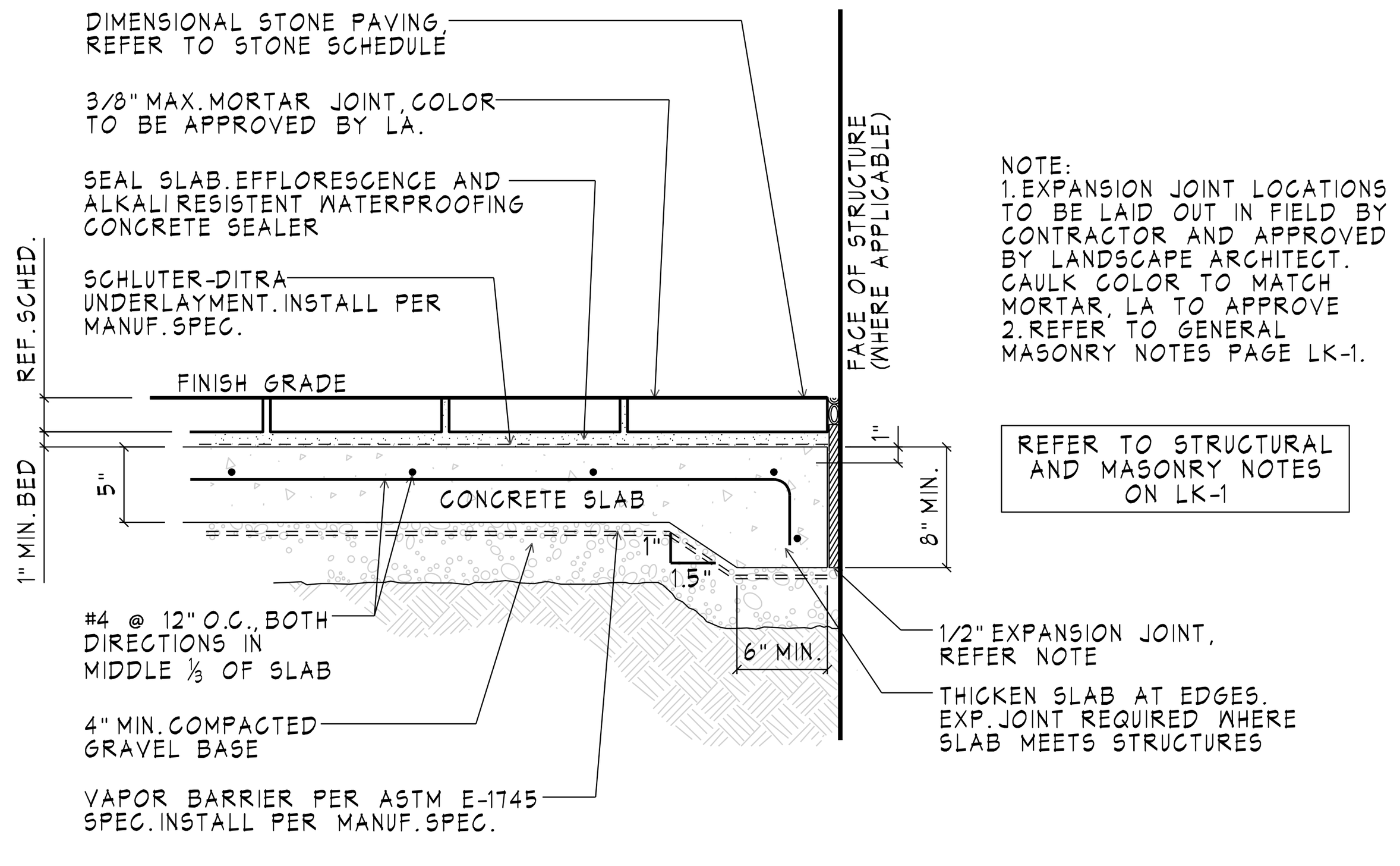
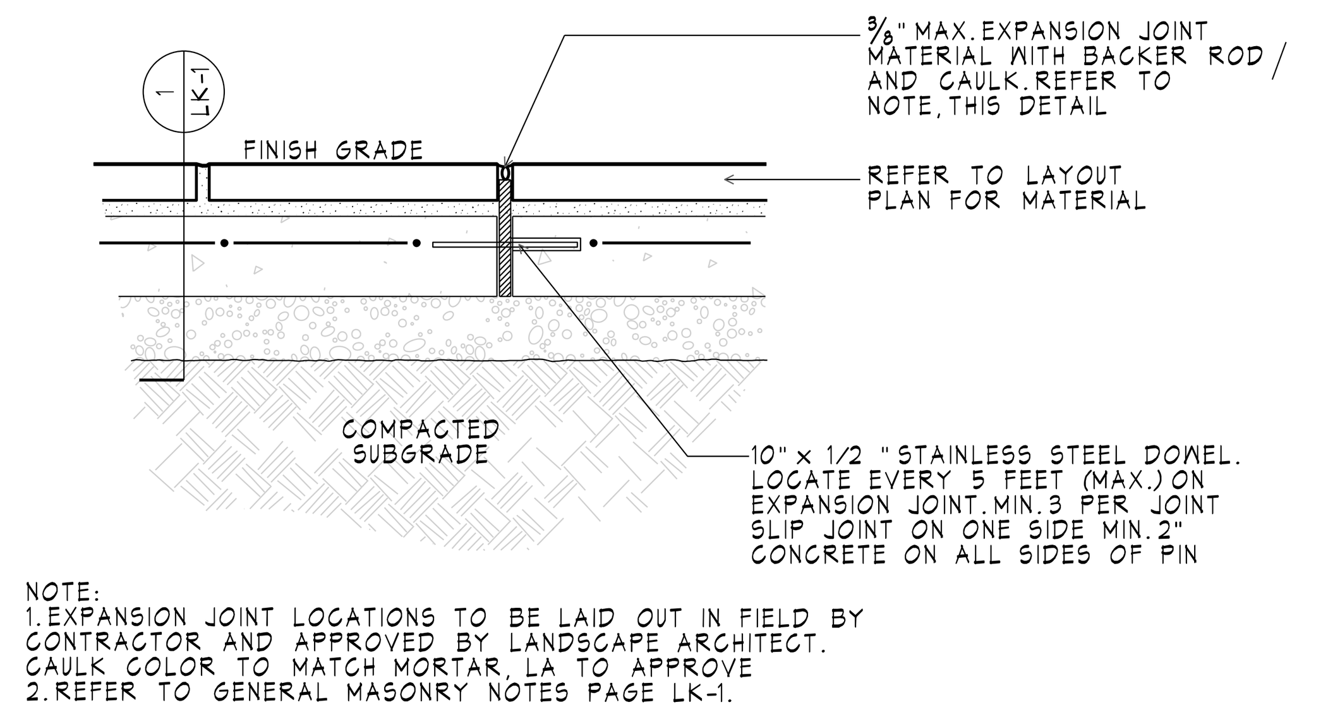


