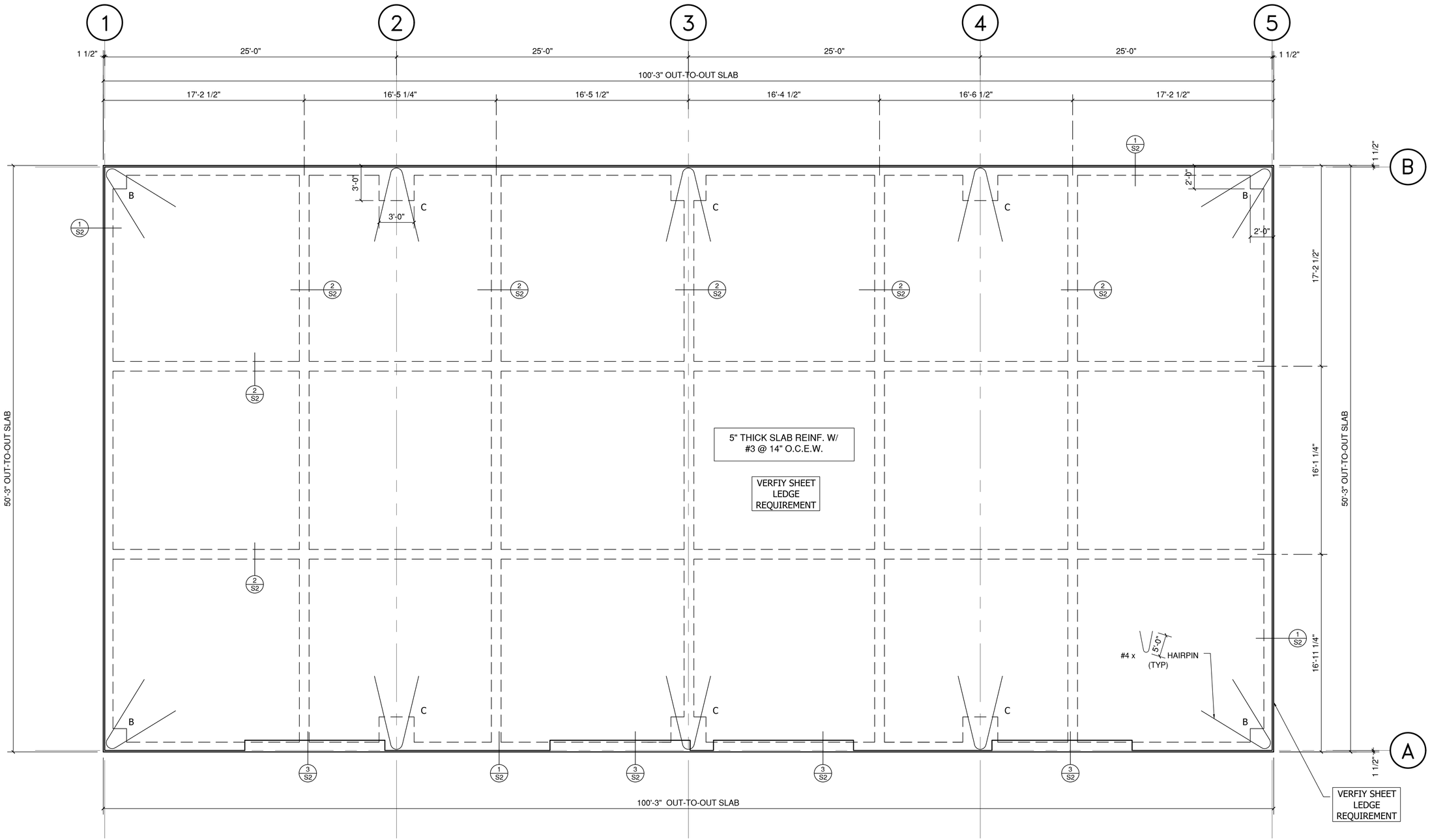

COLUMN FOOTING SCHEDULE

MARK	SIZE	REINFORCING
A	18" X 18"	(2) #5 EACH WAY BOTTOM
B	24" X 24"	(3) #5 EACH WAY BOTTOM
C	36" X 36"	(4) #5 EACH WAY BOTTOM

BOTTOM OF ALL FOOTINGS TO BE 12 INCHES MIN. INTO UNDISTURBED VIRGIN SOIL OR APPROVED COMPACTED MATERIAL

DESIGN SPECIFIC LEGAL INFORMATION

THIS ENGINEERING DESIGN PLAN SHALL BE USED ONLY FOR THE SPECIFIC PROJECT AS LISTED ON THE TITLEBLOCK. THIS DESIGN CANNOT BE REUSED FOR IDENTICAL OR SIMILAR BUILDINGS ON THE SAME PROJECT SITE OR ANY OTHER PROJECT SITE WITHOUT THE EXPRESSED WRITTEN CONSENT OF SYNERGETIC ENGINEERING/ 3 DAY DESIGN. UTILIZING THIS DESIGN PLAN FOR ADDITIONAL BUILDINGS/PROJECTS IS STRICTLY ILLEGAL.

