF FRAMING PLAN
A	E2	ROOF SHEETING PLAN
A	E3	FRONT SIDEWALL
A	E4	BACK SIDEWALL
A	E5	LEFT ENDWALL
A	E6	RIGHT ENDWALL
A	E7	FRAME CROSS SECTION
A	E8	WALL LINEAR
A	DET1-15	STANDARD DETAILS

DRAWING STATUS

☐ FOR APPROVAL

THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWINGS ISSUED "FOR ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☒ FOR CONSTRUCTION PERMIT

THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL. ONLY DRAWINGS ISSUED "FOR ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☐ FOR ERECTOR INSTALLATION

FINAL DRAWINGS FOR CONSTRUCTION.

FOR QUESTIONS OR ASSISTANCE CONCERNING ERECTION CALL:

843-669-6399

MONDAY – FRIDAY 7:30AM TO 5:00PM

ENGINEERING SEAL

THIS CERTIFICATION COVERS PARTS MANUFACTURED AND DELIVERED BY THE MANUFACTURER ONLY, AND EXCLUDES PARTS SUCH AS DOORS, WINDOWS, FOUNDATION DESIGN AND ERECTION OF THE BUILDING.

THESE DRAWINGS AND THE METAL BUILDING SYSTEM THEY REPRESENT ARE THE PRODUCT OF AN AFFILIATE OF NCI GROUP, INC. – 10943 N. SAM HOUSTON PARKWAY W., HOUSTON, TX 77064. THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS HEREON IS EMPLOYED BY AN AFFILIATE OF NCI GROUP, INC. AND IS NOT THE ENGINEER-OF-RECORD FOR THE OVERALL PROJECT.

BUILDING SIZE: 45'-0" x 50'-0" x 14'-3" x 18'-0"

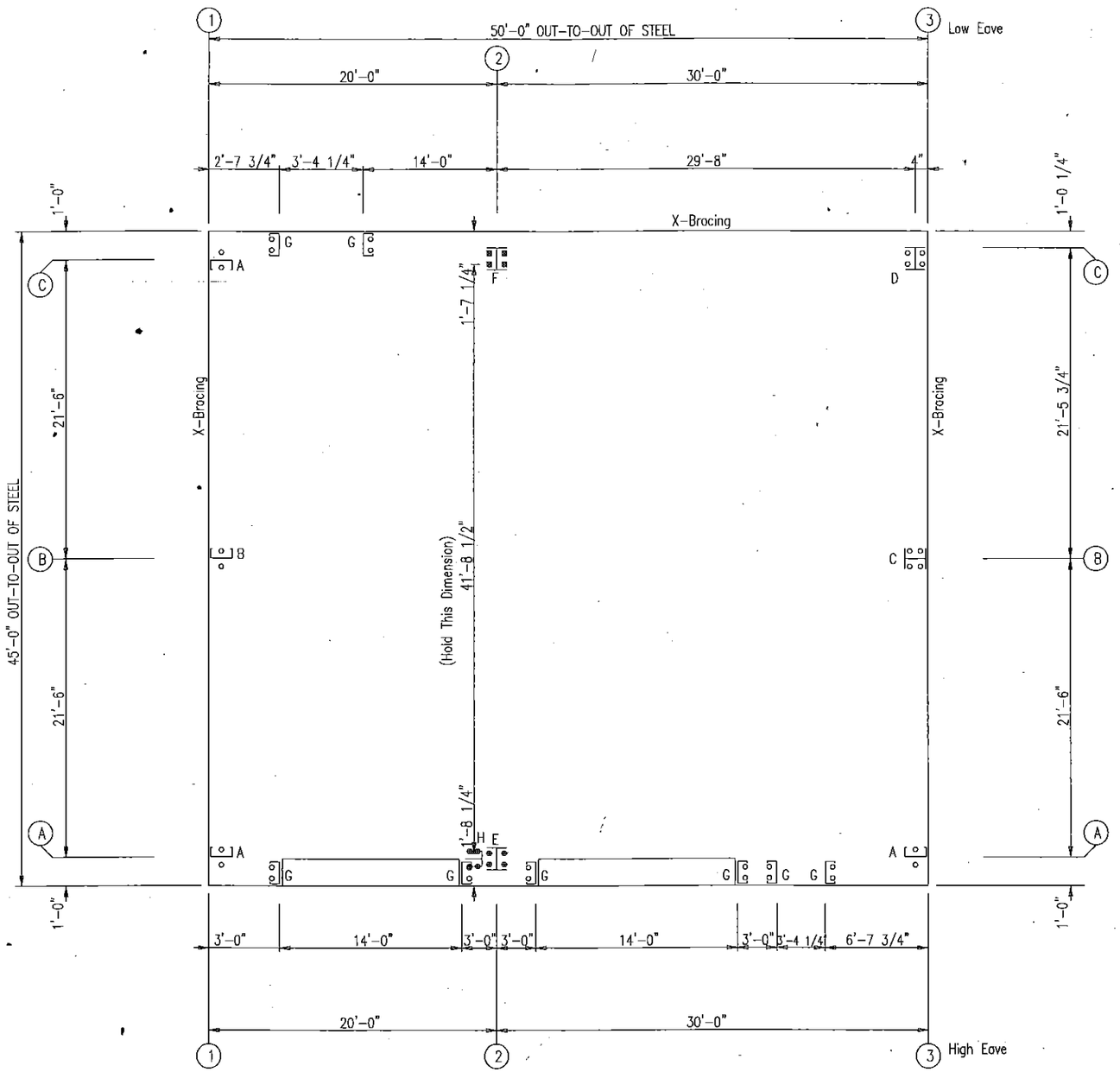
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/20/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/20/15	N.T.S.	1	A	15-B-17264	C1	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREIEIDIN



ANCHOR BOLT PLAN

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/23/15	FOR ERECTOR INSTALLATION	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	F1	0

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

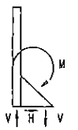
BUILDING BRACING REACTIONS

Wall Loc	Wall Line	Col Line	Reactions in plane of wall ± Reactions (k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear (lb/ft) Wind	Seis	Note
L_EW	1	C,B	Bracing, see EW reactions						
F_SW	A	2							(g)
R_EW	3	B,C	Bracing, see EW reactions						
B_SW	C	3,2	6.1	"	2.3	"			

(g)Wind column at column line

*See RF reactions table for vertical and horizontal reactions in plane of the rigid frame.

WIND COLUMN REACTIONS



Wall Loc	Wall Line	Col Line	R/L	Load_ID	± Reactions Horz (k)	± Reactions Vert (k)	Moment (ft-k)	Anc_Bolt Qty	Anc_Bolt Dia	Base_Plate(in) Width	Base_Plate(in) Length	Base_Plate(in) Thick
F_SW	A	2	L	Wind	6.8	77.2	115.8	4	1.000	8.000	8.000	0.750
				Seismic	6.8	77.3	115.9					

Note

vertical rection are included in rigid frame reactions

ENDWALL COLUMN: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc_Bolt Qty	Anc_Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Base_Plate (in) Thick	Grout (in)
1	C	2	0.625	7.000	12.00	0.250	0.0
1	B	2	0.625	7.000	12.00	0.250	0.0
1	A	2	0.625	7.000	12.00	0.250	0.0
3	A	2	0.625	7.000	12.00	0.250	0.0
3	B	4	0.625	6.000	12.00	0.375	0.0
3	C	4	0.625	6.000	12.00	0.375	0.0

NOTES FOR REACTIONS

BUILDING REACTIONS ARE BASED ON THE FOLLOWING BUILDING DATA:

WIDTH (FT)	= 45
LENGTH (FT)	= 50
EAVE HEIGHT (FT)	= 14.25 / 18
ROOF SLOPE (rise/12)	= 1.0:12 /
DEAD LOAD (psf)	= 2.730
COLLATERAL LOAD (psf)	= 1
ROOF LIVE LOAD (psf)	= 20.00
FRAME LIVE LOAD (psf)	= 12
ROOF SNOW LOAD (psf)	= 12
GROUND SNOW LOAD (psf)	= 10.0000
WIND SPEED (MPH)	= 150
WIND CODE	= IBC 12
EXPOSURE	= C
CLOSED/OPEN	= Closed
IMPORTANCE – WIND	= 1.00
IMPORTANCE – SEISMIC	= 1.50
SEISMIC ZONE	= D

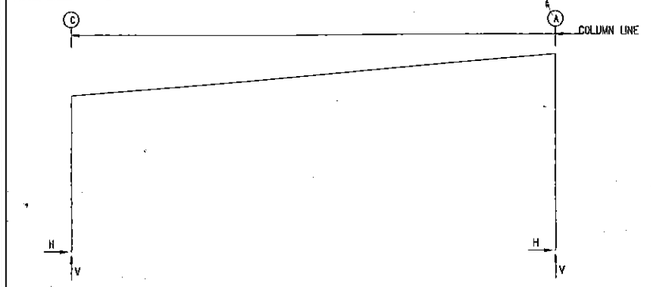
ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
○ 16	Jamb	5/8"	F1554	2.00
○ 16	Endwall	5/8"	F1554	2.00
⊠ 4	Frame	3/4"	F1554	2.50
⊕ 4	Frame	1"	F1554	3.00
⊕ 4	WindCol	1"		

GENERAL NOTES

1. THE REACTIONS PROVIDED ARE BASED ON THE ORDER DOCUMENTS AT THE TIME OF MAILING. ANY CHANGES TO BUILDING LOADS OR DIMENSIONS MAY CHANGE THE REACTIONS. THE REACTIONS WILL BE SUPERSEDED AND VOIDED BY ANY FUTURE MAILING.
2. REACTIONS ARE PROVIDED AS UN-FACTORED FOR EACH LOAD GROUP APPLIED TO THE COLUMN. THE FOUNDATION ENGINEER WILL APPLY THE APPROPRIATE LOAD FACTORS AND COMBINE THE REACTIONS IN ACCORDANCE WITH THE BUILDING CODE AND DESIGN SPECIFICATIONS TO DETERMINE BEARING PRESSURES AND CONCRETE DESIGN. THE FACTORS APPLIED TO LOAD GROUPS FOR THE STEEL COLUMN DESIGN MAY BE DIFFERENT THAN THE FACTORS USED IN THE FOUNDATION DESIGN.
3. THE MANUFACTURER DOES NOT PROVIDE "MAXIMUM" LOAD COMBINATION REACTIONS. HOWEVER, THE INDIVIDUAL LOAD REACTIONS PROVIDED MAY BE USED BY THE FOUNDATION ENGINEER TO DETERMINE THE APPLICABLE LOAD COMBINATIONS FOR HIS/HER DESIGN PROCEDURES AND ALLOW FOR AN ECONOMICAL FOUNDATION DESIGN
4. THE METAL BUILDING MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE ANCHOR BOLT DIAMETER ONLY TO PERMIT THE TRANSFER OF FORCES BETWEEN THE BASE PLATE AND THE ANCHOR BOLT IN SHEAR, BEARING AND TENSION, BUT IS NOT RESPONSIBLE FOR THE ANCHOR BOLT EMBEDMENT FOR TRANSFER OF FORCES TO THE FOUNDATION. THE METAL BUILDING MANUFACTURER DOES NOT DESIGN AND IS NOT RESPONSIBLE FOR THE DESIGN, MATERIAL AND CONSTRUCTION OF THE FOUNDATION EMBEDMENTS. THE END USE CUSTOMER SHOULD ASSURE HIMSELF THAT ADEQUATE PROVISIONS ARE MADE IN THE FOUNDATION DESIGN FOR LOADS IMPOSED BY COLUMN REACTIONS OF THE BUILDING, OTHER IMPOSED LOADS, AND BEARING CAPACITY OF THE SOIL AND OTHER CONDITIONS OF THE BUILDING SITE. IT IS RECOMMENDED THAT THE ANCHORAGE AND FOUNDATION OF THE BUILDING BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER EXPERIENCED IN THE DESIGN OF SUCH STRUCTURES, (SECTION A3 MBMA 2006 METAL BUILDING SYSTEMS MANUAL)
5. BOTTOM OF ALL BASE PLATES ARE AT THE SAME ELEVATION. (UNLESS NOTED)
6. ANCHOR RODS ARE ASTM F1554 GRADE 36 MATERIAL UNLESS NOTED OTHERWISE.

FRAME LINES: 2



RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc_Bolt Qty	Anc_Bolt Dia	Base_Plate (in) Width	Base_Plate (in) Length	Base_Plate (in) Thick	Grout (in)
2	C	4	0.750	6.000	9.500	0.375	0.0
2	A	4	1.000	8.000	11.00	0.750	0.0

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2	C	1.0	2.5	0.3	0.7	3.4	8.4	3.4	8.4	−14.9	−27.8	3.7	−12.4
2	A	−1.0	3.3	−0.3	0.7	−3.4	11.5	−3.4	12.1	3.9	−34.1	14.6	−29.5

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2	C	−13.4	−16.5	5.2	−1.1	−5.1	−29.3	−5.1	−29.3	−1.9	−1.2	1.9	1.2
2	A	2.4	−22.8	13.2	−18.2	6.4	−100.8	6.4	−100.8	−1.7	1.2	1.7	−1.2

Frame Line	Column Line	Seismic_Long Horiz	Seismic_Long Vert	MIN_SNOW Horiz	MIN_SNOW Vert
2	C	0.0	−1.2	3.7	8.6
2	A	0.0	−95.2	−3.7	8.8

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind Press Horz
1	C	0.4	0.1	1.8	1.2	1.4	−5.4	0.0	0.5	1.4	−5.4	0.0	0.5	0.0
1	B	1.1	0.3	5.1	3.0	0.0	−12.1	4.5	−10.3	0.0	−12.1	4.5	−10.3	−5.8
1	A	0.7	0.1	3.0	2.6	0.0	−7.1	0.0	−5.4	0.0	−7.1	0.0	−5.4	0.0

Frm Line	Col Line	Wind Sucl Horz	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert	Seis_Left Horz	Seis_Left Vert	Seis_Right Horz	Seis_Right Vert	−MIN_SNOW− Horz	−MIN_SNOW− Vert	E1PAT_SL_1− Horz	E1PAT_SL_1− Vert
1	C	0.0	0.0	−3.1	0.0	−1.8	1.5	−1.0	0.0	1.1	0.0	1.1	0.0	0.6
1	B	6.4	1.9	−14.7	1.1	−8.5	0.0	1.0	1.5	−1.1	0.0	3.3	0.0	0.8
1	A	0.0	0.0	−4.6	0.0	−2.7	0.0	0.0	0.0	0.0	0.0	1.1	0.0	−0.1

Frm Line	Col Line	E1PAT_SL_2− Horz	E1PAT_SL_2− Vert	E1PAT_LL_1− Horz	E1PAT_LL_1− Vert	E1PAT_LL_2− Horz	E1PAT_LL_2− Vert
1	C	0.0	−0.1	0.0	2.0	0.0	−0.3
1	B	0.0	0.8	0.0	2.7	0.0	2.6
1	A	0.0	0.6	0.0	−0.3	0.0	2.1

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert	Wind Press Horz
3	A	0.9	0.1	4.0	3.8	0.0	−7.9	0.0	−10.1	0.0	−7.9	0.0	−10.1	0.0
3	B	1.6	0.4	6.7	4.4	6.3	−14.5	0.0	−16.8	6.3	−14.5	0.0	−16.8	−5.6
3	C	0.7	0.1	2.4	1.7	0.0	0.6	1.8	−7.5	0.0	0.6	1.9	−7.6	−2.8

Frm Line	Col Line	Wind Sucl Horz	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert	Seis_Left Horz	Seis_Left Vert	Seis_Right Horz	Seis_Right Vert	−MIN_SNOW− Horz	−MIN_SNOW− Vert	E2PAT_SL_1− Horz	E2PAT_SL_1− Vert
3	A	0.0	0.0	−6.4	0.0	−3.8	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.0
3	B	6.3	2.6	−20.4	1.5	−12.1	2.1	−1.5	0.0	1.3	0.0	4.9	0.0	1.2
3	C	3.1	0.0	−4.4	0.0	−2.6	0.0	1.5	2.1	−1.4	0.0	1.6	0.0	−0.1

Frm Line	Col Line	E2PAT_SL_2− Horz	E2PAT_SL_2− Vert	E2PAT_LL_1− Horz	E2PAT_LL_1− Vert	E2PAT_LL_2− Horz	E2PAT_LL_2− Vert
3	A	0.0	−0.1	0.0	2.8	0.0	−0.4
3	B	0.0	1.2	0.0	3.5	0.0	3.5
3	C	0.0	0.9	0.0	−0.4	0.0	2.7

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/23/15	FOR ERECTOR INSTALLATION	PNR	PNR	MGS

MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

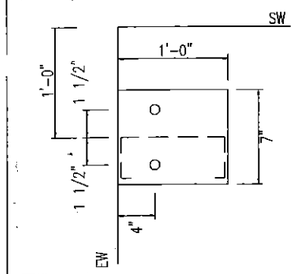
MBMA METAL BUILDING MANUFACTURERS ASSOCIATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 32227 Dec 07, 2015 MUSTAPHA I CHREEIDE

PROJECT:	Fleming Town Fire
CUSTOMER:	ACE CONSTRUCTION CO., INC
OWNER:	FLORENCE COUNTY
LOCATION:	Pamplico, SC 29583,

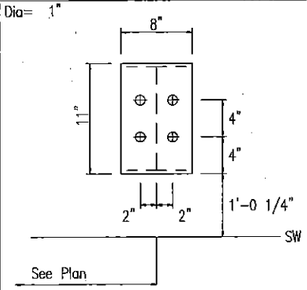
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	F2	0

Dia= 5/8"



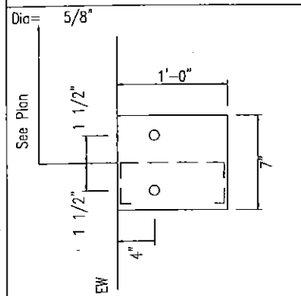
DETAIL A

Dia= 1"



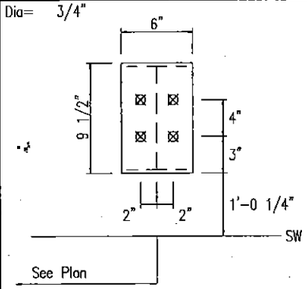
DETAIL E

Dia= 5/8"



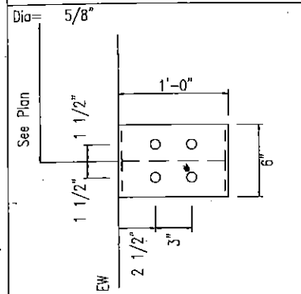
DETAIL B

Dia= 3/4"



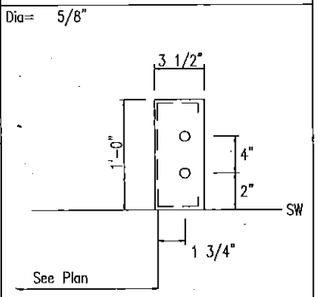
DETAIL F

Dia= 5/8"



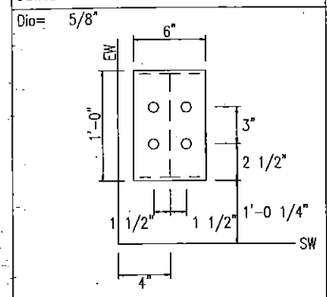
DETAIL C

Dia= 5/8"



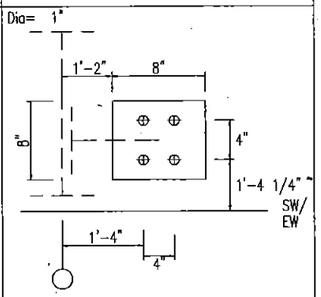
DETAIL G

Dia= 5/8"

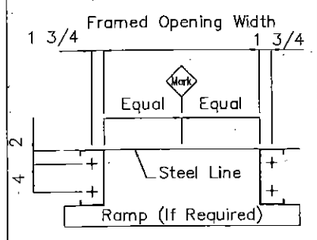


DETAIL D

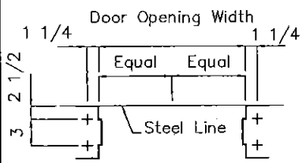
Dia= 1"



