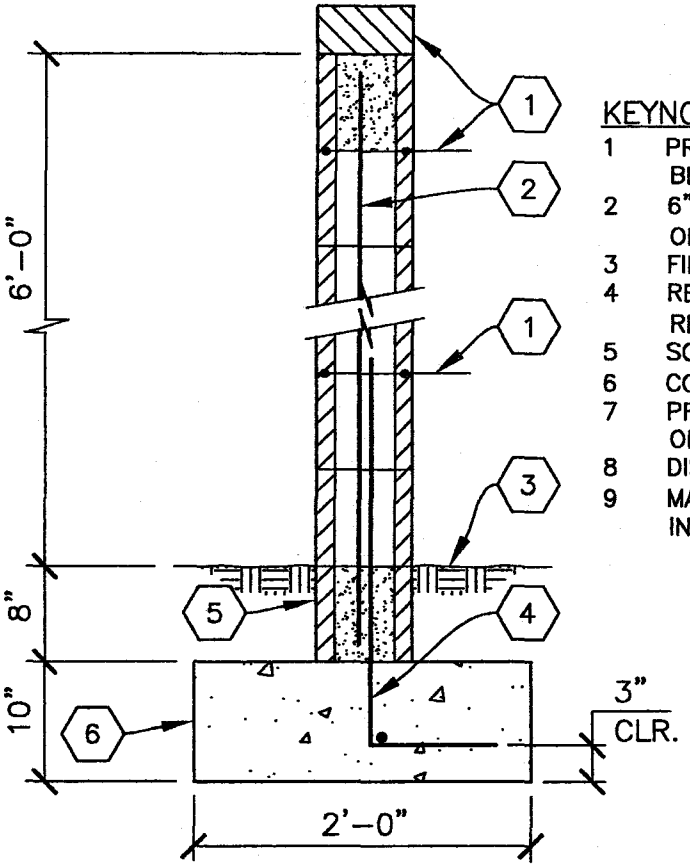
6" CMU STANDARD FENCE WALL

INTERLOCKING HEAD JOINTS
HORIZONTAL JOINT REINFORCING
W/ CONTROL JOINTS
S.P. = 1500 PSF

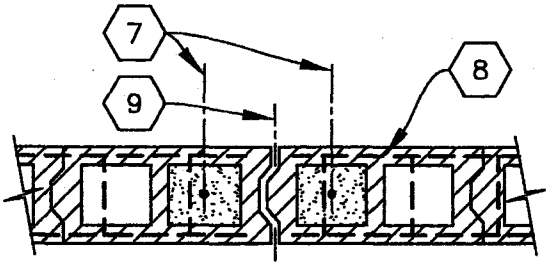
Registered Professional Engineer (Civil)
CERTIFICATE NO. 14134
WILLIAM B. CREAGER
Date Signed 2-25-09
ARIZONA, U.S.A.
EXP. 12/31/2011



TYP. WALL SECTION

KEYNOTES:

1 PROVIDE HORIZ. JOINT REINFORCING AT 16" O.C. INCLUDING BED JOINT AT TOP OF WALL WITH CAP BLOCK
2 6" CMU FENCE WALL WITH #4 VERT. REBAR AT 48" O.C. OR #5 VERT. REBAR AT 72" O.C. IN GROUTED CELL
3 FINISH GRADE OR CONCRETE SLAB
4 REBAR DOWEL WITH STD. 90° HOOK TO MATCH VERTICAL REINF. – 30" LAP FOR #4; 38" LAP FOR #5
5 SOLID GROUT MASONRY BELOW GRADE
6 CONCRETE FOOTING WITH 1– #4 LONGITUDINAL
7 PROVIDE SPECIFIED REBAR IN GROUTED CELL EACH SIDE OF CONTROL JOINT
8 DISCONTINUE JOINT REINF. AT CONTROL JOINT
9 MASONRY CONTROL JOINT–NOT REQ'D. TO BE EXTENDED INTO CONCRETE FOOTING BELOW