MAXIMUM DROP IN SLAB NOTE:

8" MAX. = REF. 8" MAX. TYP. DROP IN SLAB DETAIL, CONTACT ENGINEER FOR RE-DESIGN IF SLAB DROP IS MORE THAN 8"

SHRINKAGE CRACKS / CONTRACTION JOINT NOTE:

THE CONCRETE CURING PROCESS MAY INDUCE NON-STRUCTURAL SHRINKAGE CRACKS IN THE FOUNDATION. SAW-CUT OR HAND-TOOLED CONTRACTION JOINTS MAY BE INSTALLED IN AN EFFORT TO MITIGATE THE SIZE, LENGTH, AND NUMBER OF THESE NON-STRUCTURAL SHRINKAGE CRACKS. SYNERGETIC ENGINEERING / 3 DAY DESIGN IS NOT RESPONSIBLE FOR THESE THESE CRACKS AS THEY ARE PURELY COSMETIC IN NATURE AND DO NOT REPRESENT STRUCTURAL DESIGN DEFECTS. CONTRACTOR TO VERIFY CONTRACTION JOINT REQUIREMENTS WITH OWNER PRIOR TO POURING CONCRETE.

BUILDER TO VERIFY ALL SLAB DROPS, SLOPE TO FLOOR DRAINS, ELECTRICAL CONDUITS, ETC. PRIOR TO SETTING FORMS.

SYNERGETIC ENGINEERING

FOUNDATION ENGINEER

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NEW CONSTRUCTION
SAMPLE PLAN

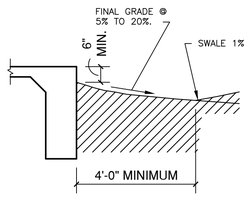
JOB # SAMPLE PLAN

REV	XX-XX-XX

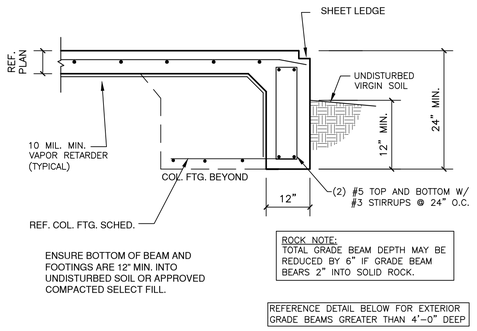
FOUNDATION PLAN

SCALE:
1/4"=1'-0"
PAGE SIZE:
ARCH 'D'
24" X 36"

S1.0



TYPICAL FINAL GRADE DETAIL

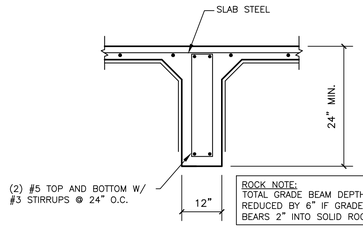


ENSURE BOTTOM OF BEAM AND FOOTINGS ARE 12" MIN. INTO UNDISTURBED SOIL OR APPROVED COMPACTED SELECT FILL.

ROCK NOTE:
TOTAL GRADE BEAM DEPTH MAY BE REDUCED BY 6" IF GRADE BEAM BEARS 2" INTO SOLID ROCK.

REFERENCE DETAIL BELOW FOR EXTERIOR GRADE BEAMS GREATER THAN 4'-0" DEEP

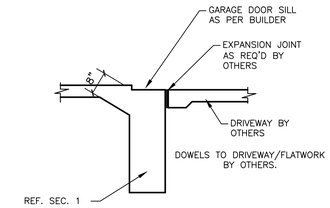
SECTION 1



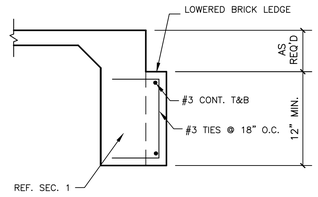
ROCK NOTE:
TOTAL GRADE BEAM DEPTH MAY BE REDUCED BY 6" IF GRADE BEAM BEARS 2" INTO SOLID ROCK.