DETAIL H



ARDia 5/8" Framed Opening AR Layout



AR Dia 1/2" Walk Door AR Layout

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/23/15	FOR ERECTOR INSTALLATION	PNR	PNR	MGS

MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061

Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: Fleming Town Fire

CUSTOMER: ACE CONSTRUCTION CO., INC

OWNER: FLORENCE COUNTY

LOCATION: Pamplico, SC 29583, -

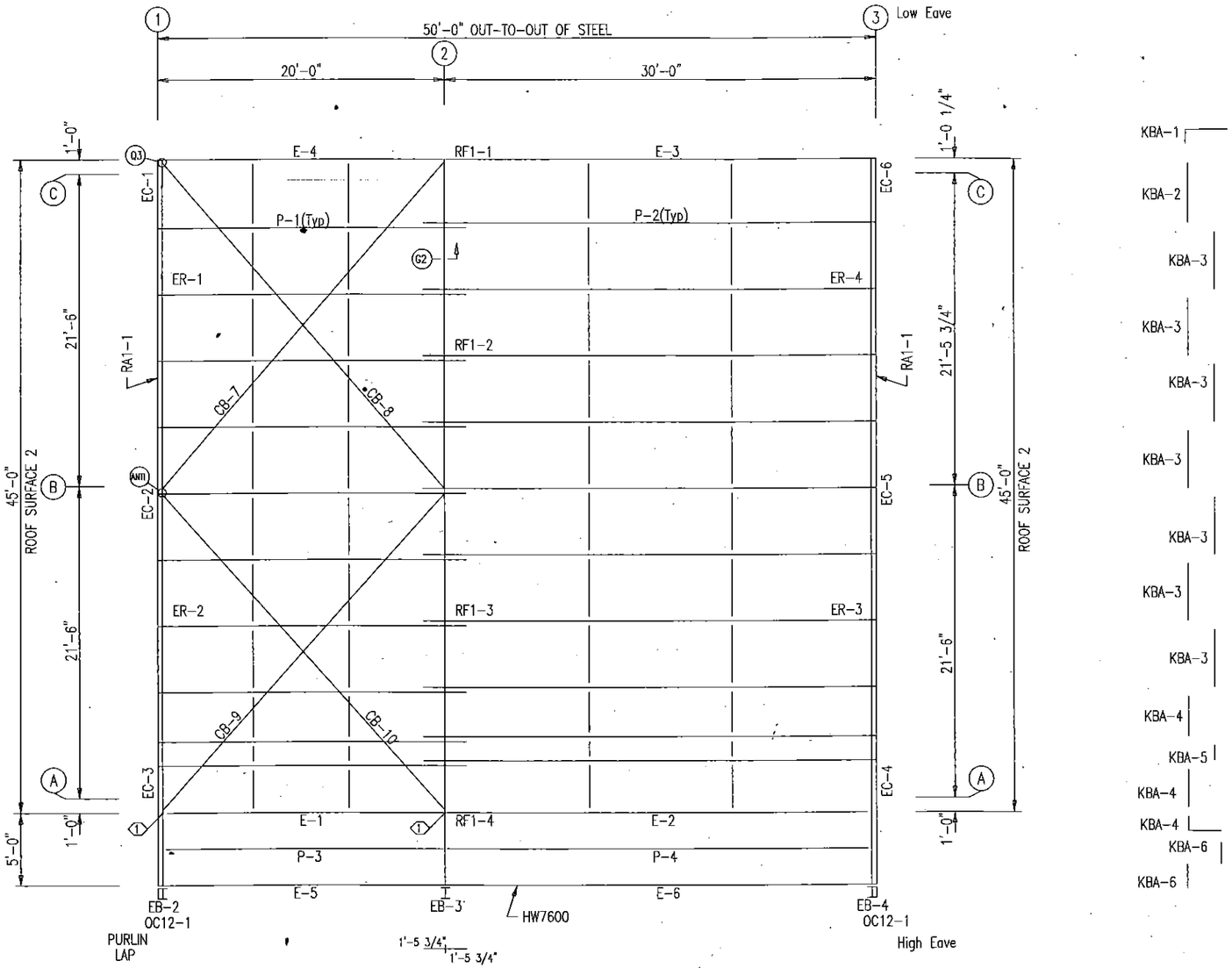
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	F3	0

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MUSTAPHA I CHREEIDE

EXTENSION/CANOPY BOLTS ROOF PLAN				
MARK	QUAN	TYPE	DIA	LENGTH
EB-2/CBS375	4	A325	1/2"	1 3/4"
EB-3/CBS375	8	A325	1/2"	1 3/4"
EB-4/CBS375	4	A325	1/2"	1 3/4"

SPECIAL BOLTS ROOF PLAN					
ID	QUAN	TYPE	DIA	LENGTH	WASH
1	2	A325	1/2"	1 1/4"	2

MEMBER TABLE ROOF PLAN		
MARK	PART	LENGTH
OC12	OC1214	8'-9 1/16"
EB-2	W12X14	6'-10 11/16"
EB-3	W12X14	6'-10 11/16"
EB-4	W12X14	6'-10 11/16"
P-1	12X35Z13	21'-5 1/2"
P-2	12X35Z13	31'-5 1/2"
P-3	12X35Z14	19'-0"
P-4	12X35Z13	29'-0"
E-1	12ES1H14	19'-0"
E-2	12ES1H14	29'-0"
E-3	12ES1L14	29'-11 1/2"
E-4	12ES1L14	19'-11 1/2"
E-5	12X35C14	19'-11 1/2"
E-6	12X35C14	29'-11 1/2"
CB-7	1/2" DIA. ROD	29'-3"
CB-8	1/2" DIA. ROD	29'-6"
CB-9	1/2" DIA. ROD	28'-10"
CB-10	1/2" DIA. ROD	28'-8"
KBA-1	L1X1X14G	1'-0 5/16"
KBA-2	L1X1X14G	4'-6"
KBA-3	L1X1X14G	4'-9"
KBA-4	L1X1X14G	3'-7"
KBA-5	L1X1X14G	1'-10 1/8"
KBA-6	L1X1X14G	2'-8 1/4"



KBA-1
KBA-2
KBA-3
KBA-3
KBA-3
KBA-3
KBA-3
KBA-3
KBA-4
KBA-5
KBA-4
KBA-4
KBA-6
KBA-6

DOWNSPOUT SPACING LOCATIONS

DOWNSPOUTS ARE TO BE PLACED AT A SPACING NOT TO EXCEED ?? FT. WITH A DOWNSPOUT WITHIN ?? FT. OF EACH END OF THE GUTTER RUN.

GENERAL NOTES:

1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ROOF FRAMING PLAN

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions

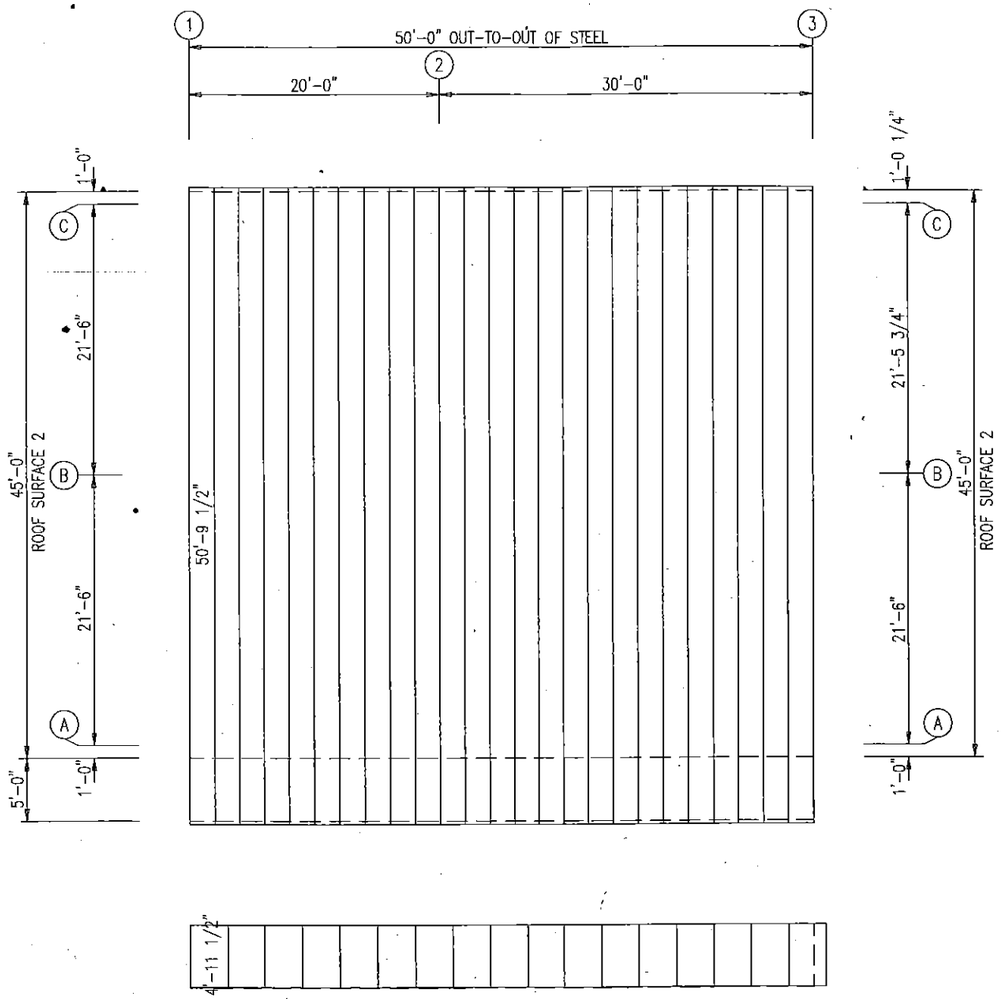
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	E1	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE



[A]

ROOF SHEETING PLAN

PANELS: 24 Ga. DOUBLE-LOK – Galvalume
[A] SOFFIT PANELS: 26 Ga. PU – TBD

GENERAL NOTES:

1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PSR" PANEL ROOF DETAIL.
4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

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MBMA

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LOCATION: Pamplico, SC 29583,

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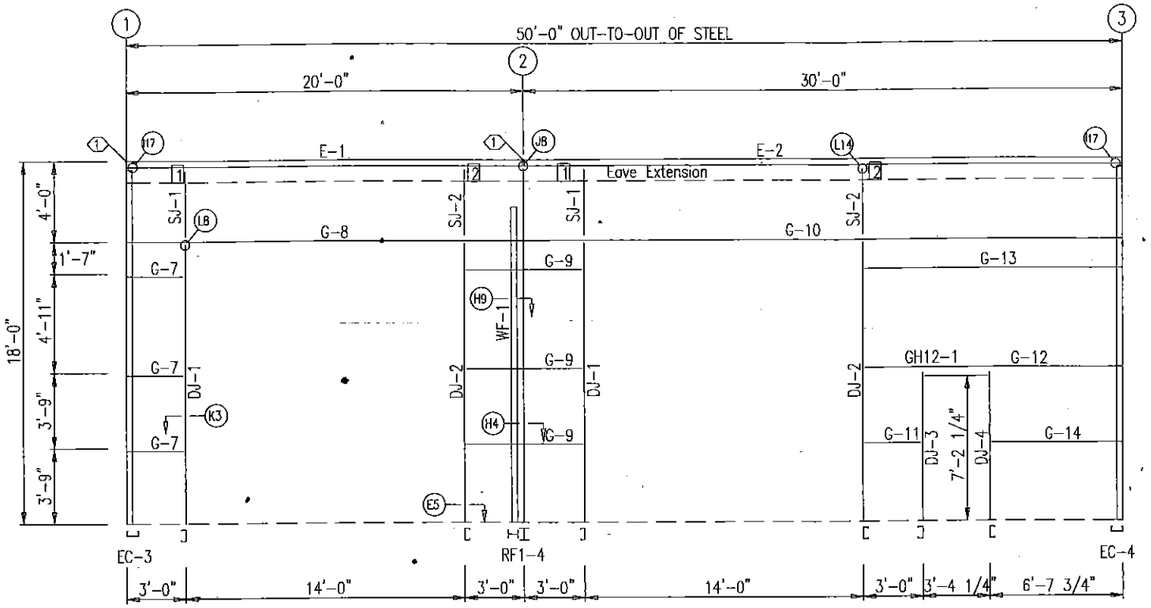
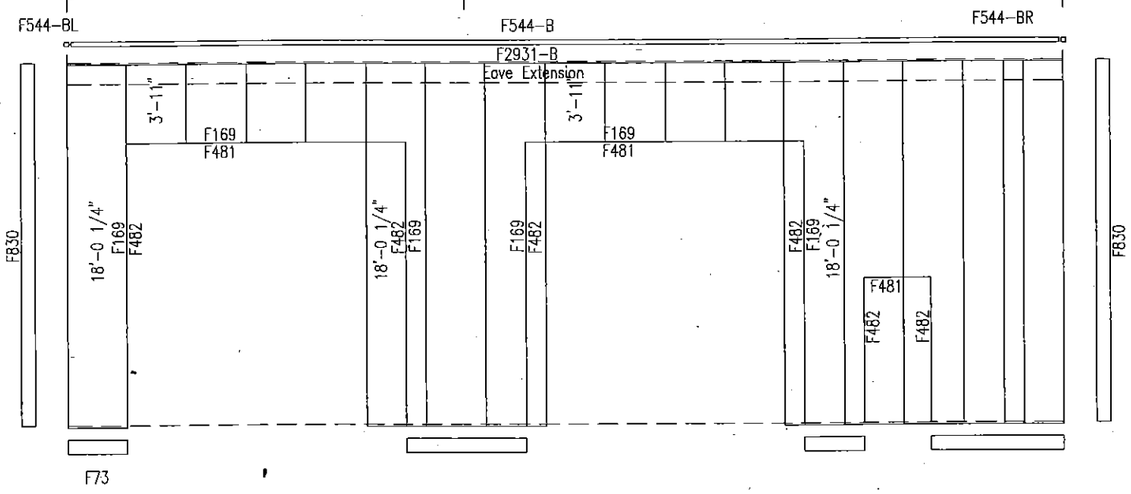
	11/23/15	N.T.S.	1	A	15-B-17264	E2	A

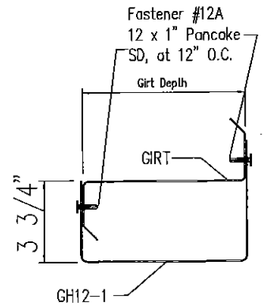


SIDEWALL FRAMING: FRAME LINE A



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. PR – TBD



BOLT TABLE
FRAME LINE A

LOCATION	QUAN	TYPE	DIA	LENGTH
WF-1 – RF1-4	10	A325	5/8"	1 1/2"

SPECIAL BOLTS

ID	QUAN	TYPE	DIA	LENGTH	WASH
1	2	A325	1/2"	1 1/4"	2

MEMBER TABLE
FRAME LINE A

MARK	PART	LENGTH
WF-1	W18X50	16'-0"
DJ-1	12F35C12	14'-0"
DJ-2	12F35C12	14'-0"
DJ-3	12F35C14	7'-6"
DJ-4	12F35C14	7'-6"
SJ-1	12F35C14	2'-10 1/2"
SJ-2	12F35C14	2'-10 1/2"
GH12-1	GH12	3'-4 1/4"
E-1	12ES1H14	19'-0"
E-2	12ES1H14	29'-0"
G-7	12X25Z14	2'-8"
G-8	12X35C12	19'-11 1/2"
G-9	12X25Z14	5'-4 1/2"
G-10	12X35C13	29'-11 1/2"
G-11	12X25Z14	2'-4 1/2"
G-12	12X25Z14	12'-8"
G-13	12X25Z14	12'-8"
G-14	12X25Z14	6'-3 3/4"

CONNECTION PLATES
FRAME LINE A

ID	MARK/PART
1	SC577_L
2	SC577_R

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

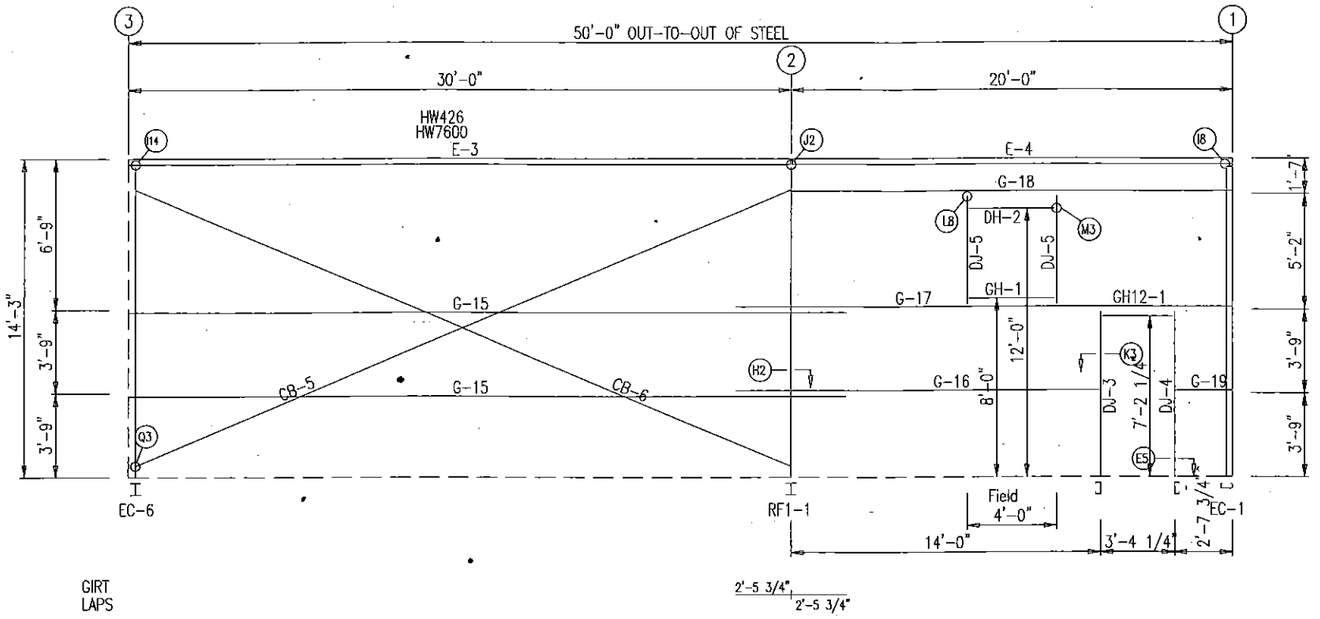
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

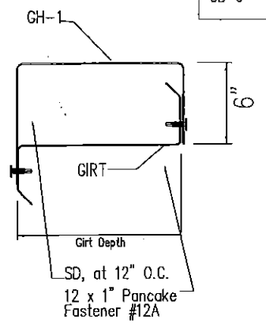
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	E3	A

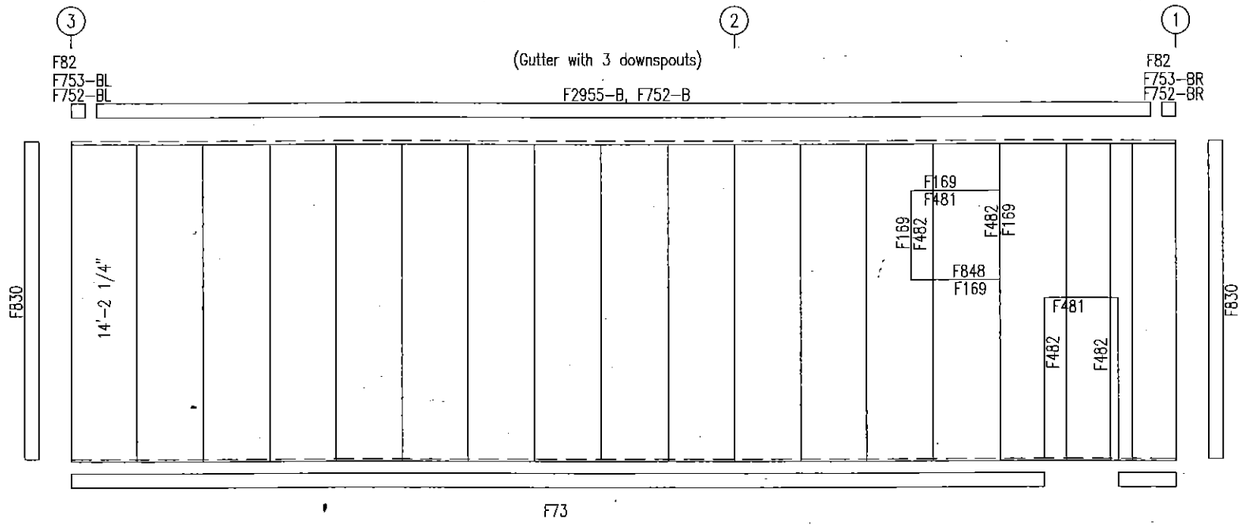
SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

