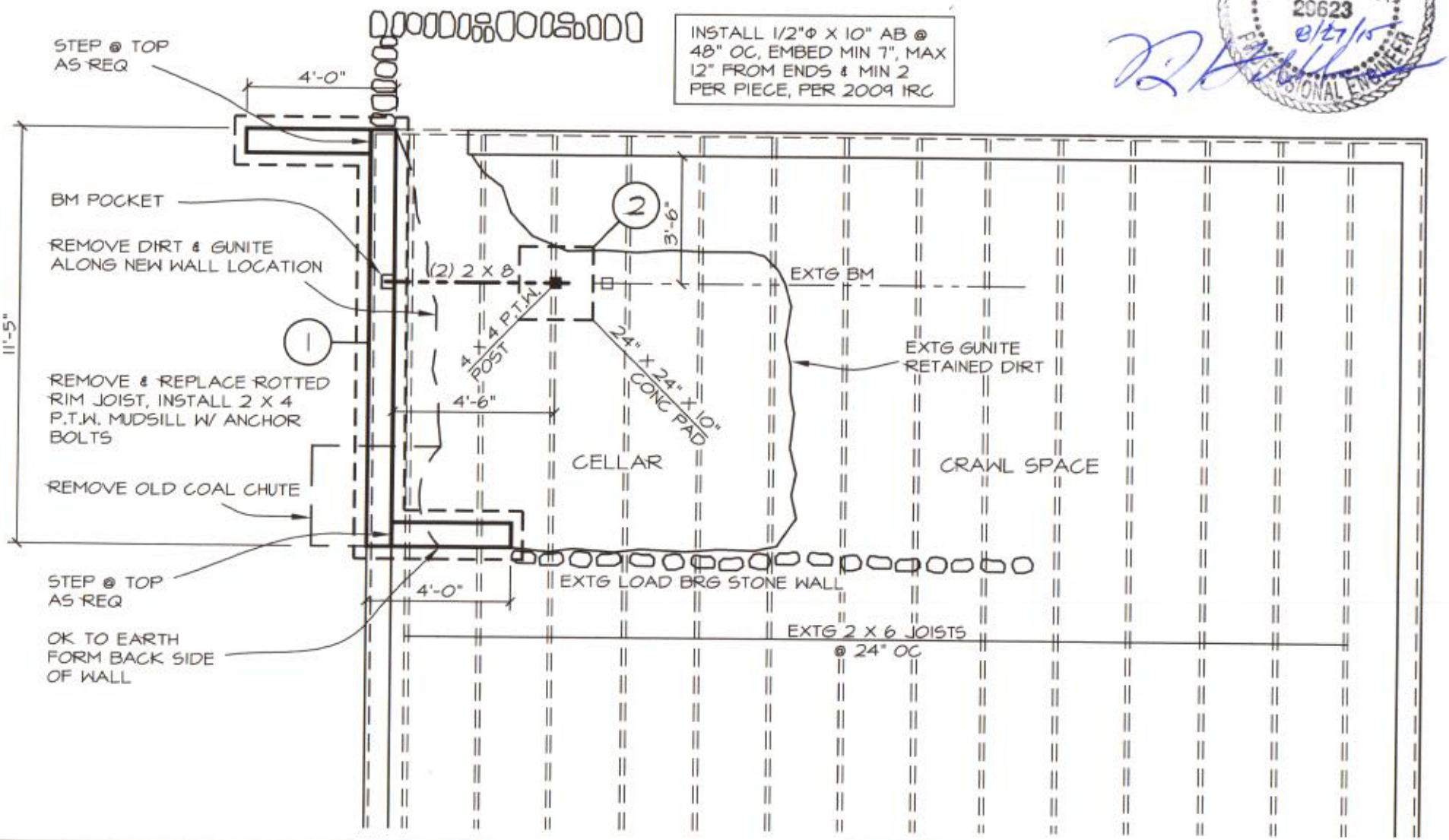


COLORADO REGISTERED
BRIAN T. HILDENBRANDT
20623
8/27/15
PROFESSIONAL ENGINEER

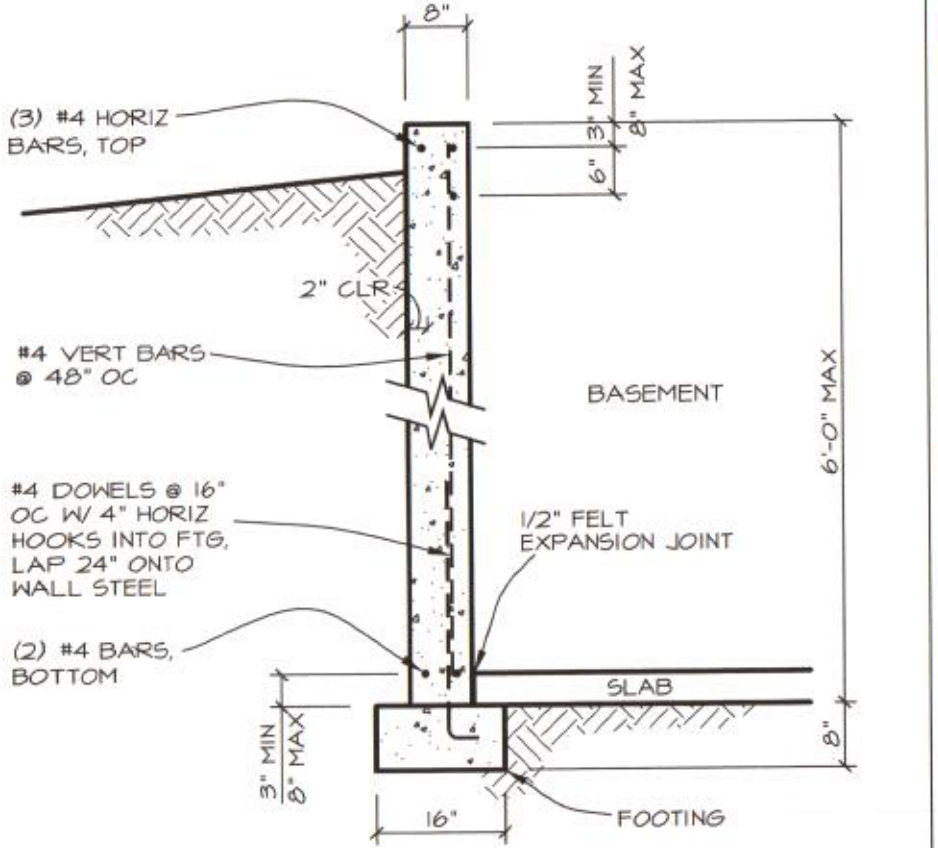
HILDENBRANDT & ASSOCIATES, INC.
3210 East Woodmen Road, Suite 100, Colorado Springs, CO 80920
Phone: (719) 535-9894/ Email: brianhildenbrandt@gmail.com