PLAN AT TYP. CONTROL JOINT

GENERAL NOTES:

a DESIGN BASED ON 2006 IBC WITH ASCE 7–02 WIND LOADING PER CITY OF PHOENIX AMENDMENTS TO 2006 IBC; 90 MPH, EXPOSURE "B"; MINIMUM LATERAL WIND LOAD = 10 PSF ON FENCE PER ASCE 7–02 SECTION 6.1.4.1
b DESIGN BASED ON MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF AT(–)1'–6" BELOW FINISHED GRADE
c MASONRY: F'm = 1500 PSI, ASTM C90; RUNNING BOND; INTERLOCKING HEAD JOINTS
d MORTAR: F'm SHALL BE MIN. 1800 PSI, TYPE "S" PER ASTM C270
e GROUT: F'c SHALL BE MIN. 2000 PSI PER ASTM C476; GROUT MAY BE FIELD MIXED WITH FINE AGGREGATE; CONSOLIDATE GROUT IN CELL
f REINFORCING STEEL: Fy = 60,000 PSI PER ASTM A615
g JOINT REINFORCING: Fy = 70,000 PSI, W1.7, 9 GA. WIRE, LADUR OR TRUSS TYPE PER ASTM A82
h CONCRETE: F'c = 2500 PSI AT 28 DAYS PER ASTM C94; CONFORM TO IBC 1904.3 SULFATE EXPOSURE
i FOOTINGS SHALL BEAR ON WELL DRAINED COMPACTED GRANULAR FILL OR UNDISTURBED NATURAL SOIL
j CONTROL JOINT SPACING
k THIS DESIGN TO BE USED ONLY AT INTERIOR AREAS OF SUBDIVISIONS
l PERIODIC SPECIAL INSPECTION REQUIRED FOR ALL MASONRY WALLS BY CERTIFIED MASONRY INSPECTOR PER BUILDING OFFICIAL REQUIREMENTS

cbh
CBH CONSULTING ENGINEERS INC.
2601 NORTH 3RD STREET, SUITE 106
PHOENIX, ARIZONA 85004
PHONE : (602) 266-9766 FAX : (602) 266-9231

PROJECT:	A.M.G. MASONRY FENCE WALL STANDARDS IHJT-1 - 1500		
BY:	WBC	DATE:	25 FEB 09
REVIEWED:		DATE:	

6" CMU STANDARD FENCE WALL

MORTARED HEAD JOINTS
W/ CONTROL JOINTS
S.P. = 1500 PSF

Registered Professional Engineer (Civil) CERTIFICATE NO. 14134 WILLIAM B. CREAGER Date Signed 2-25-09 ARIZONA, U.S.A.

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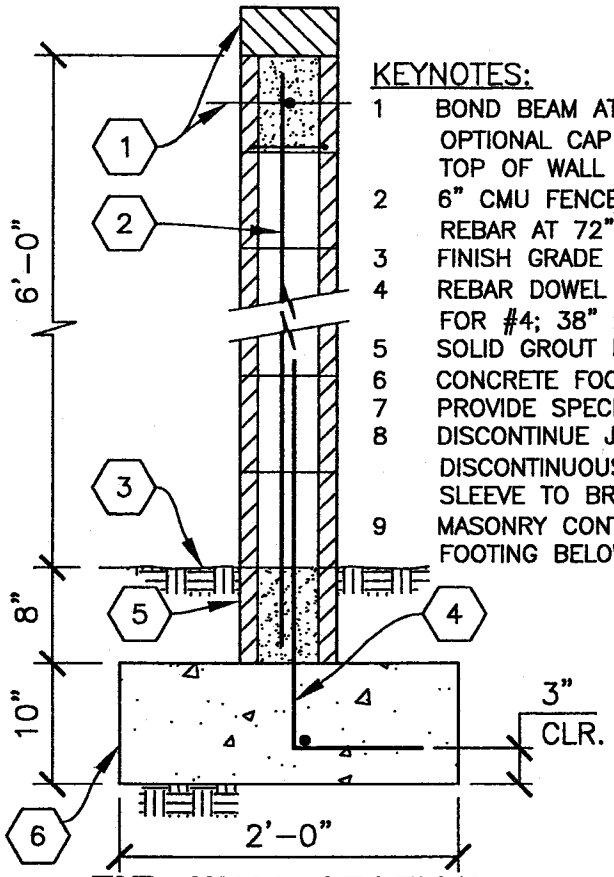
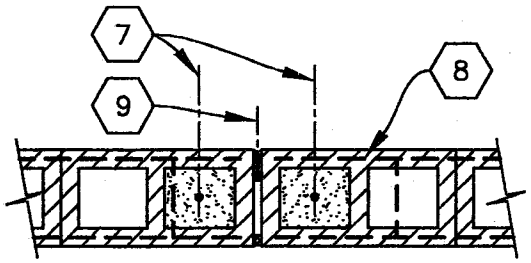