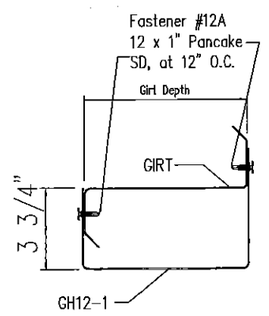
MEMBER TABLE FRAME LINE C		
MARK	PART	LENGTH
DJ-3	12F35C14	7'-6"
DJ-4	12F35C14	7'-6"
DJ-5	12F35C14	5'-2"
GH12-1	GH12	3'-4 1/4"
DH-2	12F35C14	4'-0"
GH-1	GH-1	4'-0"
E-3	12ES1L14	29'-11 1/2"
E-4	12ES1L14	19'-11 1/2"
G-15	12X35Z13	32'-5 1/2"
G-16	12X35Z14	16'-2"
G-17	12X35Z14	22'-5 1/2"
G-18	12X35Z13	20'-3 1/2"
G-19	12X25Z14	2'-3 3/4"
CB-5	1/2" DIA. ROD	32'-8"
CB-6	1/2" DIA. ROD	32'-10"



SIDEWALL FRAMING: FRAME LINE C







SIDEWALL SHEETING & TRIM: FRAME LINE C

PANELS: 26 Ga. PR – TBD

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
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4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

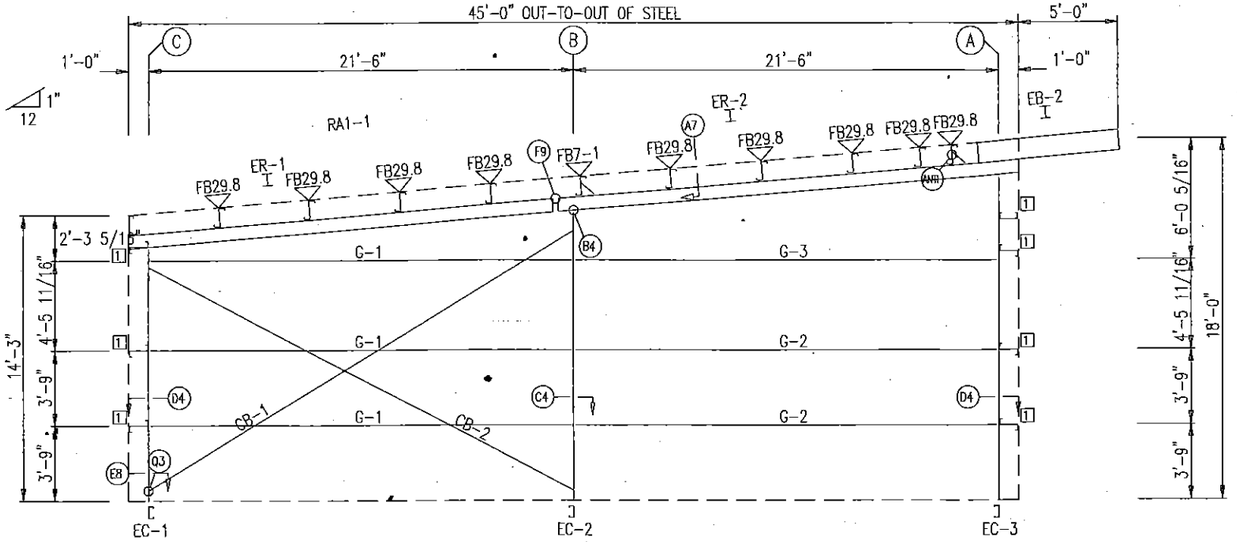
PROJECT: Fleming Town Fire

CUSTOMER: ACE CONSTRUCTION CO., INC OWNER: FLORENCE COUNTY

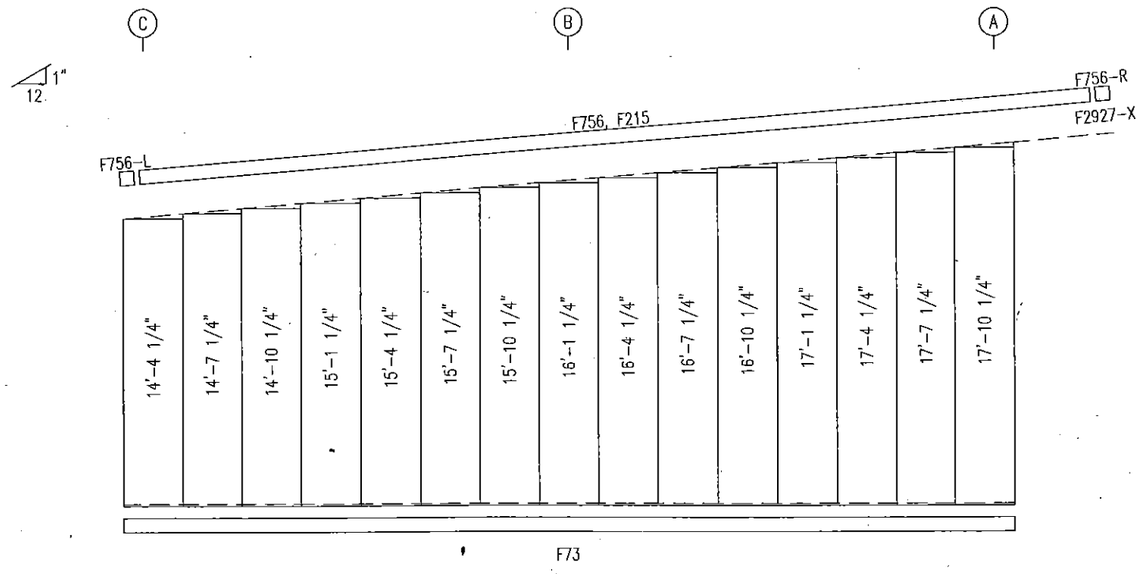
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	E4	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREIDE

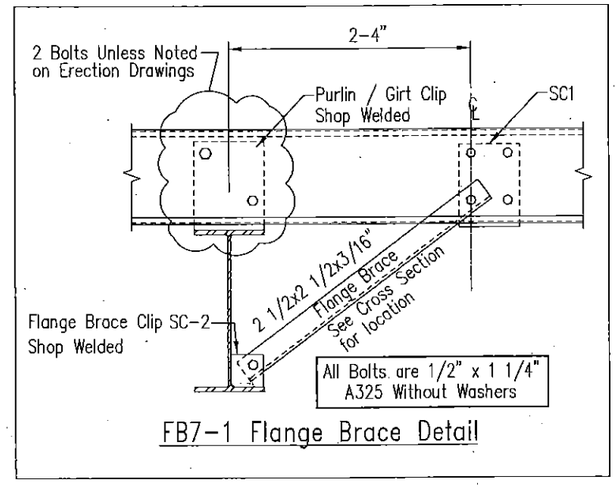


ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. PR – TBD



FB7-1 Flange Brace Detail

BEARING FRAME ONLY!

WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

BOLT TABLE
FRAME LINE 1

LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	5/8"	1 3/4"
Columns/Rof	4	A325	1/2"	1 1/4"

MEMBER TABLE
FRAME LINE 1

MARK	PART	LENGTH
EB-2	W12X14	6'-10 11/16"
EC-1	12F35C12	12'-6 13/16"
EC-2	12F35C12	14'-4 5/16"
EC-3	12F25C14	16'-1 13/16"
ER-1	W8X10	21'-8 3/8"
ER-2	W8X10	23'-5 11/16"
G-1	12X35Z13	20'-10"
G-2	12X35Z13	21'-1 3/4"
G-3	12X35Z12	21'-1 3/4"
CB-1	1/2" DIA. ROD	25'-8"
CB-2	1/2" DIA. ROD	24'-10"

FLANGE BRACE TABLE
FRAME LINE 1

▽ID	MARK	LENGTH
1	FB29.8	2'-5 3/4"
2	FB7-1	2'-5 3/4"

CONNECTION PLATES
FRAME LINE 1

□ ID	MARK/PART
1	SC-55

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	E5	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
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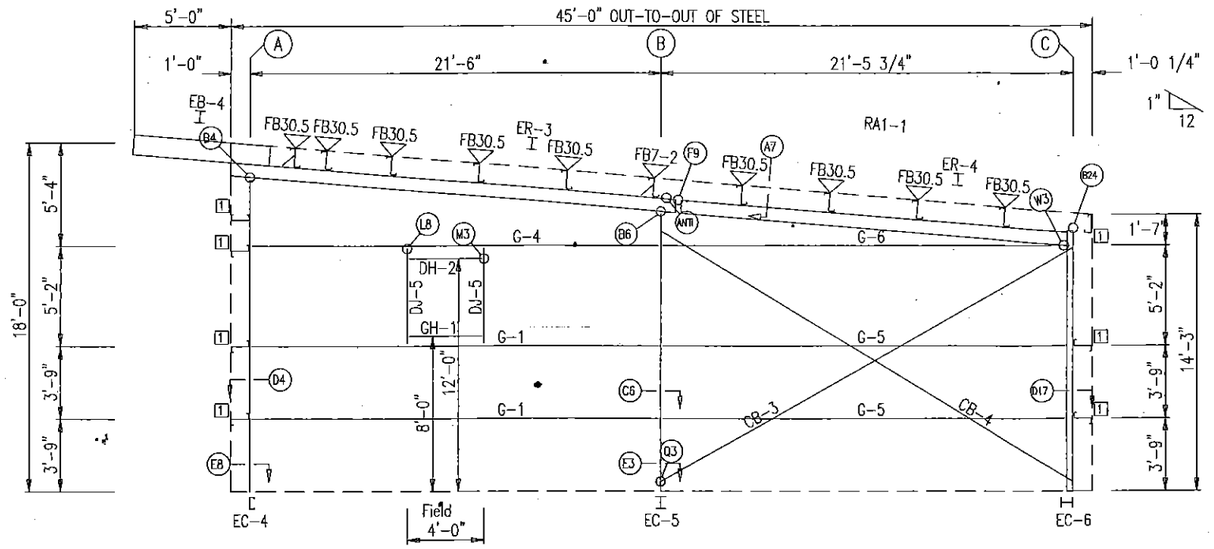
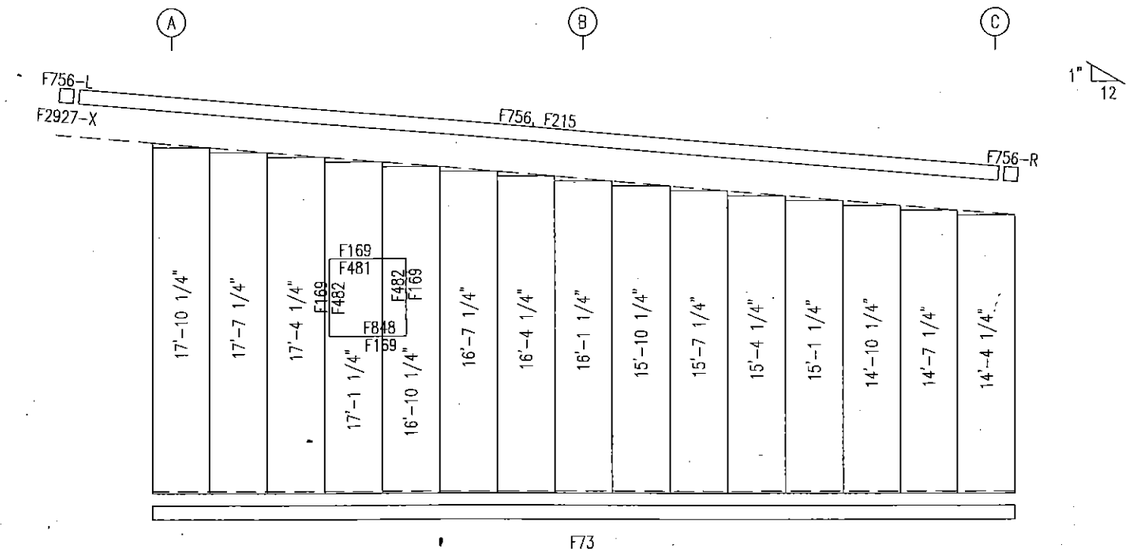


ENDWALL FRAMING: FRAME LINE 3



ENDWALL SHEETING & TRIM: FRAME LINE 3

PANELS: 26 Ga. PR – TBD

BEARING FRAME ONLY!

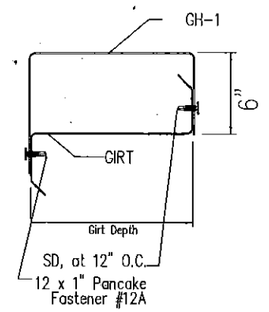
WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE. WASHER NOT NEEDED ON CLIP SIDE.

BOLT TABLE
FRAME LINE 3

LOCATION	QUAN	TYPE	DIA	LENGTH
EC-6/ER-4	4	A325	5/8"	1 1/4"
ER-3/ER-4	8	A325	5/8"	1 3/4"
EC-4/ER-3	4	A325	1/2"	1 1/4"
EC-5/ER-3	4	A325	1/2"	1 1/4"

MEMBER TABLE
FRAME LINE 3

MARK	PART	LENGTH
EB-4	W12X14	6'-10 11/16"
EC-4	12F25C14	15'-11 13/16"
EC-5	W12X14	14'-2 5/16"
EC-6	W12X14	13'-4 3/4"
ER-3	W10X12	23'-5 11/16"
ER-4	W10X12	19'-8 9/16"
DJ-5	12F35C14	5'-2"
DH-2	12F35C14	4'-0"
GH-1	GH-1	4'-0"
G-1	12X35Z13	20'-10"
G-4	12X35Z12	20'-10"
G-5	12X35Z13	20'-1 9/16"
G-6	12X35Z13	18'-11 5/8"
CB-3	1/2" DIA. ROD	23'-11"
CB-4	1/2" DIA. ROD	24'-9"

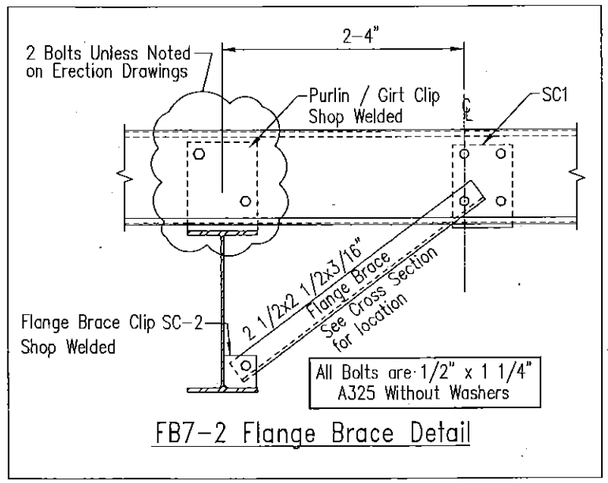


FLANGE BRACE TABLE
FRAME LINE 3

▽ID	MARK	LENGTH
1	FB30.5	2'-6 1/2"
2	FB7-2	2'-6 1/2"

CONNECTION PLATES
FRAME LINE 3

□ ID	MARK/PART
1	SC-55



FB7-2 Flange Brace Detail

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

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MBMA

PROJECT: Fleming Town Fire
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LOCATION: Pamplico, SC 29583,

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SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
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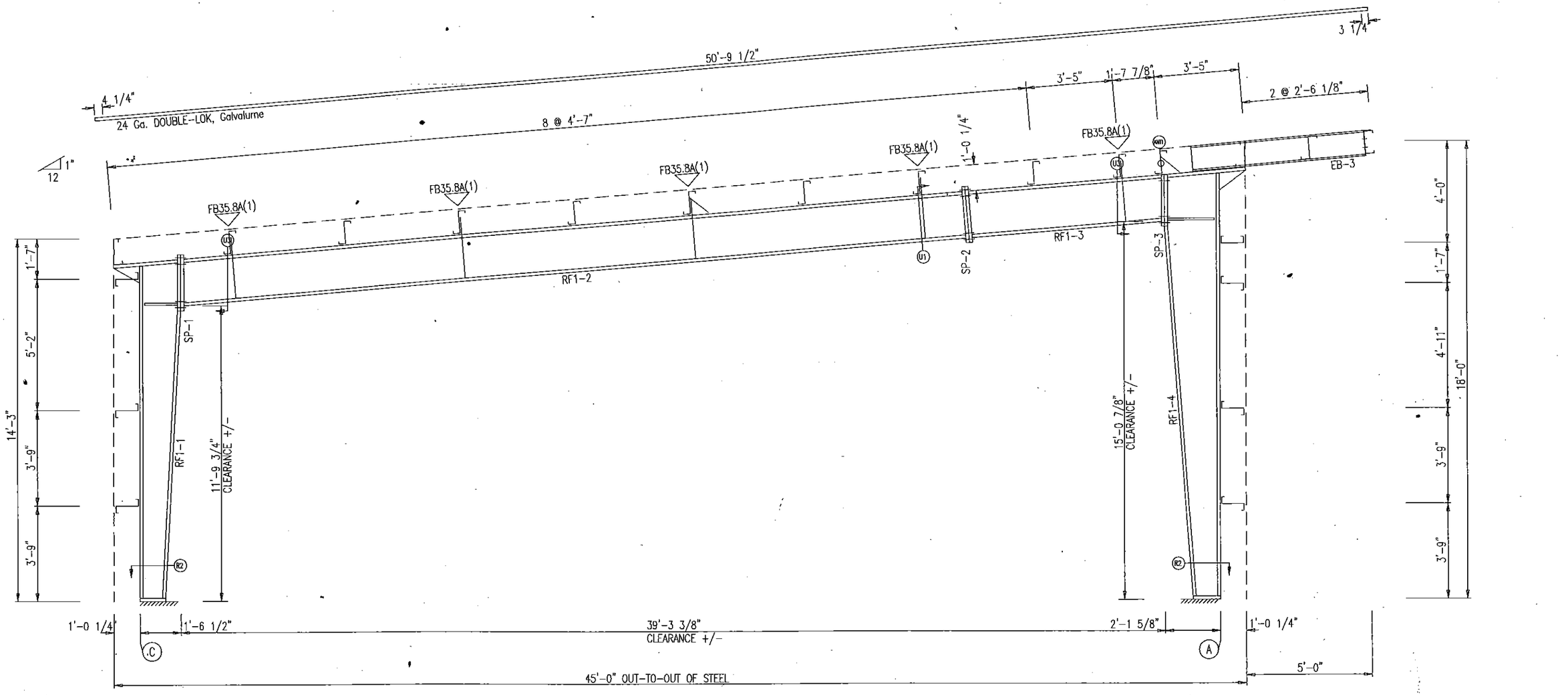
SPLICE BOLT TABLE						
Mark	Qty Top	Bot	Int	Type	Dia	Length
SP-1	4	4	0	A325	3/4"	2"
SP-2	4	4	0	A325	3/4"	1 3/4"
SP-3	2	4	0	A325	7/8"	2 1/2"

FLANGE BRACES: BOTH SIDES(UNLESS NOTED)
FBxxA(1): xx=length(in)
A - L2X2X14G

MEMBER TABLE				
Mark	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	9.0/18.0	0.134	137.8	6 x 1/4" x 159.1	6 x 1/4" x 138.1
	18.0/18.0	0.185	22.8	6 x 1/4" x 30.6	
RF1-2	19.0/19.0	0.156	107.9	5 x 1/4" x 240.0	5 x 1/4" x 240.0
	19.0/19.0	0.134	240.0	5 x 1/4" x 135.7	5 x 1/4" x 137.3
	19.0/19.0	0.134	29.5		
RF1-3	19.0/19.0	0.185	94.7	6 x 3/8" x 94.7	6 x 1/4" x 93.1
RF1-4	25.0/25.0	0.250	25.2	8 x 3/8" x 37.7	8 x 1/4" x 177.1
	25.0/10.0	0.185	176.4	8 x 3/8" x 201.7	