Foundation Repair Plan

16 West Mill Street, Colorado Springs, CO
Prepared for: City of Colorado Springs

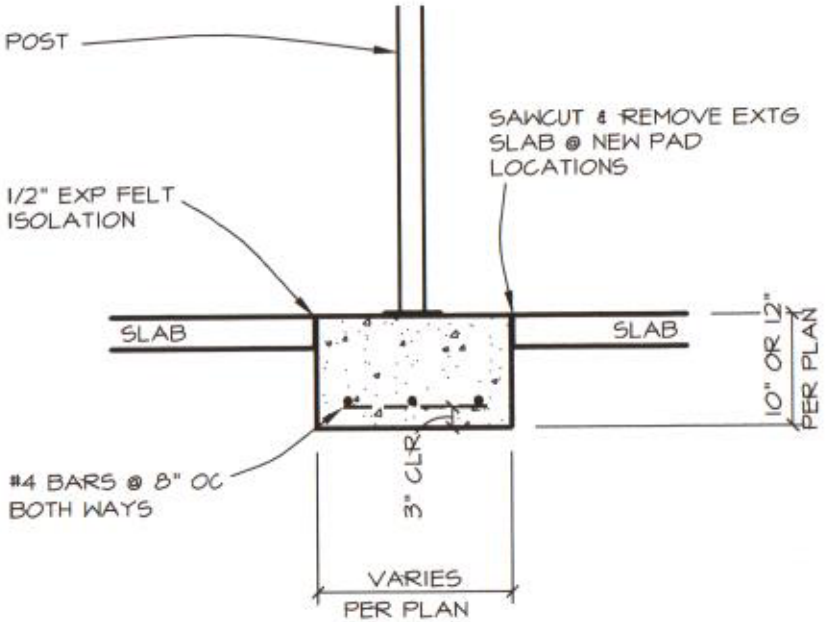
Scale: 1/4" = 1'-0"
Phone: 385-6883

Project: 150808	8/26/15	S1 of 3



1 Low Foundation Wall, 6' Max

1/2" = 1'-0"