INTERIOR BEAMS: ADD "PIER" GRADE BEAM SUPPORTS AT INTERIOR GRADE BEAM INTERSECTIONS WHERE FILL UNDERNEATH BOTTOM OF GRADE BEAM EXCEEDS 2'-0" FOR SANDY LOAM FORMING FILL OR EXCEEDS 4'-0" FOR CRUSHER SCREENINGS/ROAD BASE FORMING FILL. REF. HARD POINT DETAIL THIS SHEET.

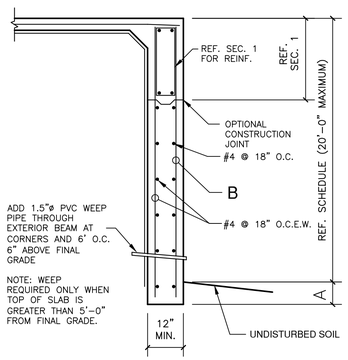
SECTION 2



SECTION 3

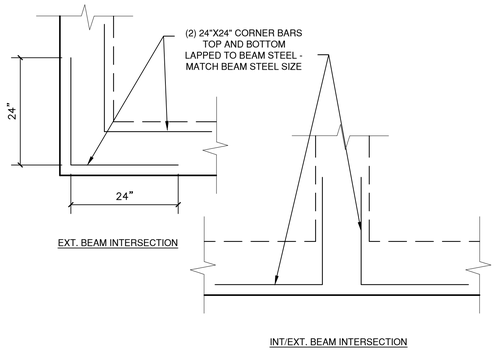


TYP. LOWERED BRICK LEDGE

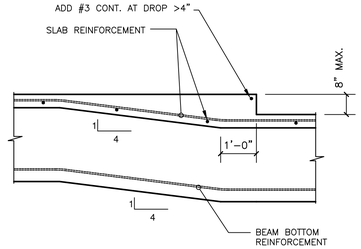


DEEP BEAM SCHEDULE		
WALL HEIGHT	A	B
4'-1" TO 6'-0"	18" SOIL OR 2" ROCK	#4 @ 12" O.C.
6'-1" TO 12'-0"	18" SOIL OR 4" ROCK	#4 @ 12" O.C.
12'-1" TO 16'-0"	18" SOIL OR 6" ROCK	#5 @ 12" O.C.
16'-1" TO 20'-0"	18" SOIL OR 12" ROCK	#6 @ 10" O.C.

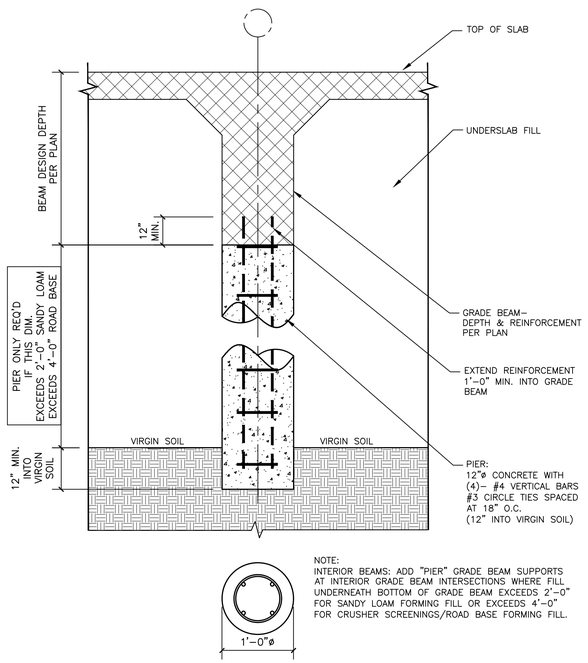
EXTERIOR BEAM GREATER THAN 4'-0" ABOVE EXISTING GRADE



CORNER BAR DETAILS



TYPICAL DROP IN SLAB 8" MAX.



NOTE:
INTERIOR BEAMS: ADD "PIER" GRADE BEAM SUPPORTS AT INTERIOR GRADE BEAM INTERSECTIONS WHERE FILL UNDERNEATH BOTTOM OF GRADE BEAM EXCEEDS 2'-0" FOR SANDY LOAM FORMING FILL OR EXCEEDS 4'-0" FOR CRUSHER SCREENINGS/ROAD BASE FORMING FILL.