TYP. WALL SECTION

KEYNOTES:

1. BOND BEAM AT TOP OF WALL–#4 REBAR IN CONTINUOUS GROUTED CELL OR OPTIONAL CAP BLOCK WITH JOINT REINF. AT 16" O.C. AND IN BED JOINT AT TOP OF WALL
2. 6" CMU FENCE WALL WITH #4 VERT. REBAR AT 48" O.C. OR #5 VERT. REBAR AT 72" O.C. IN GROUTED CELL
3. FINISH GRADE OR CONCRETE SLAB
4. REBAR DOWEL WITH STD. 90° HOOK TO MATCH VERTICAL REINF.–30" LAP FOR #4; 38" LAP FOR #5
5. SOLID GROUT MASONRY BELOW GRADE
6. CONCRETE FOOTING WITH 1– #4 LONGITUDINAL
7. PROVIDE SPECIFIED REBAR IN GROUTED CELL EACH SIDE OF CONTROL JOINT
8. DISCONTINUE JOINT REINF. AT CONTROL JOINT. BOND BEAM REINF. MAY BE DISCONTINUOUS OR CONTINUOUS AT CONTROL JOINT. PROVIDE 12" PLASTIC SLEEVE TO BREAK BOND AT CONTINUOUS INSTALLATIONS
9. MASONRY CONTROL JOINT–NOT REQ'D. TO BE EXTENDED INTO CONCRETE FOOTING BELOW



PLAN AT TYP. CONTROL JOINT

GENERAL NOTES:

a. DESIGN BASED ON 2006 IBC WITH ASCE 7–02 WIND LOADING PER CITY OF PHOENIX AMENDMENTS TO 2006 IBC; 90 MPH, EXPOSURE "B"; MINIMUM LATERAL WIND LOAD = 10 PSF ON FENCE PER ASCE 7–02 SECTION 6.1.4.1
b. DESIGN BASED ON MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF AT(–)1'–6" BELOW FINISHED GRADE
c. MASONRY: F'm = 1500 PSI, ASTM C90; RUNNING BOND; MORTARED HEAD JOINTS
d. MORTAR: F'm SHALL BE MIN. 1800 PSI, TYPE "S" PER ASTM C270
e. GROUT: F'c SHALL BE MIN. 2000 PSI PER ASTM C476; GROUT MAY BE FIELD MIXED WITH FINE AGGREGATE; CONSOLIDATE GROUT IN CELL
f. REINFORCING STEEL: Fy = 60,000 PSI PER ASTM A615
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h. CONCRETE: F'c = 2500 PSI AT 28 DAYS PER ASTM C94, CONFORM TO IBC 1904.3 SULFATE EXPOSURE
i. FOOTINGS SHALL BEAR ON WELL DRAINED COMPACTED GRANULAR FILL OR UNDISTURBED NATURAL SOIL
j. MASONRY CONTROL JOINTS TO BE CONSTRUCTED AT MAX. SPACING OF 24 FT. O.C.
k. THIS DESIGN TO BE USED ONLY AT INTERIOR AREAS OF SUBDIVISIONS
l. PERIODIC SPECIAL INSPECTION REQUIRED FOR ALL MASONRY WALLS BY CERTIFIED MASONRY INSPECTOR PER BUILDING OFFICIAL REQUIREMENTS

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PROJECT:	A.M.G. MASONRY FENCE WALL STANDARDS MHJT-1 - 1500		
BY:	WBC	DATE:	25 FEB 09
REVIEWED:		DATE:	