RIGID FRAME ELEVATION: FRAME LINE 2

GENERAL NOTES:

1. ALL BOLTED JOINTS WITH A325M-09 TYPE 1 BOLTS GREATER THAN 1/2" DIAMETER ARE SPECIFIED AS PRETENSIONED JOINTS IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004". PRETENSIONING CAN BE ACCOMPLISHED BY USING THE TURN-OF-NUT METHOD OF TIGHTENING, CALIBRATED WRENCH, TWIST OFF TYPE TENSION CONTROL BOLTS OR DIRECT TENSION INDICATOR AS ACCEPTABLE TO THE INSPECTING AGENCY AND BUILDING OFFICIAL. INSTALLATION INSPECTION REQUIREMENTS FOR PRE-TENSIONED JOINTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.2) USING TURN-OF-NUT METHOD IS SUGGESTED. THE CONNECTIONS ON THIS PROJECT ARE NOT SLIP CLITICAL.
2. ALL FIELD CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 BOLTS.
3. INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

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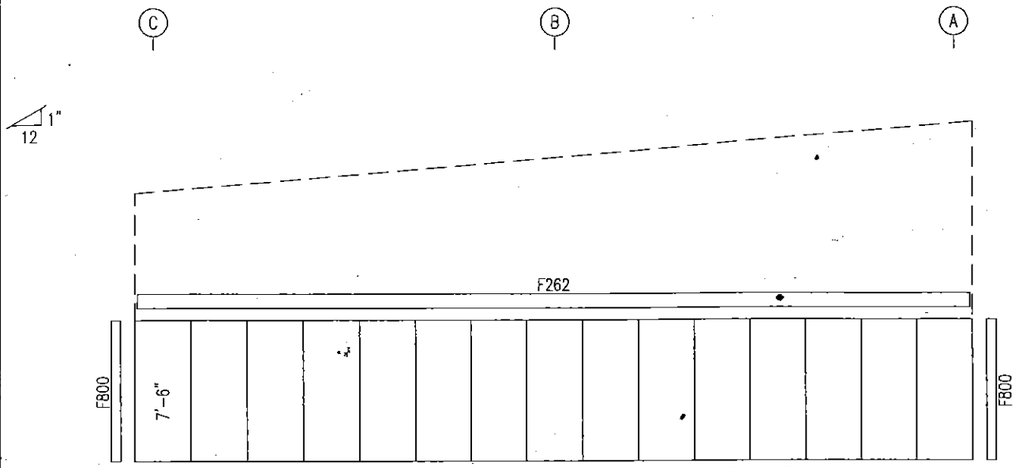
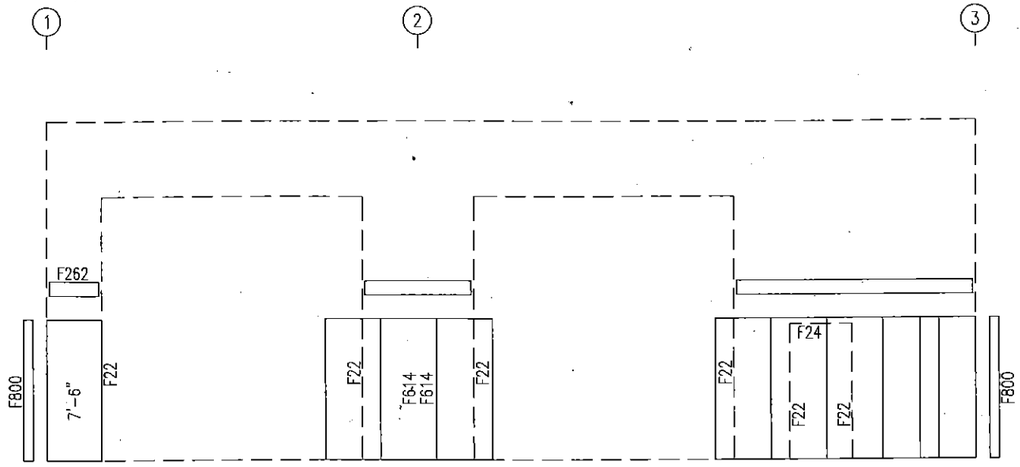


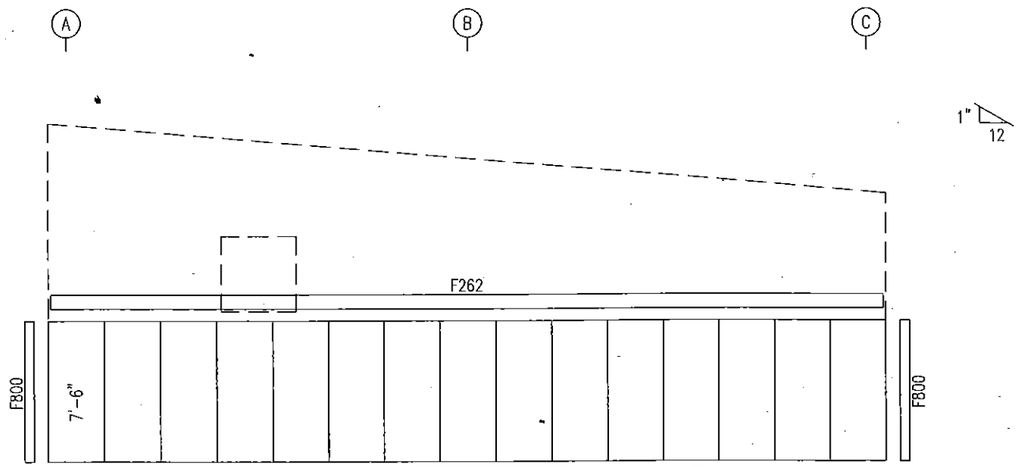
ENDWALL LINER SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. PR – Polar White



SIDEWALL LINER SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. PR – Polar White



ENDWALL LINER SHEETING & TRIM: FRAME LINE 3

PANELS: 26 Ga. PR – Polar White

SIDEWALL LINER SHEETING & TRIM: FRAME LINE C

PANELS: 26 Ga. PR – Polar White

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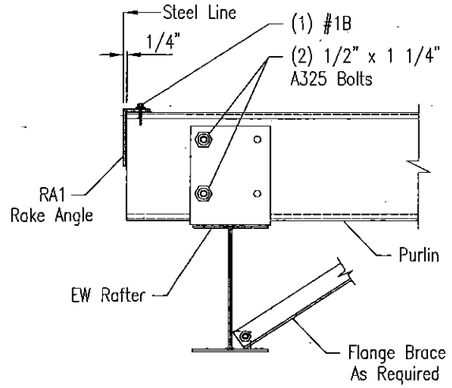
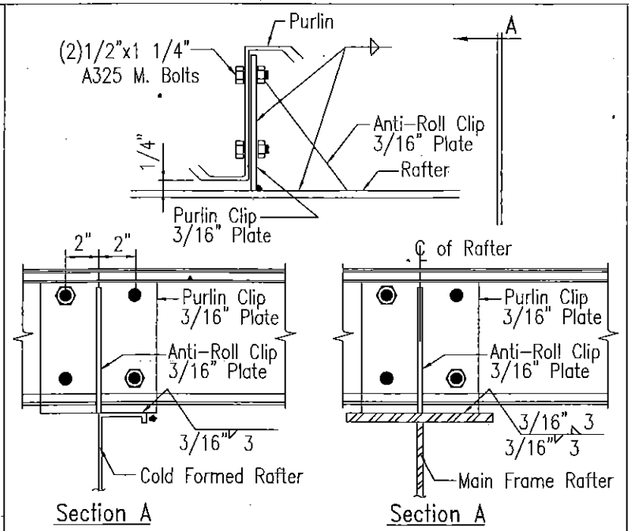
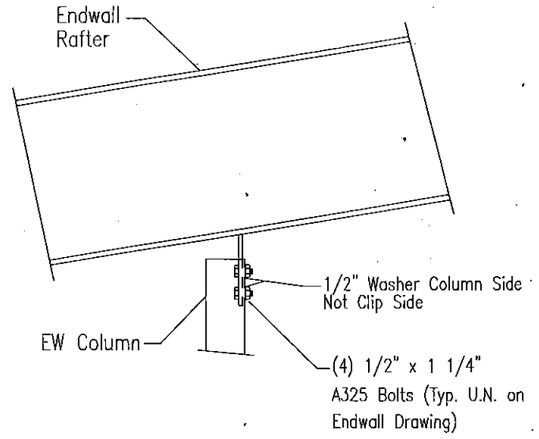


1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

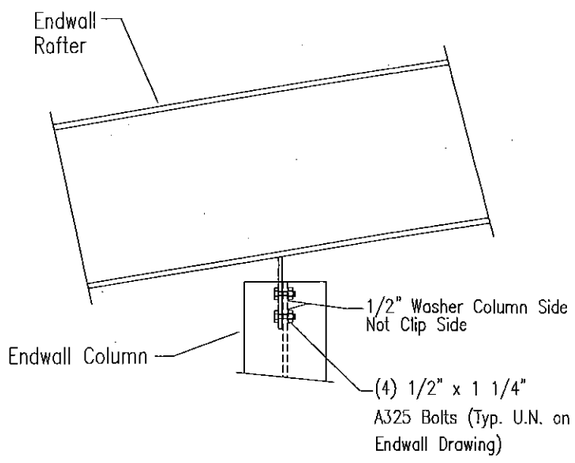
A7 SECTION THRU HOT ROLLED RAFTER



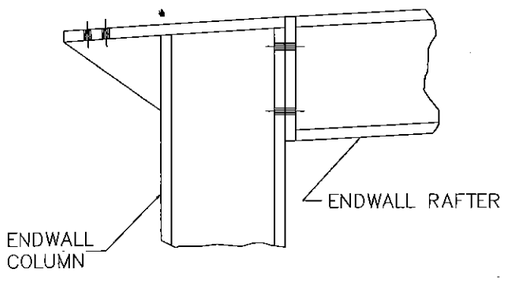
ANTI PURLIN ANTI-ROLL CLIP



B4 ENDWALL COLUMN TO RAFTER

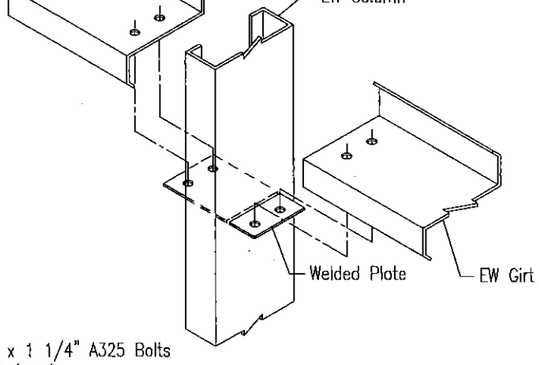


B6 HOT ROLLED ENDWALL COLUMN TO RAFTER



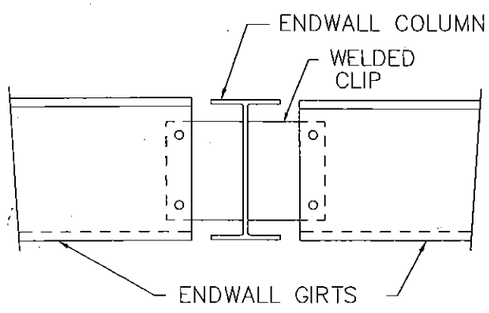
SEE ERECTION DRAWINGS FOR BOLT SIZE.

B24 CORNER COLUMN TO ENDWALL RAFTER



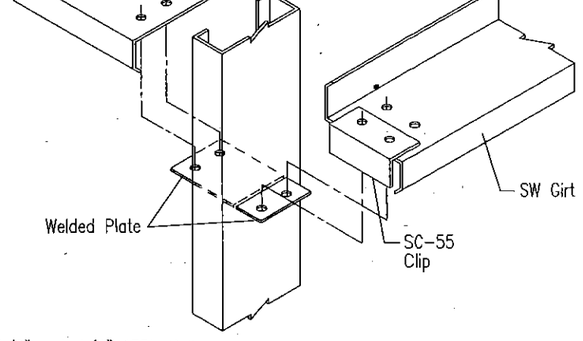
1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

C4 CEE ENDWALL COLUMN TO WALL GIRT



1/2"ø x 1 1/4" A325 BOLTS

C6 ENDWALL COLUMN TO WALL GIRT



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

D4 CORNER COLUMN TO WALL GIRT

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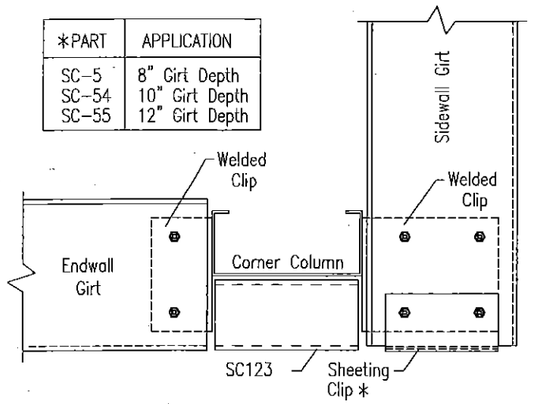
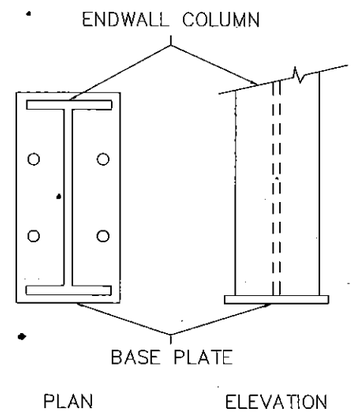
*PART	APPLICATION
SC-5	8" Girt Depth
SC-54	10" Girt Depth
SC-55	12" Girt Depth

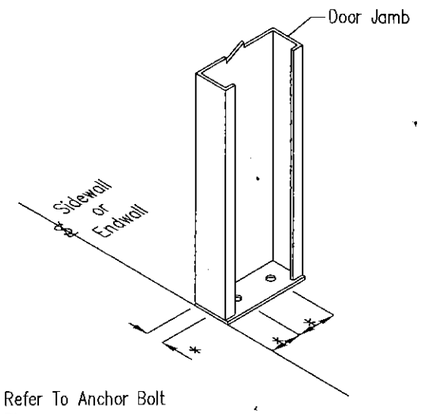


1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

D17 ROTATED CORNER COLUMN TO WALL GIRTS

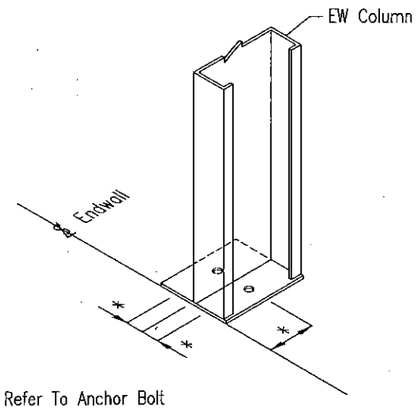


E3 BASE PLATE FOR ENDWALL COLUMN



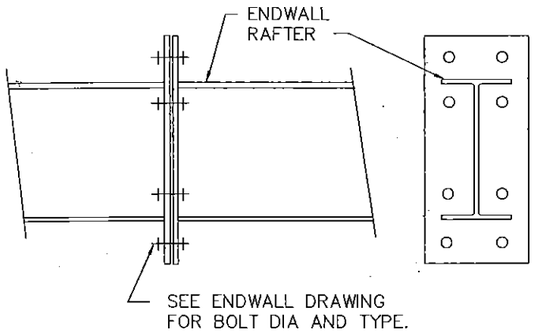
(*) = Refer To Anchor Bolt Plan

E5 BASE PLATE FOR DOOR JAMB

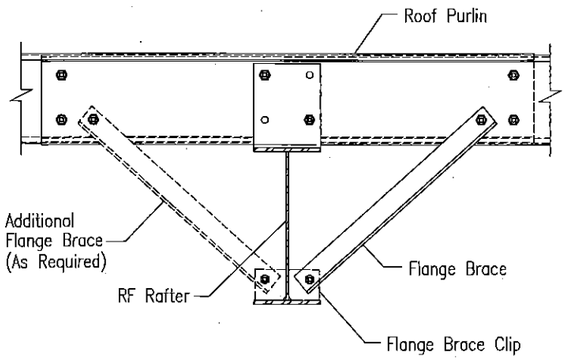


(*) = Refer To Anchor Bolt Plan

E8 BASE PLATE FOR ENDWALL COLUMN

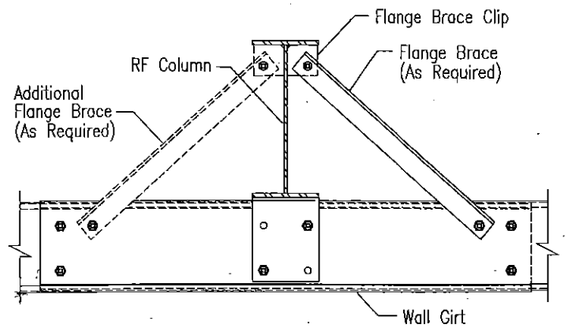


F9 RAFTER SPLICE ALONG SURFACE



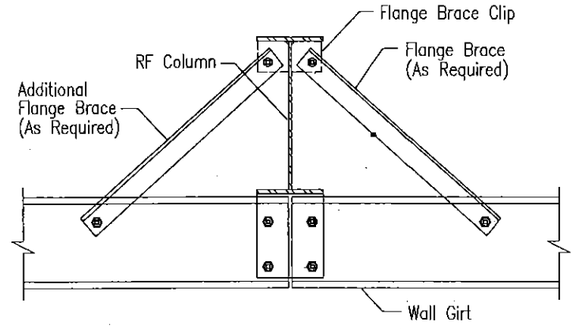
1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

G2 ROOF PURLIN TO INTERIOR FRAME RAFTER



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

H2 WALL GIRT TO RIGID FRAME COLUMN



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

H4 WALL GIRT TO RIGID FRAME COLUMN

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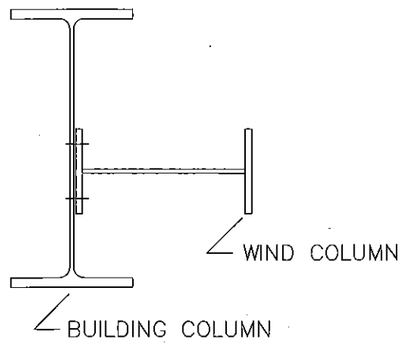
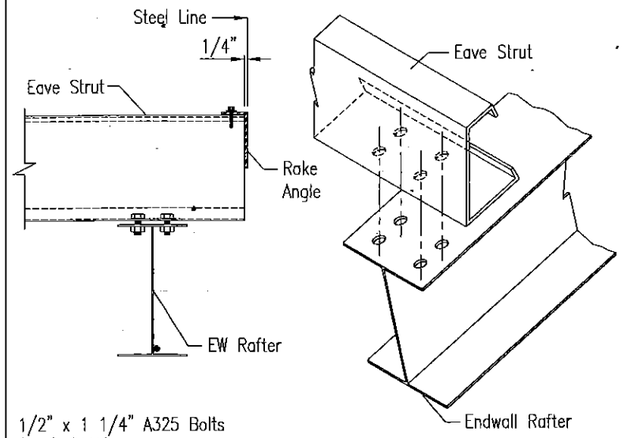


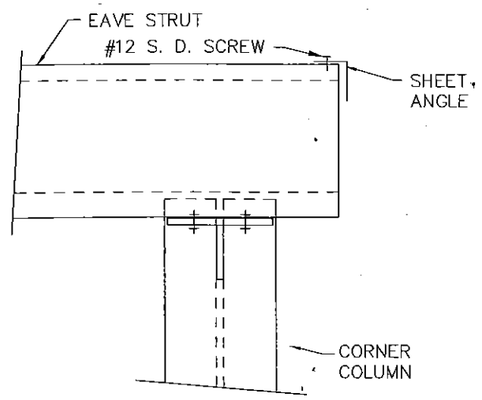
5/8" x 1 1/2" A325 Bolts
(Typ.) (U.N.)