2 Interior Pad

1/2" = 1'-0"

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Details
16 West Mill Street, Colorado Springs, CO
Prepared for: City of Colorado Springs
Phone: 385-6883

Project: 150808	8/26/15	S2 of 3

NOTES:

- All work shall conform with the 2011 Pikes Peak Regional Building Code and the 2009 IRC.
- The contractor is responsible for locating utilities prior to construction.
- Take dimensions from the architectural plan, except for foundation components.
- All miscellaneous details shall be in accordance with instruction from manufacturer or designer.
- Door jambs should not be built tight to slabs on grade.
- All structural fill shall be granular in nature and mechanically compacted to 90% of Maximum Modified Proctor Dry Density, per ASTM D-1557.
- Backfill shall be brought up evenly on both sides of foundation walls. The foundation wall shall be braced prior to backfilling. Care must be taken during backfilling operations to prevent damage to the foundation system.
- A gravel layer beneath floor slabs is not recommended.
- Planters adjacent to the building should be well sealed and drained.
- Slope backfield away from the building a minimum of 5% for the first 10 feet. Carry roof drains across the backfield areas. Do not allow water to pond near building.
- This design has been completed in accordance with pertinent standards, recommended design soil parameters, and accepted engineering design procedures, and is based on the best information available at the time of completion The design is intended to minimize differential movement resulting from the heaving of expansive soil induced by seasonal moisture changes. It must be recognized that foundation components, and in particular floor slabs and other flatwork, will undergo movement. Adherence to those details isolating floor slabs from columns, walls, partitions, or other structural components is extremely important if damage to the superstructure is to be minimized. Any subsequent owners should be apprised of the expansive soil condition, if any, and advised to maintain good practices in the future with with regard to surface and subsurface drainage, framing of partitions above floor slabs, drywall and finish work above floor slab, etc.
- Verify top of foundation elevations and foundation dimensions prior to setting forms and placing concrete. Hildenbrandt & Associates, Inc. should be notified of any discrepancies between the plans and the foundation design. PH NO (719) 535-9894.

LEGEND:

NEW FOUNDATION WALL

INTERIOR PAD

BEAM

DETAIL ②

MATERIALS:

REINFORCING STEEL

- Reinforcing should be continuous around the building, as shown. Minimum lap of reinforcing should be 24", unless otherwise noted.
- All reinforcing steel shall be Grade 60, Fy=60,000 psi.
- Where concrete is cast against earth, a minimum 3" concrete cover is required between the reinforcing and the earth. Where concrete is formed, a minimum 2" concrete cover is required
- All reinforcing bar bends are to be made cold. Reinforcing bar bends, hooks and placement shall conform to A.C.I. 318, Building Code Requirements for Reinforced Concrete.

CONCRETE

- Concrete shall be 3/4" maximum aggregate and shall have a minimum compressive breaking strength of 3,000 psi at 28 days. Type II concrete is recommended.
- The concrete should have a slump of between 4 to 5 inches.
- Concrete shall not be placed on frozen ground. All loose soil shall be removed from the footing footprint prior to placing concrete.
- Foundation forms should remain in place a minimum of 3 days after placing concrete.
- Floor slabs must be separated from all structural portions of the building with an expansion joint of minimum 1/2" thickness.
- 3/4" deep control joints shall be formed in the slab with a grooving tool at 15' maximum intervals, or as noted on the plan.

An open excavation inspection is required by personnel of Hildenbrandt & Associates, Inc., to verify subsurface conditions. The excavation inspection shall be performed prior to placing any structural fill, forms or concrete at the site.

This foundation design was based on field observations by personnel of Hildenbrandt & Associates, Inc., on August 14, 2015, and on an assumed soil bearing capacity of 1,500 psf.

COLORADO REGISTERED BRIAN HILDENBRANDT 29623 8/27/15 PROFESSIONAL ENGINEER

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Notes
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