DETAIL DRAWN BY:

FELTEN GROUP
ENGINEERS • ARCHITECTS • DESIGNERS

3602 EAST GREENWAY ROAD, SUITE 107
PHOENIX, ARIZONA 85032 PHONE: (602)867-2500

ARIZONA MASONRY GUILD

FENCE STANDARD

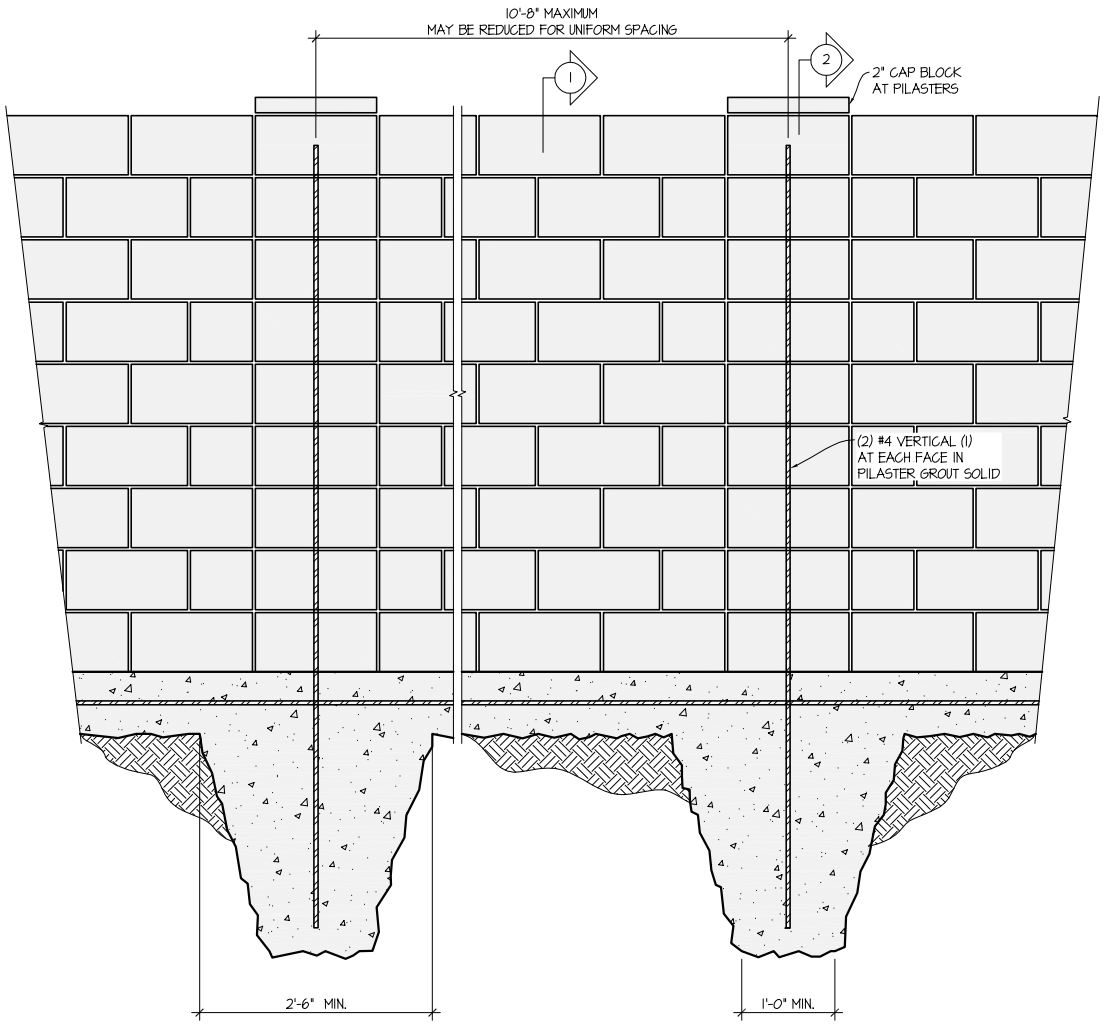
REVISIONS / SCALE / DATE

REVISIONS	ENGINEERED BY
1	G.FELTEN
2	

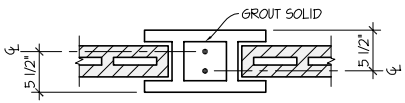
Registered Professional Engineer (Structural)
CERTIFICATE NO. 27867
GREG N. FELTEN
Date Signed 5/19/07
ARIZONA, U.S.A.