H9 WIND COLUMN TO BUILDING COLUMN

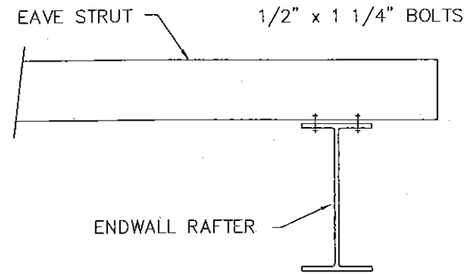


1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

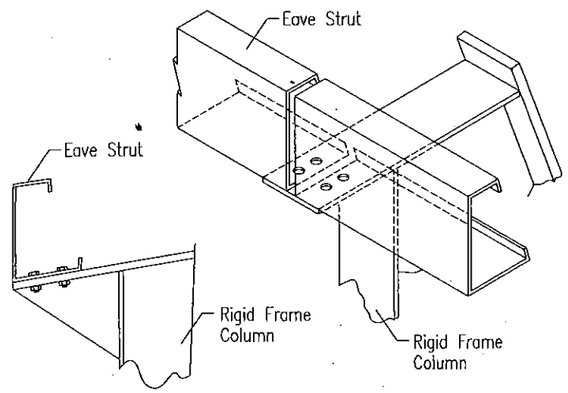
I8 LOW SIDE EAVE STRUT TO HOT ROLLED RAFTER



I14 EAVE STRUT TO CORNER COLUMN



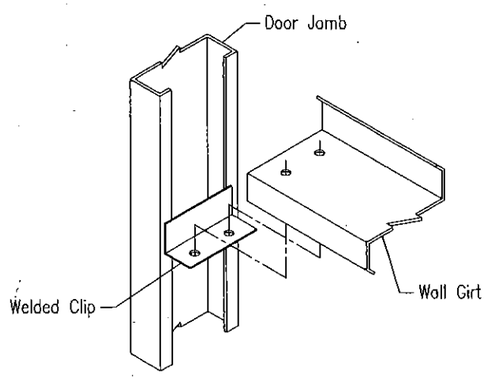
I17 EAVE STRUT TO ENDWALL RAFTER



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

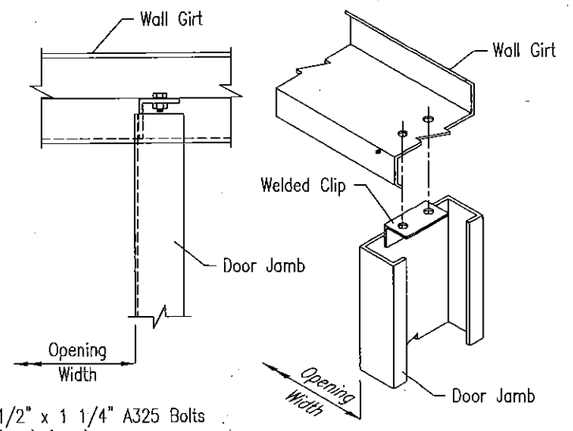
J2 EAVE STRUT TO RIGID FRAME

J8 EAVE STRUT TO RIGID FRAME



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

K3 WALL GIRT TO DOOR JAMB



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

L8 DOOR JAMB TO WALL GIRT

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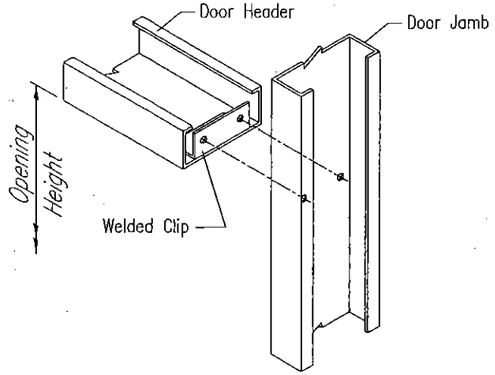
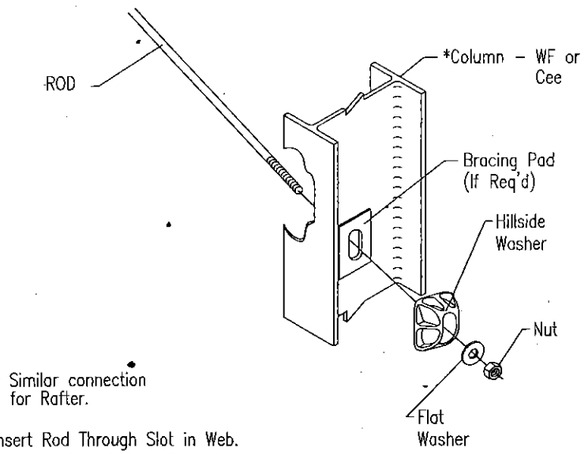


1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

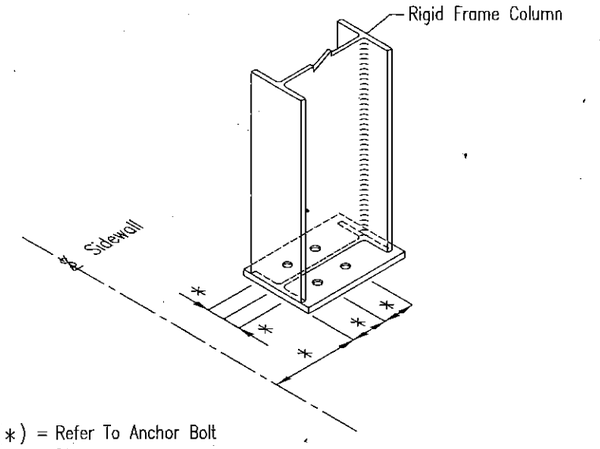
M3 DOOR HEADER TO DOOR JAMB



* Similar connection for Rafter.

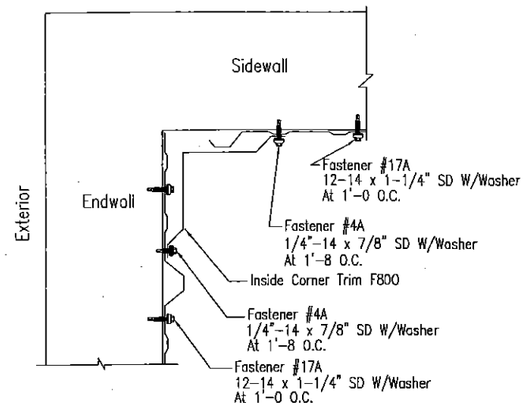
Insert Rod Through Slot in Web.
Then Assemble Hillside Washer, Flat Washer, and Nut.

Q3 DIAGONAL ROD



(*) = Refer To Anchor Bolt Plan

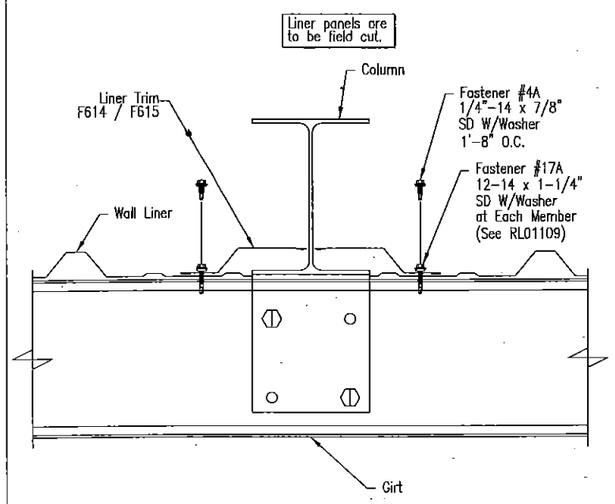
R2 ANCHOR BOLTS AT SIDEWALL COLUMNS



This drawing refers to liner conditions only. Refer to additional details for exterior sheeting and trim conditions.

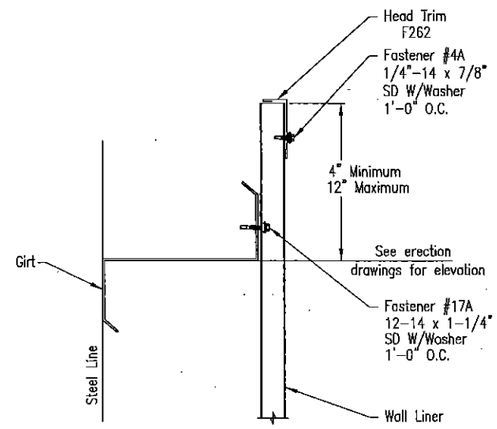
Inside Corner Liner Detail – PBR Liner
Flush Endwall – Flush Sidewall

TRIM_20



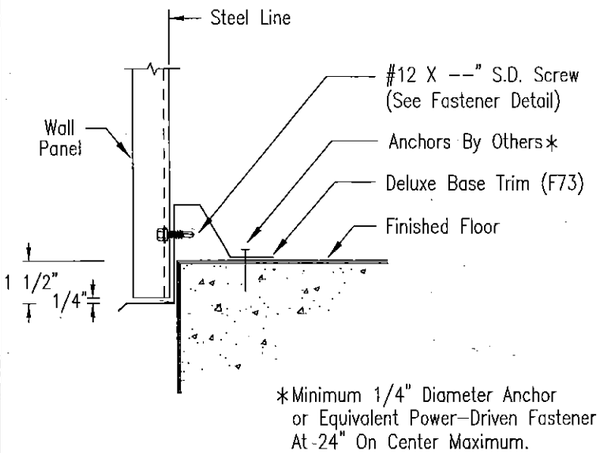
By–Pass Interior Column – PBR Liner
Standard and Standard Large Rake Trim – Sheeted Wall

TRIM_33



Termination at Girt Elevation – PBR Liner

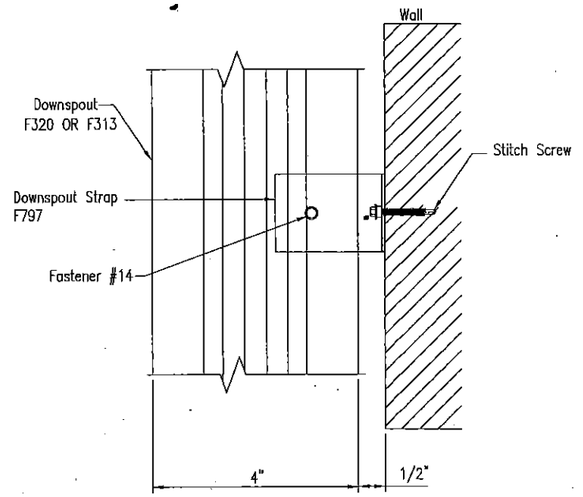
TRIM_37



*Minimum 1/4" Diameter Anchor or Equivalent Power–Driven Fastener At 24" On Center Maximum.

TRIM_39

SECTION THRU WALL PANEL AND CONCRETE FOUNDATION WITH DELUXE BASE TRIM



Downspout Strap Attachment Detail
4" x 5" Roll–Form

TRIM_81

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

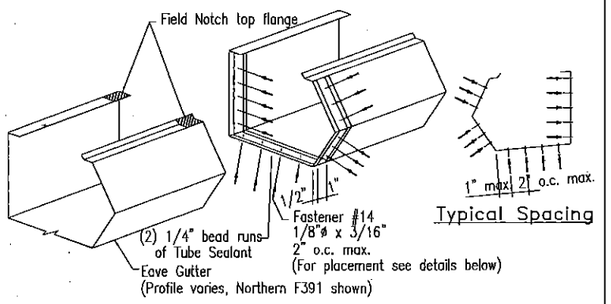
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214–687–9999 Fax 214–687–9737

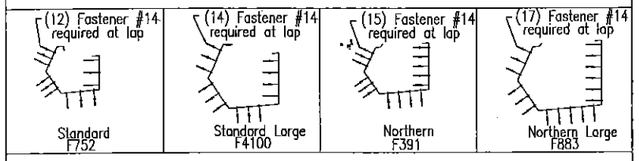
MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15–B–17264	DET4	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

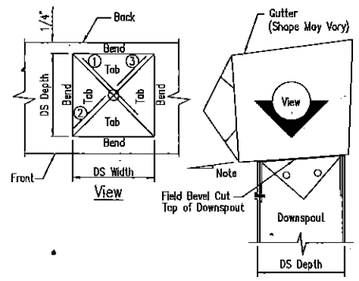




Eave Gutter End Lap Installation – DL/UD Roof

Classic Trim Profile

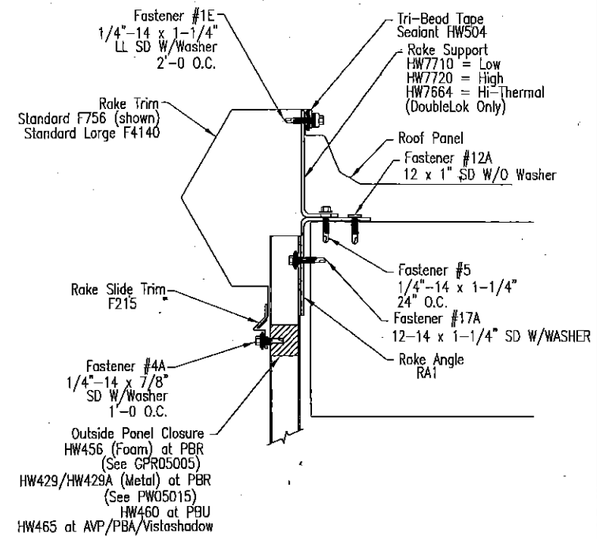
TRIM_91



Downspout To Gutter Attachment Detail

1. Refer to the building erection drawings for the location and spacing of the downspouts.
2. Locate all downspouts over a major panel rib if possable.
3. Make a cardboard template of the downspout shape . Place the template on the bottom of the gutter and trace the outline. Remove the template and draw a line from corner to corner, forming an "X" pattern.
4. Drill a whole at the center of the "X". Using tin snips, cut along the lines of the X only. Do not cut along the outside lines of the downspout square.
5. Bend each triangular tab down toward the ground, 90 Degrees to the bottom of the gutter.
6. Position the top of the downspout under the gutter. Make sure all four gutter tabs are on the inside of the downspout.
7. Install Fastener #14 through the downspout into the gutter tab. Only the two sides and the front of the downspout will receive fasteners.

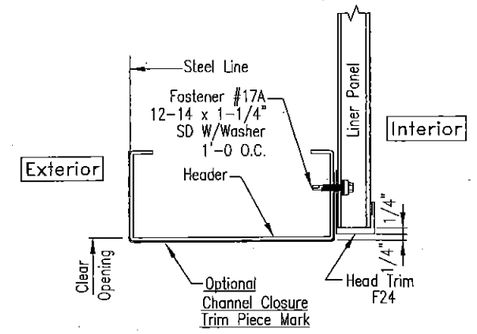
TRIM_98



Rake Detail – UD/DL Roof

Classic Standard and Standard Large Rake Trim – Sheeted Wall

TRIM_112



F981 – 8" Member
F2994 – 8-1/4" Member
F982 – 10" Member
F2993 – 10-1/4" Member
F169 – 12" Member
F2995 – 12-1/4" Member

Installer Note:
The interior leg of the Installed Channel Closure Trim is to be oriented (± 1/8") to match the interior leg of the Header or Jamb.

This drawing refers to liner conditions only. Refer to additional details for exterior sheeting and trim conditions.

Liner at Framed Opening Header

PBR Liner Panel

TRIM_117

F981 – 8" Member
F2994 – 8-1/4" Member
F982 – 10" Member
F2993 – 10-1/4" Member
F169 – 12" Member
F2995 – 12-1/4" Member

Installer Note:
The interior leg of the Installed Channel Closure Trim is to be oriented (± 1/8") to match the interior leg of the Header or Jamb.

This drawing refers to liner conditions only. Refer to additional details for exterior sheeting and trim conditions.

Liner at Framed Opening Jamb

PBR Liner Panel

TRIM_118

Locate the Gutter End Cap 1 1/2" from the end of the Gutter. Apply one bead of Tube Sealant between the End Cap surface and the Gutter. Attach the End Cap to the Gutter using (14) 1/8" Pop Rivets. Check to make sure all edges are sealed with Tube Sealant. Insert the Gutter into the Rake Trim. Align the mitered edges and attach to the Rake Trim with 1/8" Pop Rivets.

Gutter to Rake Miter Detail

TRIM_119

Downspout Kickout

4" x 5" Roll-Form

TRIM_123

Note:
Standard panel location for Start and End panels is ℄ panel rib at steel line. Refer to erection Drawings for panel location and Corner Trim piece mark.

Outside Corner Trim – PBR Wall Panel

TRIM_186

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

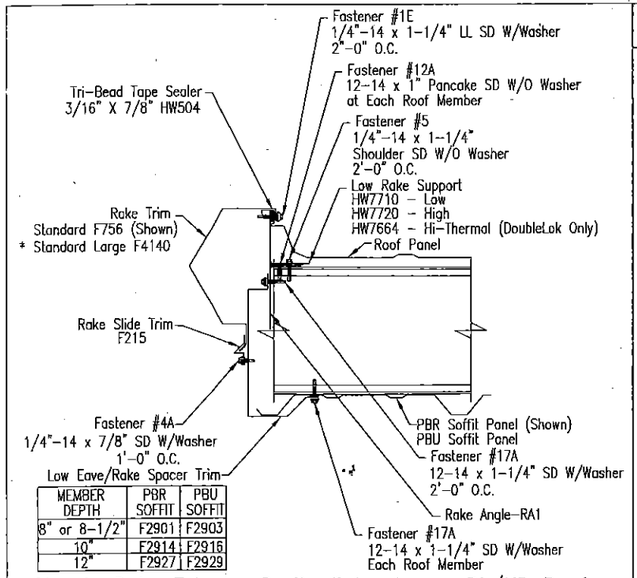
MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET5	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MUSTAPHA I CHREIDE

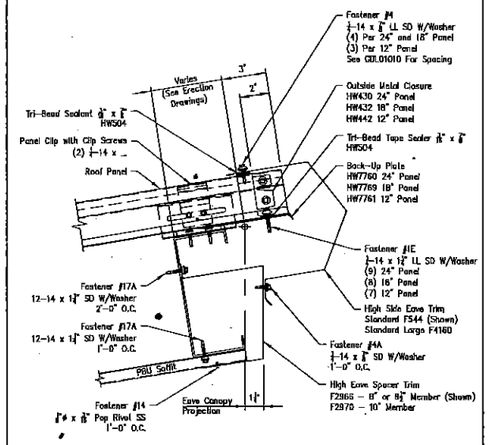


MEMBER DEPTH	PBR SOFFIT	PBU SOFFIT
8" or 8–1/2"	F2901	F2903
10"	F2914	F2916
12"	F2927	F2929

Classic Rake Trim – Purlin Extension – DL/UD Roof
Standard and Standard Large – PBR/PBU Soffit

TRIM_224

DoubleLok / UltraDek - Classic Standard and Standard Large
Eave Trim - High Side Flush Canopy - PBU Soffit

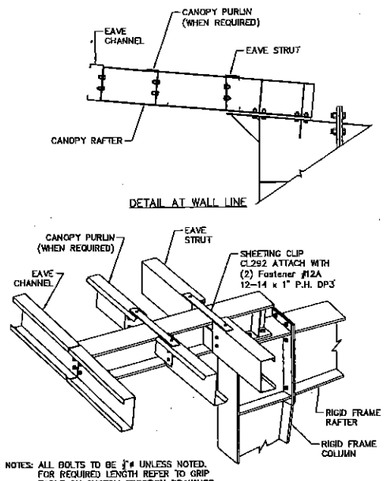


Flush Canopy - High Side Eave - Welded Clip
Interior Column - By-Pass Girt

PF05047

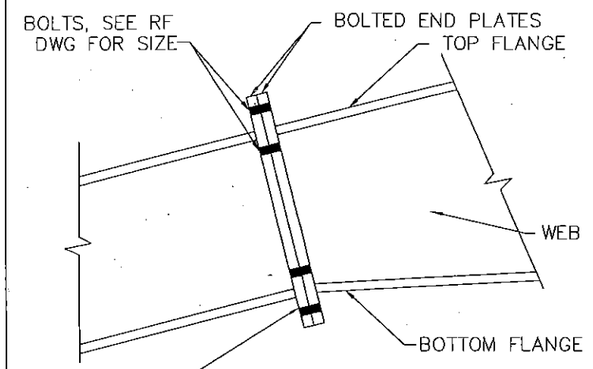
Date Feb '11 Rev 00

COLUMN DEPTH IS GREATER THAN OR EQUAL TO 1'–3"

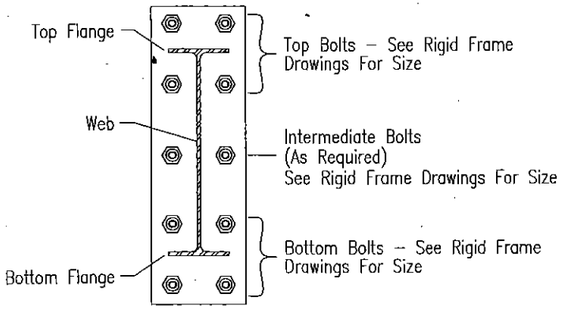


NOTES: ALL BOLTS TO BE 3/4 UNLESS NOTED.
FOR REQUIRED LENGTH REFER TO GRIP
TABLE ON CUSTOM ERECTION DRAWINGS.