HARDPOINT/PIER DETAIL

GENERAL:
1. THE LATEST A.C.I. CODE HAVE BEEN USED IN ESTABLISHING THE DESIGN REQUIREMENTS FOR THIS FOUNDATION. FOUNDATIONS CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS WILL GENERALLY MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE AND STANDARDS OF GOOD ENGINEERING PRACTICE.
2. DO NOT SCALE PLAN. CONTACT ENGINEER FOR CLARIFICATIONS.
3. SHOULD CONDITIONS ARISE THAT ARE NOT COVERED BY DETAILS ON THIS PLAN, CONTACT ENGINEER AT ONCE FOR ADDITIONAL INSTRUCTIONS.
4. VERIFY EXPOSED CONCRETE FINISHES THAT MAY BE REQUIRED AS PER ARCHITECTURALS. ENGINEER CANNOT BE HELD LIABLE FOR ANY OVERSIGHT IN THIS REGARD.
5. SPOT FOOTINGS THAT ARE BUILT ON EXPANSIVE CLAYS HAVE POTENTIAL FOR DIFFERENTIAL MOVEMENT.
6. ENGINEER IS NOT RESPONSIBLE FOR ANY PLUMBING SYSTEMS. POSSIBLE SETTLEMENT OF NOMINALLY COMPACTED FORMING FILL CAN NATURALLY OCCUR.
7. THIS FOUNDATION SYSTEM HAS BEEN DESIGNED TO PERFORM UNDER NATURAL SITE SOIL CONDITIONS AND SHALL NOT BE EXPECTED TO RESIST SOIL AND FOUNDATION MOVEMENTS RESULTING FROM, BUT NOT LIMITED TO, THE FOLLOWING EXTERNAL ITEMS- SEWER/PLUMBING LEAKS, EXCESSIVE AND/OR UNBALANCED IRRIGATION SYSTEMS, IMPROPER SITE DRAINAGE CONDITIONS INCLUDING WATER PONDING NEAR THE SLAB, AND TREES/SHRUBS IN CLOSE PROXIMITY TO THE SLAB FOOTPRINT. LONG TERM PERFORMANCE OF A FOUNDATION DEPENDS NOT ONLY ON ITS PROPER DESIGN AND CONSTRUCTION, BUT ALSO ON THE IMPLEMENTATION OF A PROPER FOUNDATION MAINTENANCE PROGRAM. THEREFORE, IT IS VITALLY IMPORTANT THAT THE END USER OF THE STRUCTURE BE MADE AWARE OF ALL THE FACTS REGARDING THE IMPORTANCE OF PROPER AND ONGOING FOUNDATION MAINTENANCE. A GOOD SOURCE OF THIS INFORMATION CAN BE FOUND IN DOCUMENT #FPA-SC-07-0 BY FOUNDATION PERFORMANCE ASSOCIATION POSTED ON THIER WEB SITE www.foundationperformance.org. FAILURE TO PROVIDE PROPER REGULAR MAINTENANCE CAN SEVERELY HINDER THE PERFORMANCE OF THE FOUNDATION SYSTEM.

FORMING FILL
1. UNDERSLAB FORMING FILL MATERIAL SHALL HAVE A P.I. LESS THAN 20 AND BE FREE OF ORGANICS.
2. FORMING FILL TO BE NOMINALLY COMPACTED.

CONCRETE:
1. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
2. CONCRETE SHALL BE WELL CONSOLIDATED USING PROPER MECHANICAL VIBRATION.
3. NO CONDUIT, PLUMBING, OR VENTS LARGER THAN 3" O.D. SHALL RUN IN GRADE BEAMS. CONDUIT, PIPING AND VENTS TO BE POSITIONED SO AS TO NOT REDUCE SLAB THICKNESS OR BEAM DIMENSIONS.
4. MINIMUM CONCRETE COVERAGE:
SLABS:
3/4" ADJACENT TO INTERIOR SLAB SURFACES
1 1/2" ABOVE SUB-GRADE
GRADE BEAMS, WALLS AND FOOTINGS:
1 1/2" ADJACENT TO EXTERIOR OR INTERIOR SURFACES
3" FROM SURFACES IN CONTACT WITH EARTH

REINFORCEMENT:
1. REINFORCING STEEL TO BE GRADE 60 FOR #4 AND LARGER AND GRADE 40 FOR #3.
2. AT DISCONTINUOUS STEEL ENDS, ADD CORNER BARS EQUAL TO CONT. HORIZ. STEEL SIZE WITH 30 BAR DIAMETER LEGS (24" MIN).
LAP ALL STEEL 30 BAR DIAMETERS MIN.

GENERAL NOTES

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NEW CONSTRUCTION
SAMPLE PLAN

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FOUNDATION DETAILS & NOTES

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

PAGE SIZE: ARCH 'D' 24" X 36"

S2