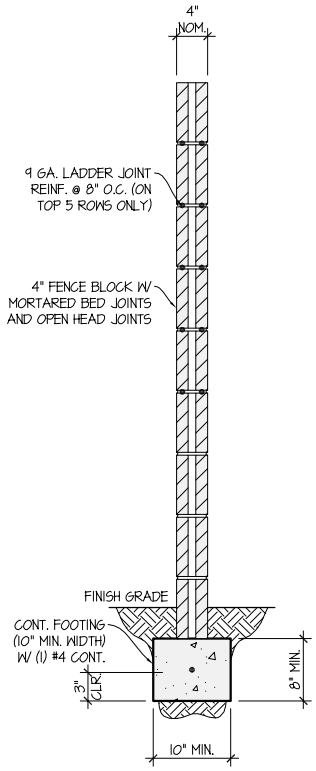
NOTE:

1. 10 PSF LATERAL WIND PRESSURE. 2006 IBC, 90 MPH, EXP. B ASCE 7-05 (ASCE 7-02 FIGURE 6-20 TO REPLACE 7-05 FIGURE 6-20 PER CITY OF PHOENIX EXCEPTION 5 TO 2006 IBC SECTION 1609.1.1 "FOR DESIGN WIND LOADS ON SOLID FREESTANDING WALLS AND SOLID SIGNS PER ASCE 7-05, SECTION 6.5.14, FIGURE 6-20 OF ASCE 7-02 MAY BE USED")
2. LATERAL SOIL PASSIVE PRESSURE OF 200 PSF/FT TO BE VERIFIED BY SOILS REPORT
3. ALLOWABLE BEARING VALUE OF 1000 PSF PSF TO BE VERIFIED BY SOILS REPORT
4. FOR THE USE AT INTERIOR AREAS OF THE SUBDIVISION
5. CONCRETE f'c = 2500 psi
6. REBAR REINFORCING fy = 60,000 psi
7. JOINT REINFORCING fy = 80,000 psi
8. CMU f'm = 1500 psi
9. MORTAR TYPE - S
10. GROUT f'c = 2000 psi

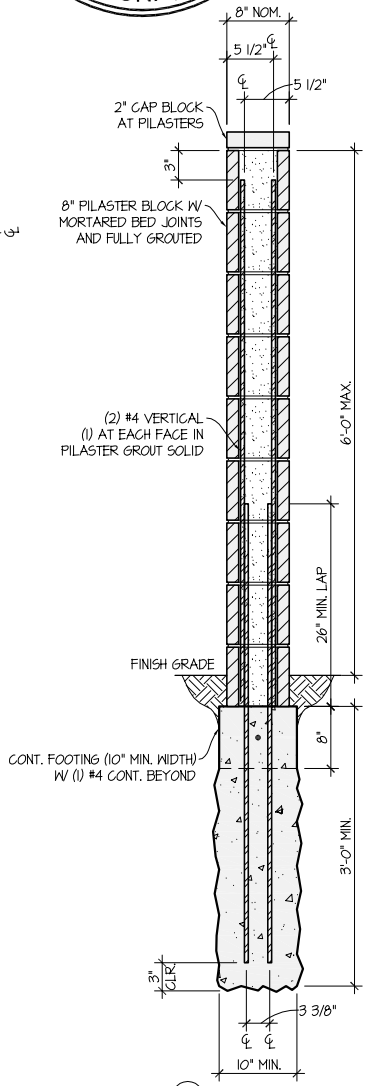


TOP VIEW
AT PILASTERS SHOWING
4" INTERSECTING WALL





1 SECTION



2 SECTION

4" INTERLOCKING BLOCK WALL W/ PILASTERS 10'-8" SPACING

7043-003

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