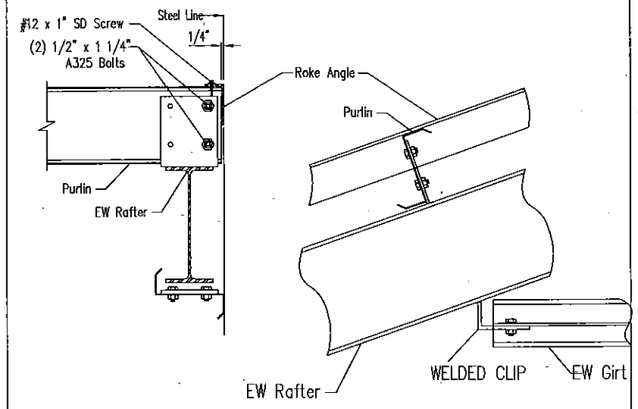
CANOPY RAFTER CONNECTIONS AND STIFFENERS
DEPICTED WILL VARY PER DESIGN REQUIREMENTS.



U1 BOLTED END PLATE RAFTER SPLICE

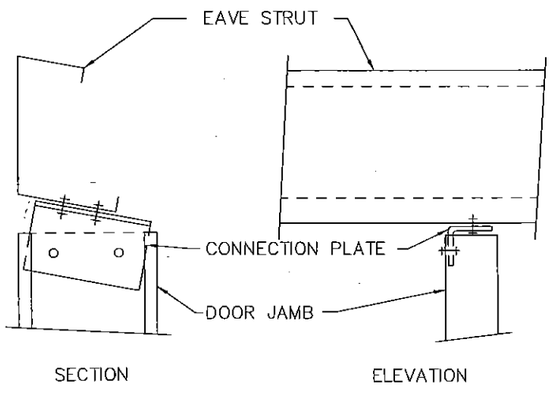


U3 BOLTS FOR RIGID FRAME RAFTER TO COLUMN CONNECTION



1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

W3 ENDWALL GIRT TO RIGID FRAME RAFTER CONNECTION

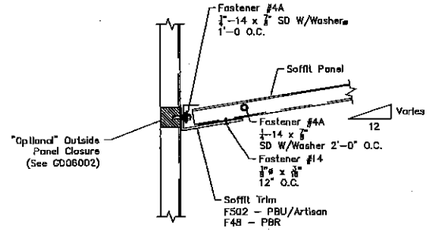


L14 DOOR JAMB TO EAVE STRUT

High Side - PBR, PBU & Artisan Soffit
at Sheeted Wall

Page GD14003

Date Nov '15 Rev 05



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A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions

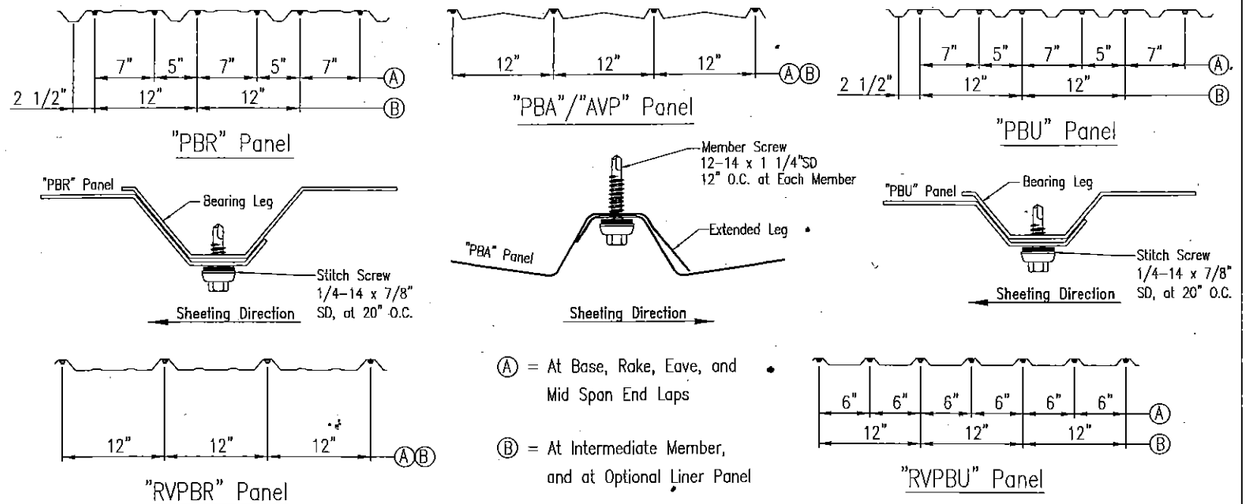
5244 Bear Creek Court Irving, TX 75061
Voice 214–687–9999 Fax 214–687–9737

MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

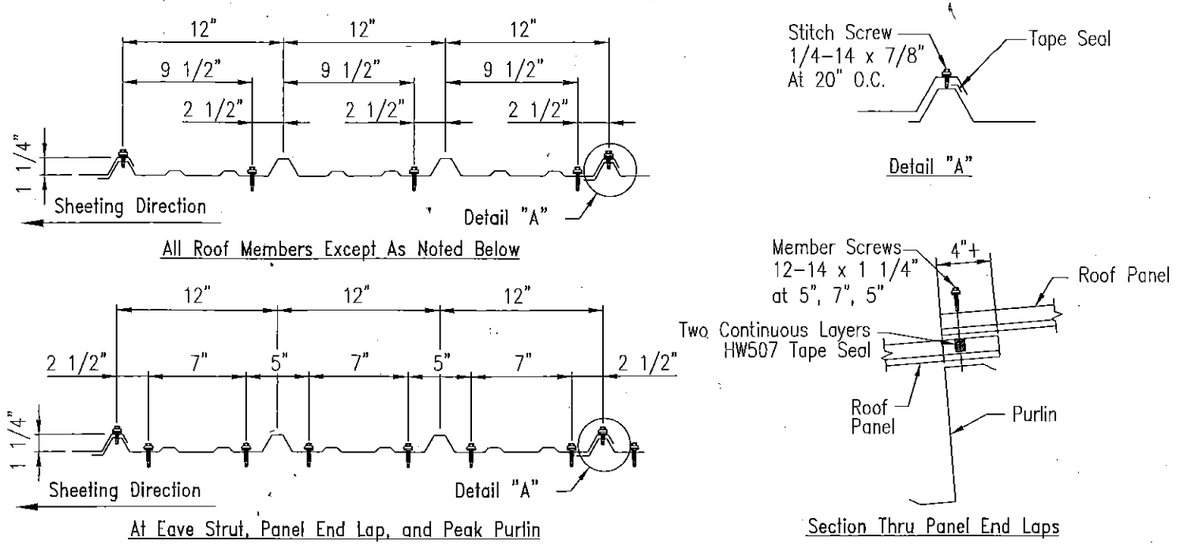
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15–B–17264	DET6	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE



Fastener Location for Panel At Wall

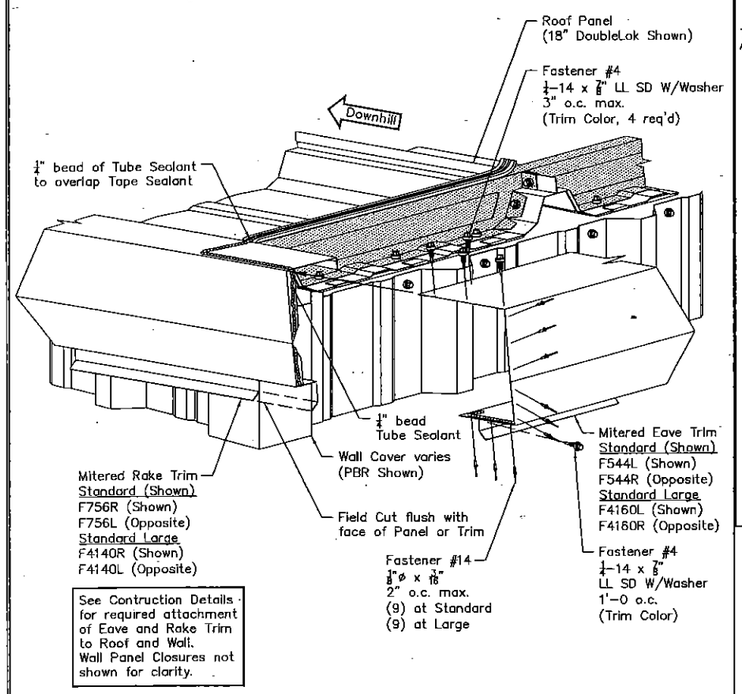
TRIM_174



Fastener Location for "PBR" Roof Panel

TRIM_175

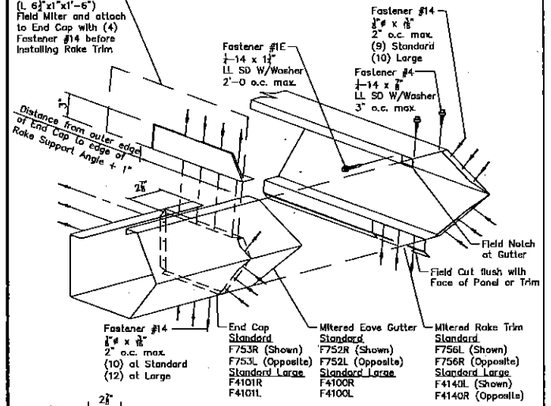
DoubleLok / UltraDek - Standard and Standard Large
High Eave Rake Corner - 1¼" Wall Panel

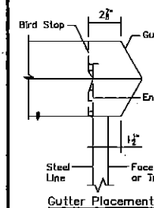


See Contruction Details for required attachment of Eave and Rake Trim to Roof and Wall. Wall Panel Closures not shown for clarity.

DoubleLok / UltraDek - Standard & Standard Large
Low Eave Rake Corner with Eave Gutter - 1¼" Wall Panel

Page WDL05005
Date Mar '14 Rev 04





Gutter Placement

1.) Apply Tube Sealant to End Cap bottom and side tabs. Install Cap 2½" in from end of Gutter. Inspect after installing and seal any gaps with Tube Sealant.

2.) Attach Eave Gutter to Roof Panel locating end 1½" past face of Panel or Trim. (See Gutter Placement)

3.) Field Cut Bird Stop allowing Bird Stop to overlap Rake Support Angle a minimum of 1" and attach to End Cap.

4.) Align edges of Eave Gutter and Rake Trim and attach Rake Trim as shown. Apply Tube Sealant along edges to seal.

5.) See Eave and Rake Construction Details included with Erection Drawings for attachment of Eave Gutter and Rake Trim to Roof and Walls.

Standard Grade

Description	Fastener Number	Application
1/4"-14 x 7/8"	4A	Stitch & Trim Screw
12-14 x 1 1/4"	17A	Member Screw
12-14 x 1 1/2"	17B	Member Screw
12-14 x 2"	28	Member Screw

Long Life

Description	Fastener Number	Application
1/4"-14 x 7/8"	4	Stitch & Trim Screw
12-14 x 1 1/4"	3	Member Screw
12-14 x 1 1/2"	3A	Member Screw
12-14 x 2"	58	Member Screw

Note:
Standard details call for 1 1/4" fasteners as member screws by default.
Member screws may be 1 1/4", 1 1/2", or 2" depending on insulation, application, or customer request.

Self-Drilling Screw Application

SCRW1

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

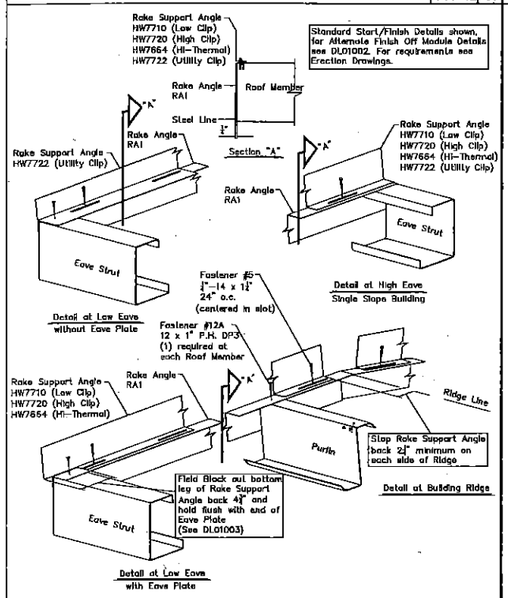
PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET7	A

LICENSED PROFESSIONAL ENGINEER
SOUTH CAROLINA
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

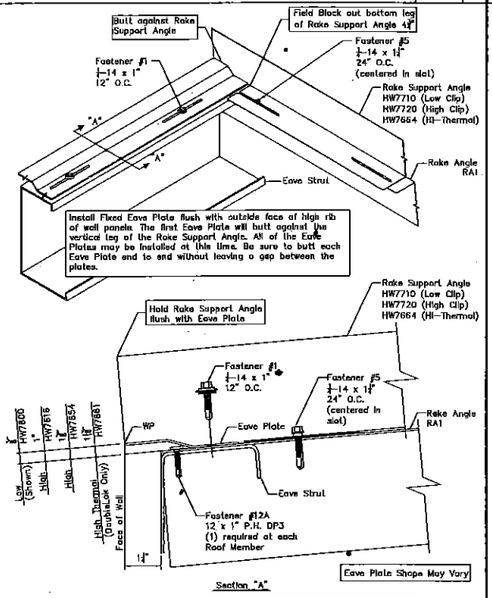
DoubleLok / UltraDek - Fixed Eave
Rake Support at Building Rake - Start / Finish

Page GDL01001 | Date Dec '12 | Rev 00



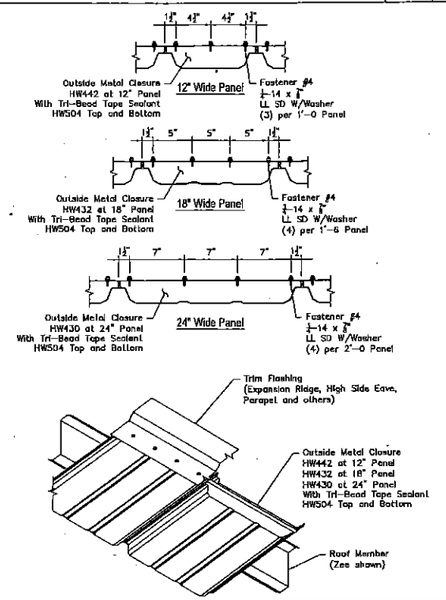
DoubleLok / UltraDek
Fixed Eave Plate

Page GDL01003 | Date Dec '12 | Rev 00



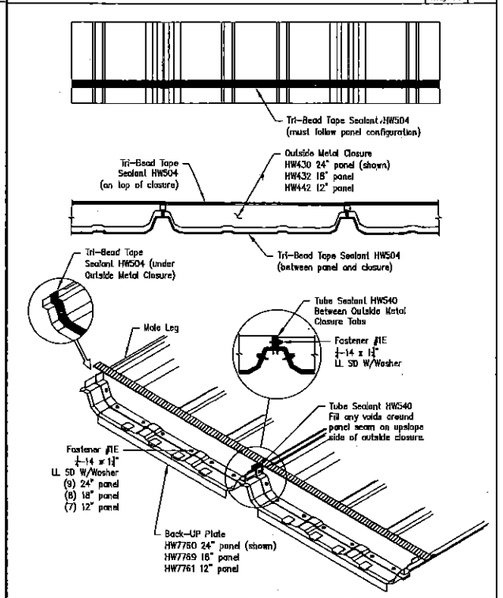
DoubleLok / UltraDek
Fastener Spacing at Trim to Outside Metal Closure

Page GDL01010 | Date Mar '14 | Rev 01



DoubleLok / UltraDek
Outside Closure

Page GDL01011 | Date May '14 | Rev 00



DoubleLok / UltraDek
Sealant at End Lap

Page GDL01012 | Date May '14 | Rev 00

DoubleLok / UltraDek
Tape Sealer at Low Eave

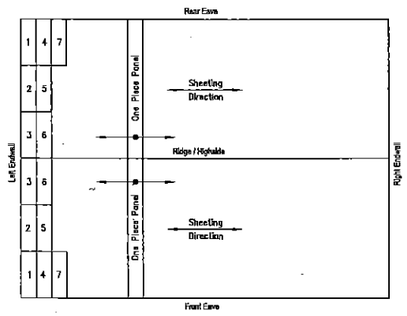
Page GDL02040 | Date Feb '15 | Rev 01

Detail at UD/DL Rake-Low System Only
Standing Seam Fastener #46 @ Backup Plate

Page GDL05023 | Date Mar '14 | Rev 01

UltraDek or DoubleLok
Sheeting Layout

Page GDL05040 | Date Aug '14 | Rev 00



Each side of the roof can be installed separately or both sides simultaneously, from opposite ends or the same end.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

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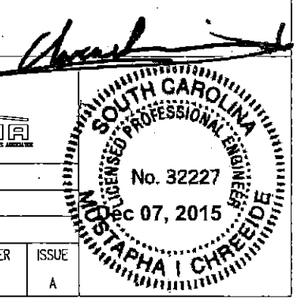
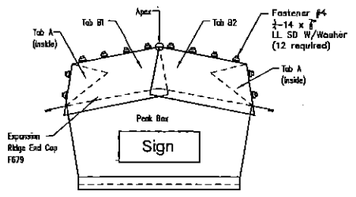
	11/23/15	N.T.S.	1	A	15-B-17264	DET8	A



DoubleLok/UltraDek Expansion Ridge End Cap Assembly

Page GDL06001 | Date Mar '14 | Rev 01

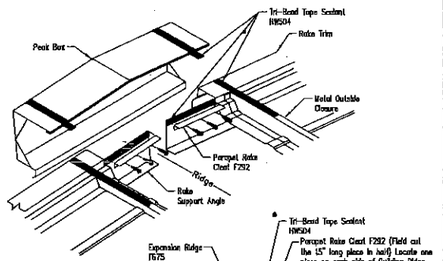


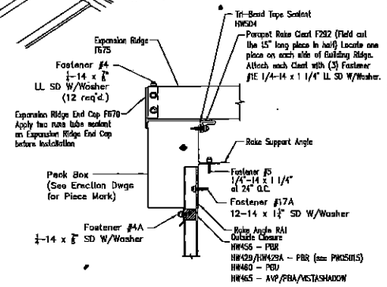
Expansion Ridge End Cap Assembly

1. Apply (2) runs of lube sealant along vertical and horizontal surfaces of expansion end cap.
2. Place end cap inside expansion ridge flashing, allowing the end cap to conform to the ridge flashing profile. Do not deform the top of the ridge by exerting too much pressure.
3. Make sure tab is even with, but not resting on top of the peak box. Tab "A" must be able to pivot in front of the peak box because of panel contraction.
4. Using a screwdriver, insert the blade in the space of tab "B1" and "B2", and twist the blade enough to cause tab "B1" to spread slightly away from tab "B2".
5. Secure the end cap to the ridge flashing with (12) Fastener #4 1/4"-14 X 7/8" as shown.

DoubleLok / UltraDek Expansion Ridge End Cap

Page GDL06002 | Date Mar '14 | Rev 03

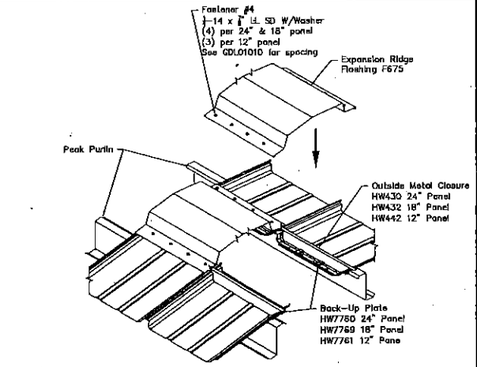


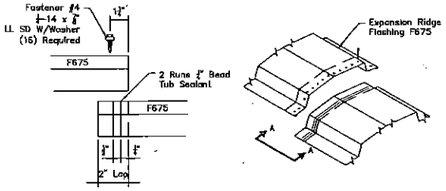


Flashing profile may vary dependent upon project order.
Attachment as illustrated are applicable for all profiles.

DoubleLok / UltraDek Expansion Ridge

Page GDL07001 | Date Mar '14 | Rev 02

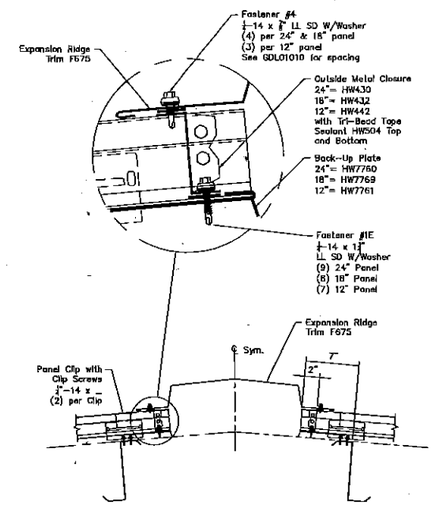




Section A

DoubleLok / UltraDek Expansion Ridge

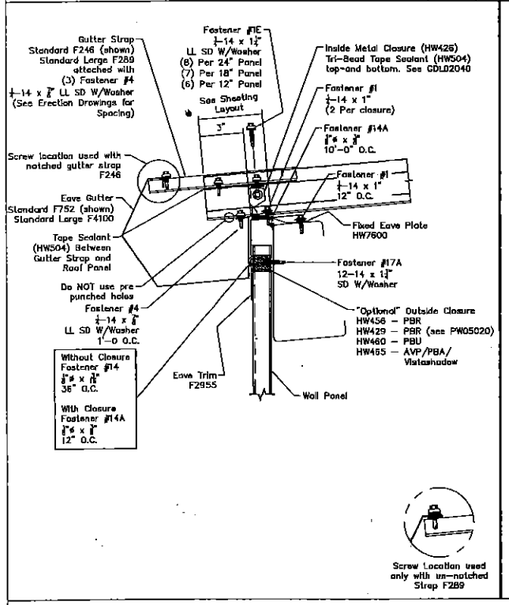
Page GDL07002 | Date May '14 | Rev 05



Note:
See GDL01011 and GDL01012 for outside closure and sealants installation information.

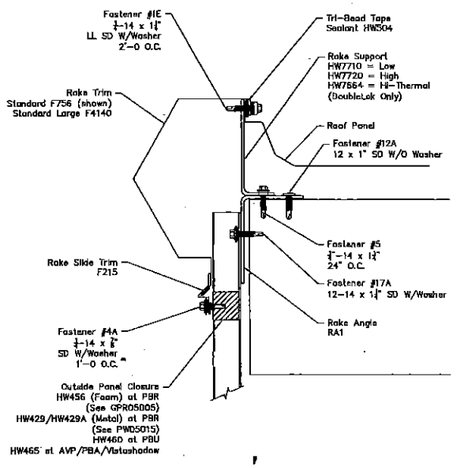
DoubleLok / UltraDek - Classic Standard and Standard Large Gutter Fixed Low Eave Plate - Sheeted Wall

Page WDL02004 | Date Jun '14 | Rev 02



DoubleLok / UltraDek - Sheeted Wall Standard and Standard Large Classic Rake Trim

Page WDL06005 | Date Jun '14 | Rev 03



ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

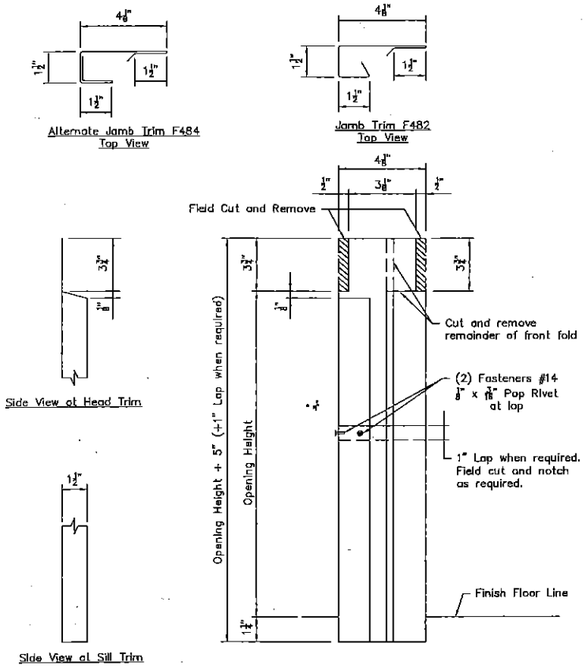
PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET9	A

LICENSED PROFESSIONAL ENGINEER
SOUTH CAROLINA
No. 32227
Dec 07, 2015
MOSTAPHA I CHREIDE

PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Field Cut Details

PW07027

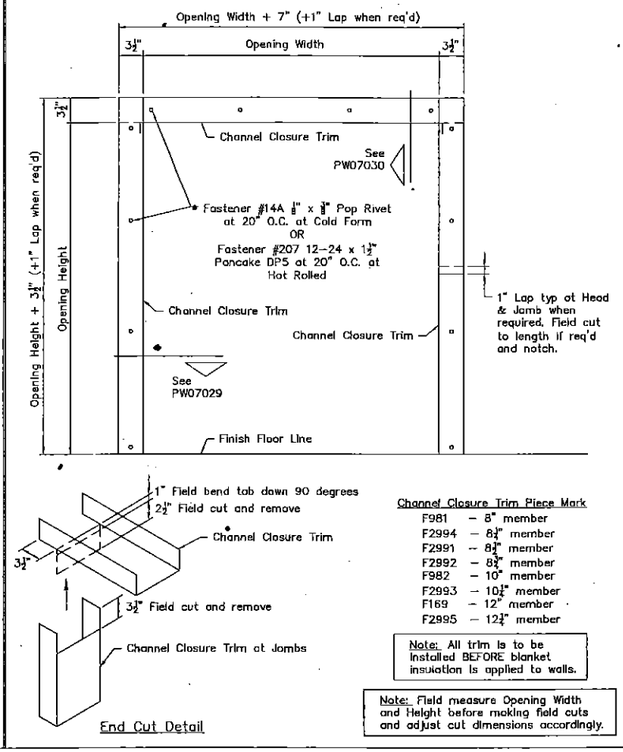


Jamb Trim F482 and
Alternate Jamb Trim F484
Front View
Right Jamb Trim as shown
Left Jamb Trim opposite hand

Note: Field measure Opening Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
"Optional" Channel Closure Trim

PW07028



End Cut Detail

Channel Closure Trim Piece Mark

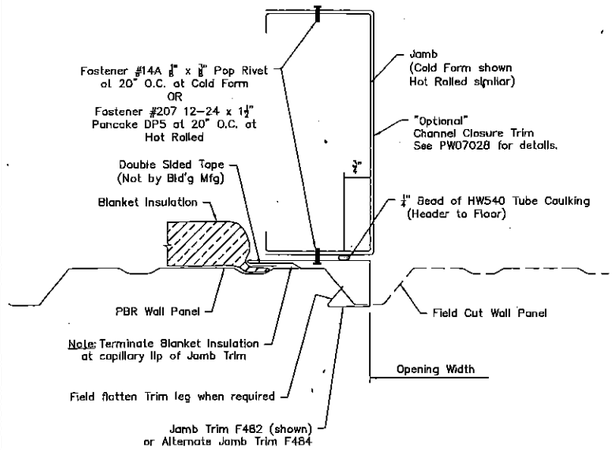
F981	– 8" member
F2994	– 8¼" member
F2991	– 8½" member
F2992	– 8¾" member
F982	– 10" member
F2993	– 10¼" member
F169	– 12" member
F2995	– 12¼" member

Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Installation

PW07029



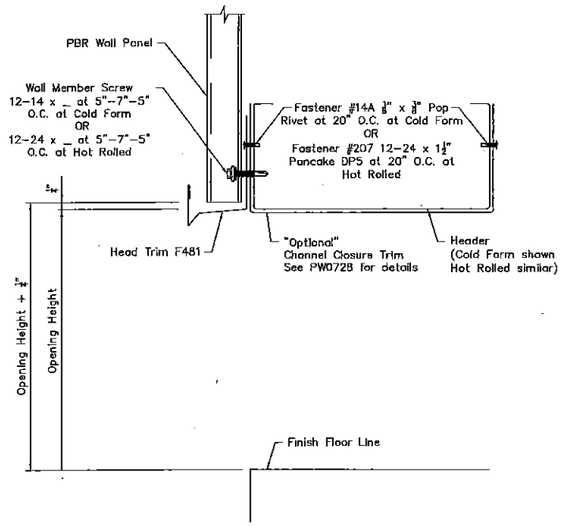
Alternate Jamb
Trim F484 Profile

Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Three Sided Framed Opening
Head Trim Installation

PW07030



Note: All trim is to be installed BEFORE blanket insulation is applied to walls

STANDARD FRAMED OPENING DETAILS (PBR WALL PANEL)
CONT.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

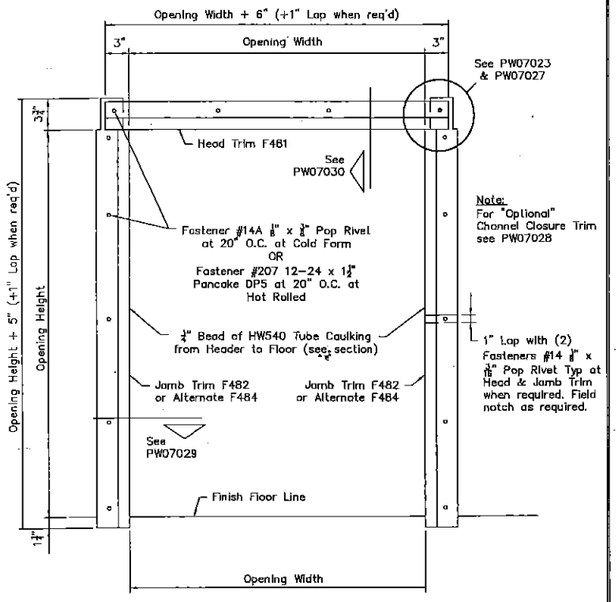
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET10	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

PBR Wall Panel - Three Sided Framed Opening
Trim Installation with Field Notch Panel at Head Trim

PW07022

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



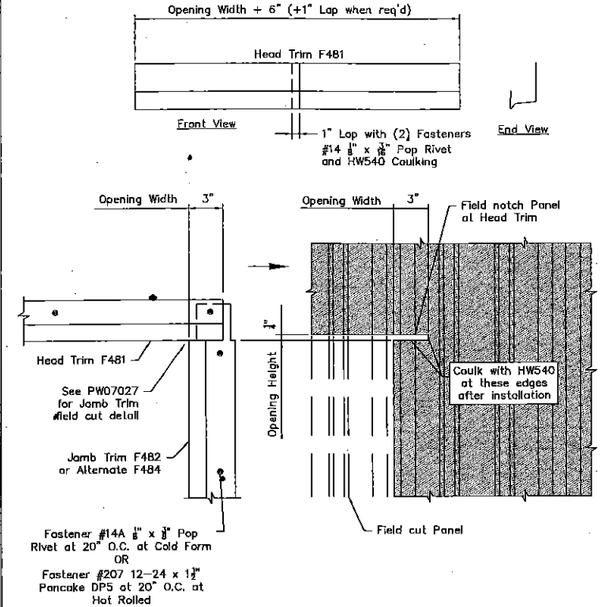
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
Field Notch Panel at Head Trim

PW07023

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



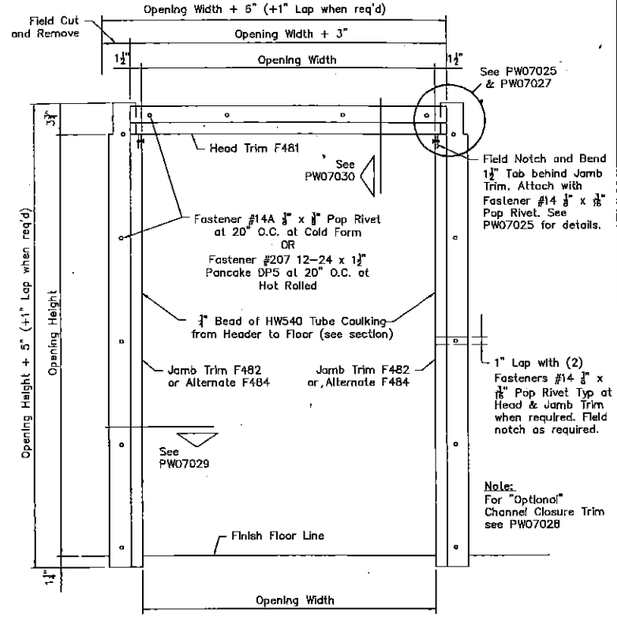
Note: All trim is to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Three Sided Framed Opening
Trim Installation with Field Notch and Bend Tabs at Head Trim

PW07024

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



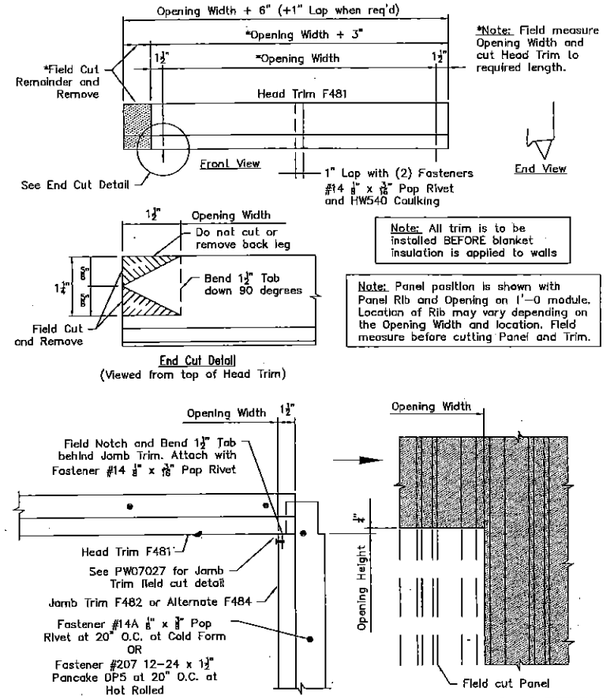
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Three Sided Framed Opening
Field Notch and Bend Tabs at Head Trim

PW07025

Note: Trim Installation can be done by Field Notch Panel as shown on PW07022 & PW07023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



STANDARD FRAMED OPENING DETAILS (PBR WALL PANEL)

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

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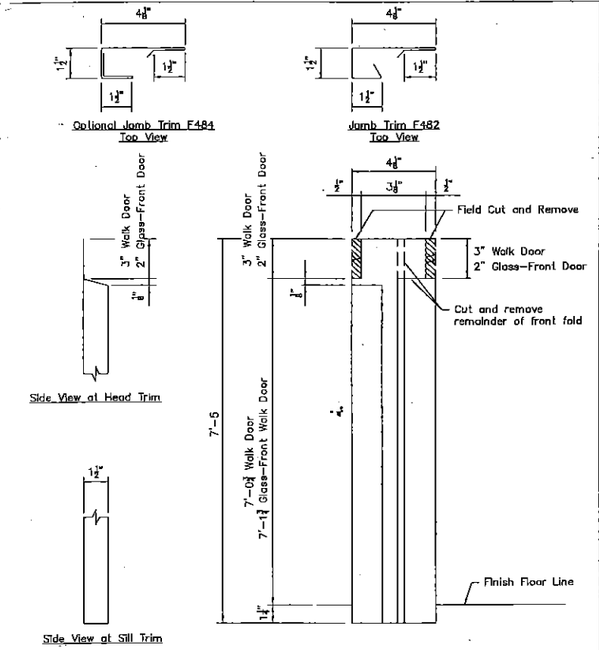
	11/23/15	N.T.S.	1	A	15-B-17264	DET11	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

PBR Wall Panel - Walk Door & Glass-Front Walk Door Jamb Trim Field Cut Details

Page PW09027 | Date Dec '11 | Rev. 00

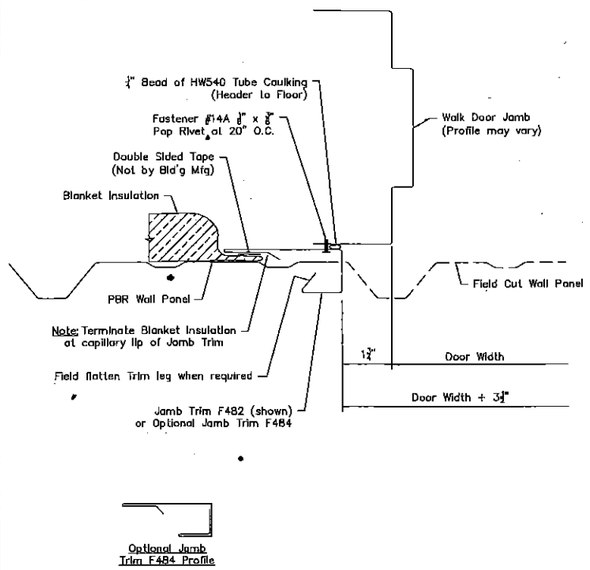


Jamb Trim F482 and Optional Jamb Trim F484
Front View
Right Jamb Trim as shown
Left Jamb Trim opposite hand

Note: Field measure Door Height before making field cuts and adjust cut dimensions accordingly so that Jamb Trim fits to Head Trim & at 1½" below Finish Floor Line.

PBR Wall Panel - Knock Down Walk Door Jamb Trim Installation

Page PW09031 | Date Dec '11 | Rev. 00



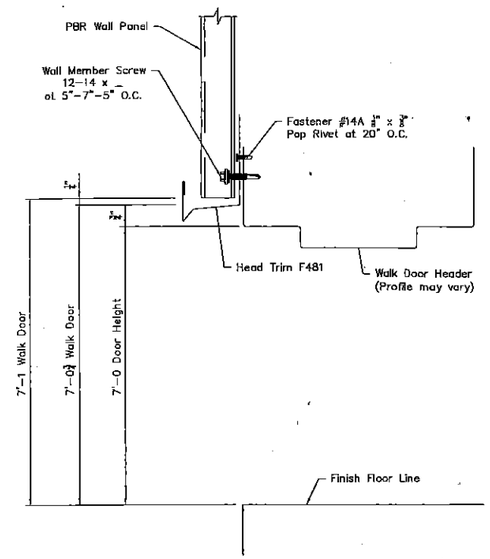
Optional Jamb Trim F484 Profile

Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Panel Rib and Door on 1'-0 module. Location of Rib may vary depending on the Door Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Knock Down Walk Door Head Trim Installation

Page PW09032 | Date Dec '11 | Rev. 00



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

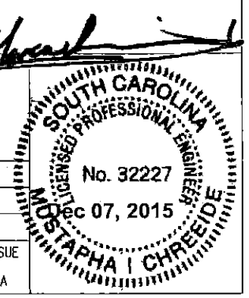
STANDARD WALKDOOR DETAILS (PBR WALL PANEL) CONT.

ISSUE	DATE	DESCRIPTION	BY	CK'D	OSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

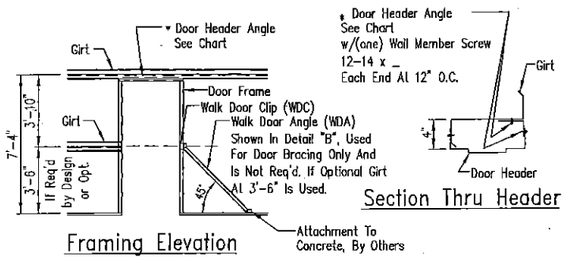
PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET12	A



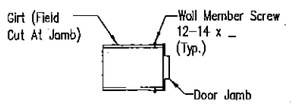
Knock Down Walk Door Sections
8", 10", 12" Girts

Page AC05131 | Date Dec '11 | Rev. 00



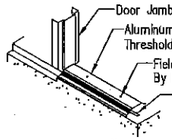
Framing Elevation

Section Thru Header

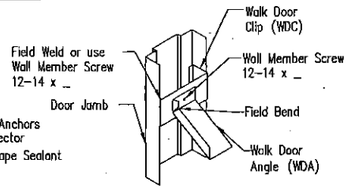


Section At 3'-6 Girt

* Door Header Angle	
Piece Mark	For Door
DHA3	3070
DHA4	4070
DHA6	6070



Detail "A"
At Base w/ Swing-Out Door

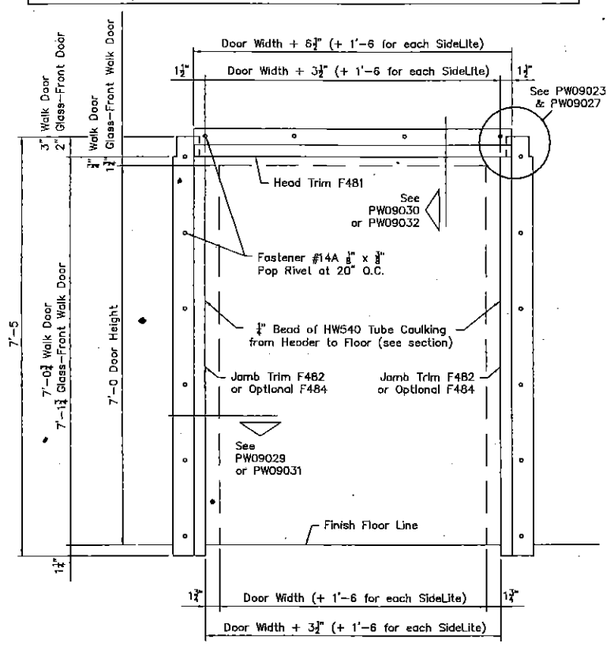


Detail "B"
At Brace (Typ. Both Jambs)

PBR Wall Panel - Walk Door & Glass-Front Walk Door
Trim Installation with Field Notch Panel at Head Trim

Page PW09022 | Date Dec '11 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW09022 & PW09023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW09024 & PW09025.



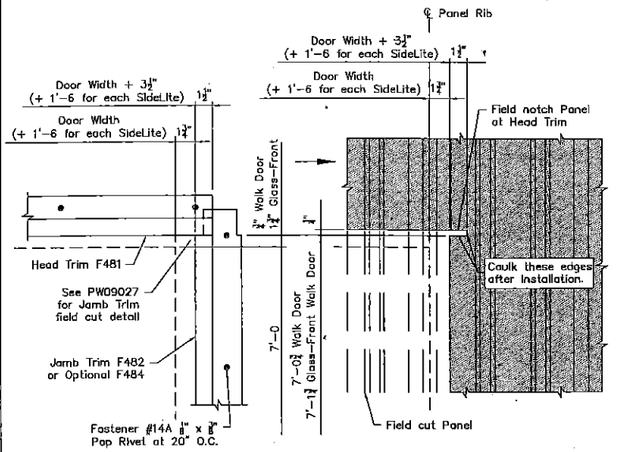
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Door Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Walk Door & Glass- Front Walk Door
Field Notch Panel at Head Trim

Page PW09023 | Date Dec '11 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW09022 & PW09023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW09024 & PW09025.

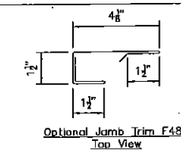


Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

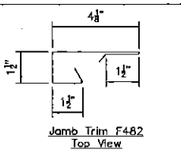
Note: Panel position is shown with Panel Rib and Door on 1'-0 module. Location of Rib may vary depending on the Door Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Walk Door & Glass-Front Walk Door
Jamb Trim Field Cut Details

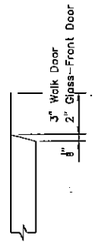
Page PW09027 | Date Dec '11 | Rev. 00



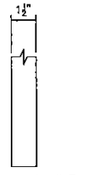
Optional Jamb Trim F484
Top View



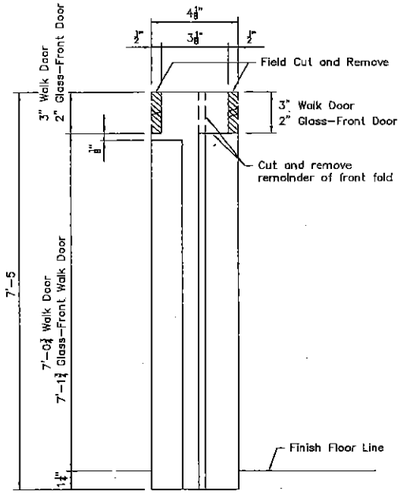
Jamb Trim F482
Top View



Side View at Head Trim



Side View at Sill Trim



Jamb Trim F482 and
Optional Jamb Trim F484
Front View
Right Jamb Trim as shown
Left Jamb Trim opposite hand

Note: Field measure Door Height before making field cuts and adjust cut dimensions accordingly so that Jamb Trim fits to Head Trim & at 1½" below Finish Floor Line.

STANDARD WALKDOOR DETAILS (PBR WALL PANEL)

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

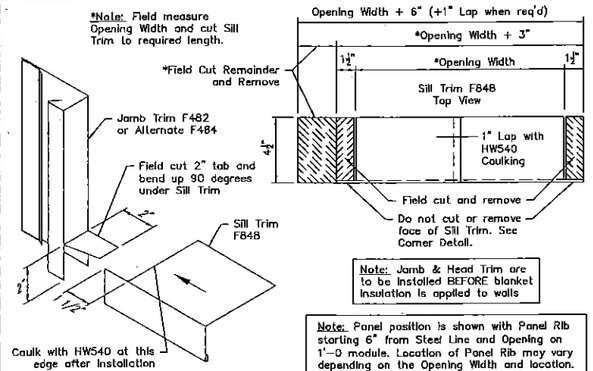
PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET13	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

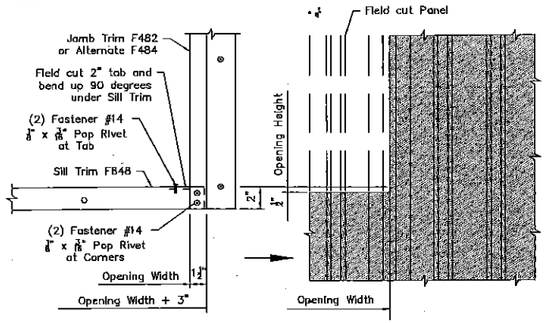
PBR Wall Panel - Four Sided Framed Opening
Sill Trim Installation

Page PW06026 | Date Jan '12 | Rev. 00



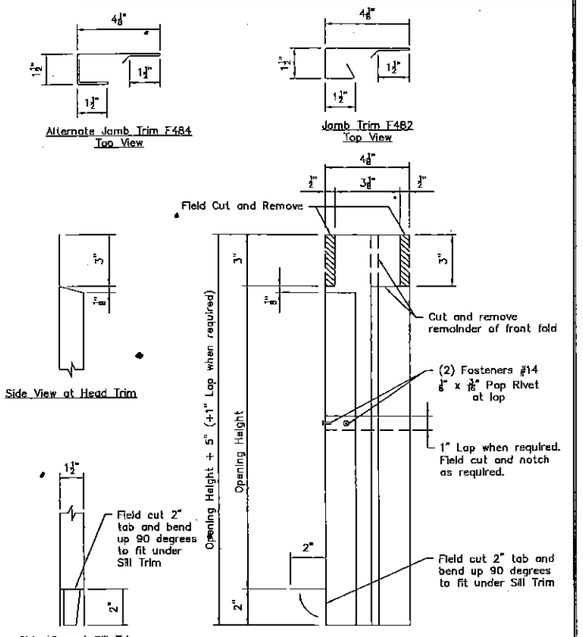
Note: Jamb & Head Trim are to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib starting 6" from Steel Line and Opening on 1'-0 module. Location of Panel Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.



PBR Wall Panel - Four Sided Framed Opening
Jamb Trim Field Cut Details

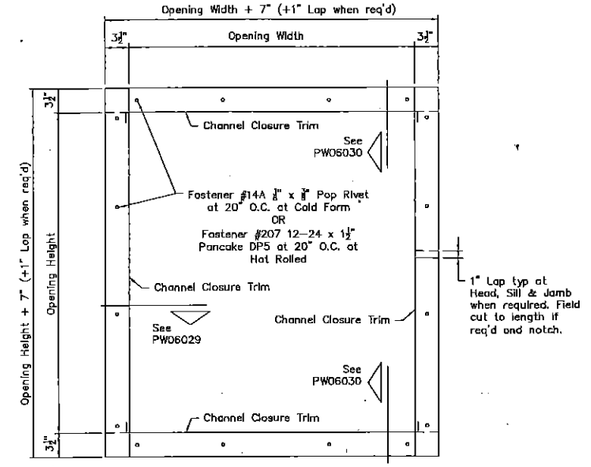
Page PW06027 | Date Jan '12 | Rev. 00

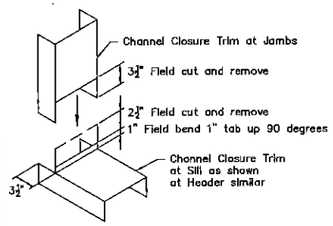


Note: Field measure Opening Height before making field cuts and adjust cut dimensions accordingly so that Jamb Trim fits to Head and Sill Trim.

PBR Wall Panel - Four Sided Framed Opening
"Optional" Channel Closure Trim

Page PW06028 | Date Jan '12 | Rev. 00





Channel Closure Trim Piece Mark

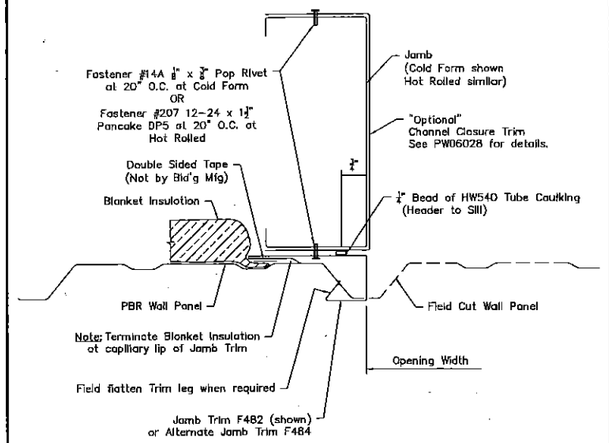
F981	– 8" member
F2994	– 8¼" member
F2991	– 8½" member
F2992	– 8¾" member
F982	– 10" member
F2993	– 10½" member
F169	– 12" member
F2995	– 12¼" member

Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Four Sided Framed Opening
Jamb Trim Installation

Page PW06029 | Date Jan '12 | Rev. 00

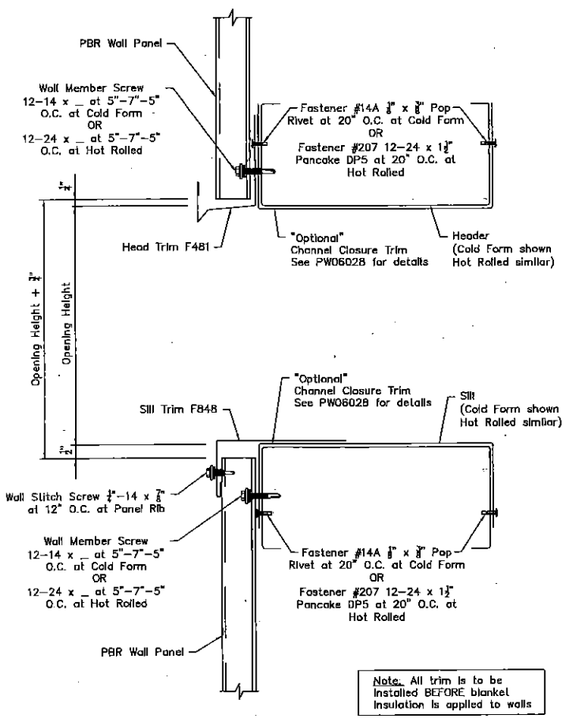


Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Four Sided Framed Opening
Head and Sill Trim Installation

Page PW06030 | Date Jan '12 | Rev. 00



Note: All trim is to be installed BEFORE blanket insulation is applied to walls

STANDARD 4 SIDED FRAMED OPENING DETAILS (PBR WALL PANEL) CONT.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions
5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

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OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

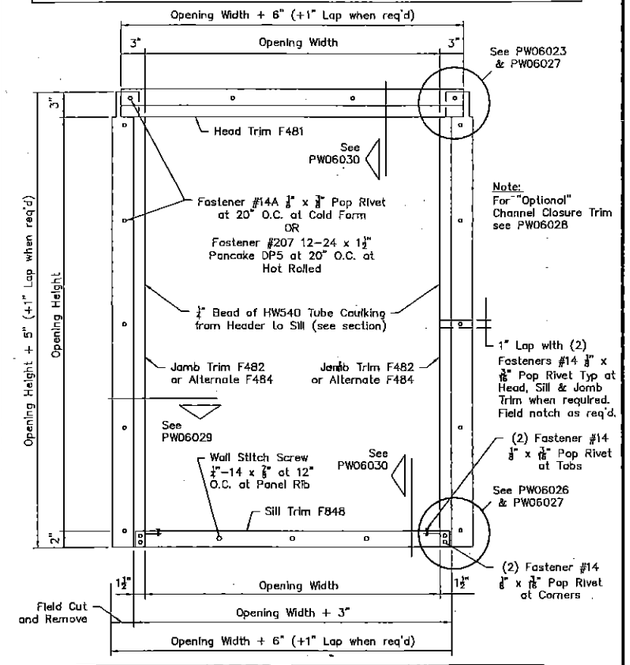
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/23/15	N.T.S.	1	A	15-B-17264	DET14	A

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 32227
Dec 07, 2015
MOSTAPHA I CHREEIDE

PBR Wall Panel - Four Sided Framed Opening
Trim Installation with Field Notch Panel at Head Trim

Page PW06022 | Date Jan '12 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



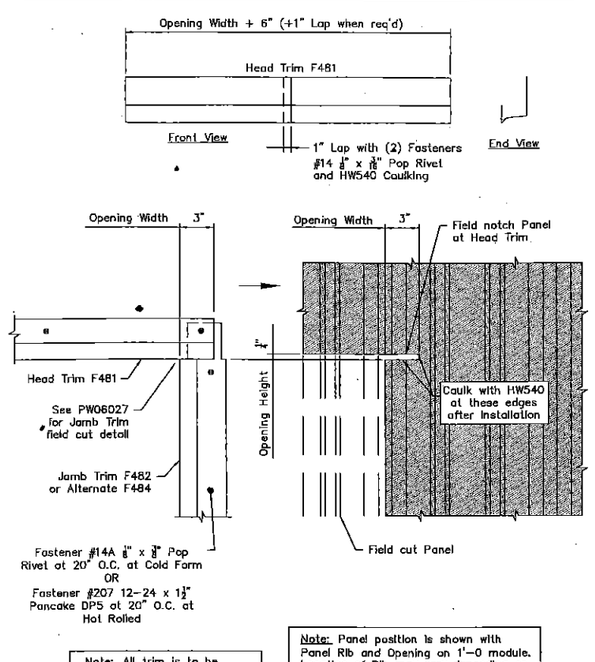
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Four Sided Framed Opening
Field Notch Panel at Head Trim

Page PW06023 | Date Jan '12 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



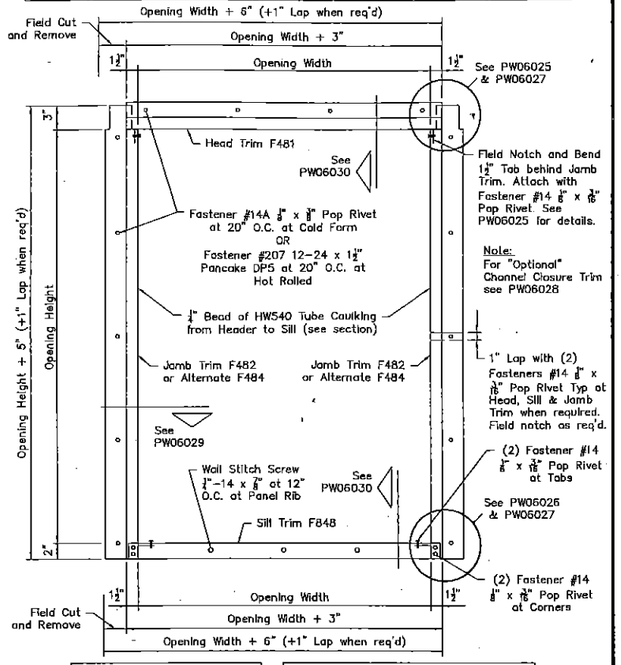
Note: All trim is to be installed BEFORE blanket insulation is applied to walls

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

PBR Wall Panel - Four Sided Framed Opening
Trim Installation with Field Notch and Bend Tabs at Head Trim

Page PW06024 | Date Jan '12 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



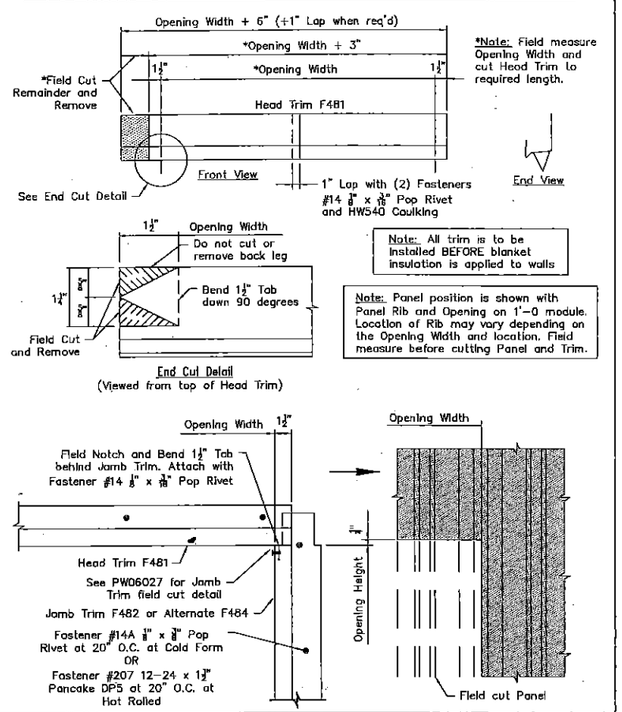
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

PBR Wall Panel - Four Sided Framed Opening
Field Notch and Bend Tabs at Head Trim

Page PW06025 | Date Jan '12 | Rev. 00

Note: Trim Installation can be done by Field Notch Panel as shown on PW06022 & PW06023 OR with Field Notch and Bend Tabs at Head Trim as shown on PW06024 & PW06025.



STANDARD 4 SIDED FRAMED OPENING DETAILS (PBR WALL PANEL)

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	11/23/15	FOR CONSTRUCTION PERMIT	PNR	PNR	MGS

MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061
Voice 214-687-9999 Fax 214-687-9737

MBMA

PROJECT: Fleming Town Fire
CUSTOMER: ACE CONSTRUCTION CO., INC
OWNER: FLORENCE COUNTY
LOCATION: Pamplico, SC 29583,

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	11/23/15	N.T.S.	1	A	15-B-17264	DET15	A

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