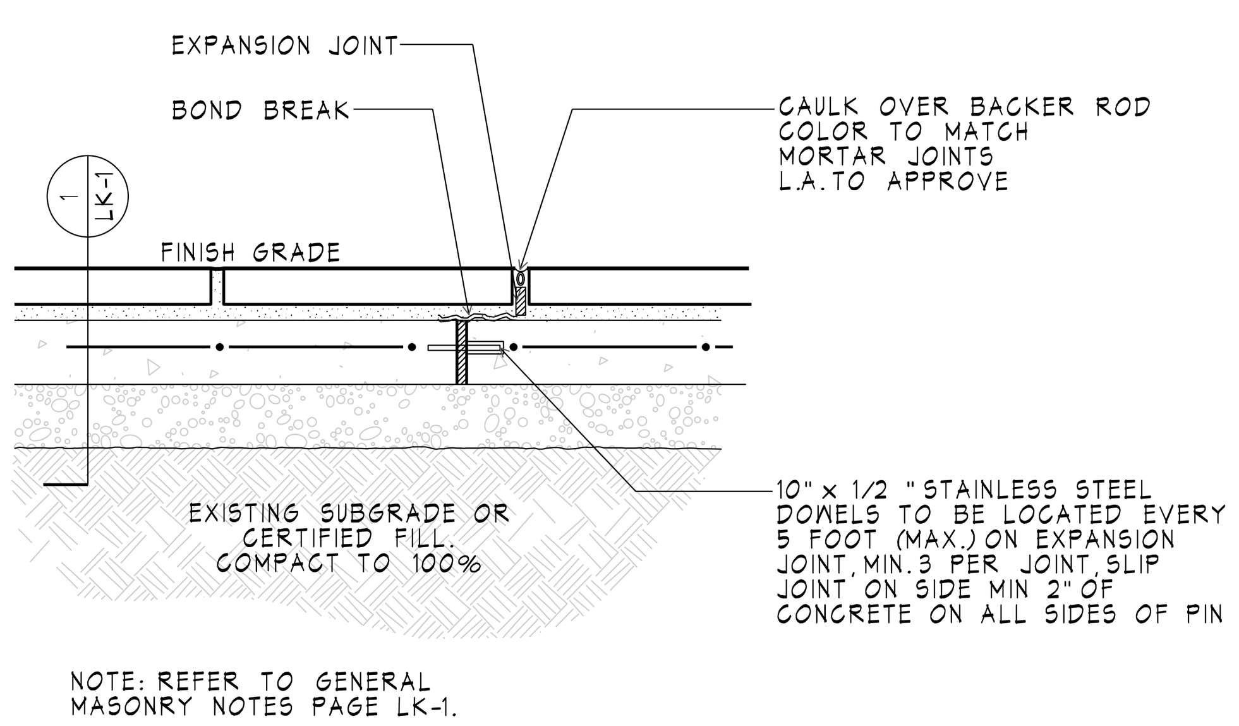
1 DIMENSIONAL STONE PAVING ON NEW SLAB DETAIL

SCALE: 1" = 1'-0"



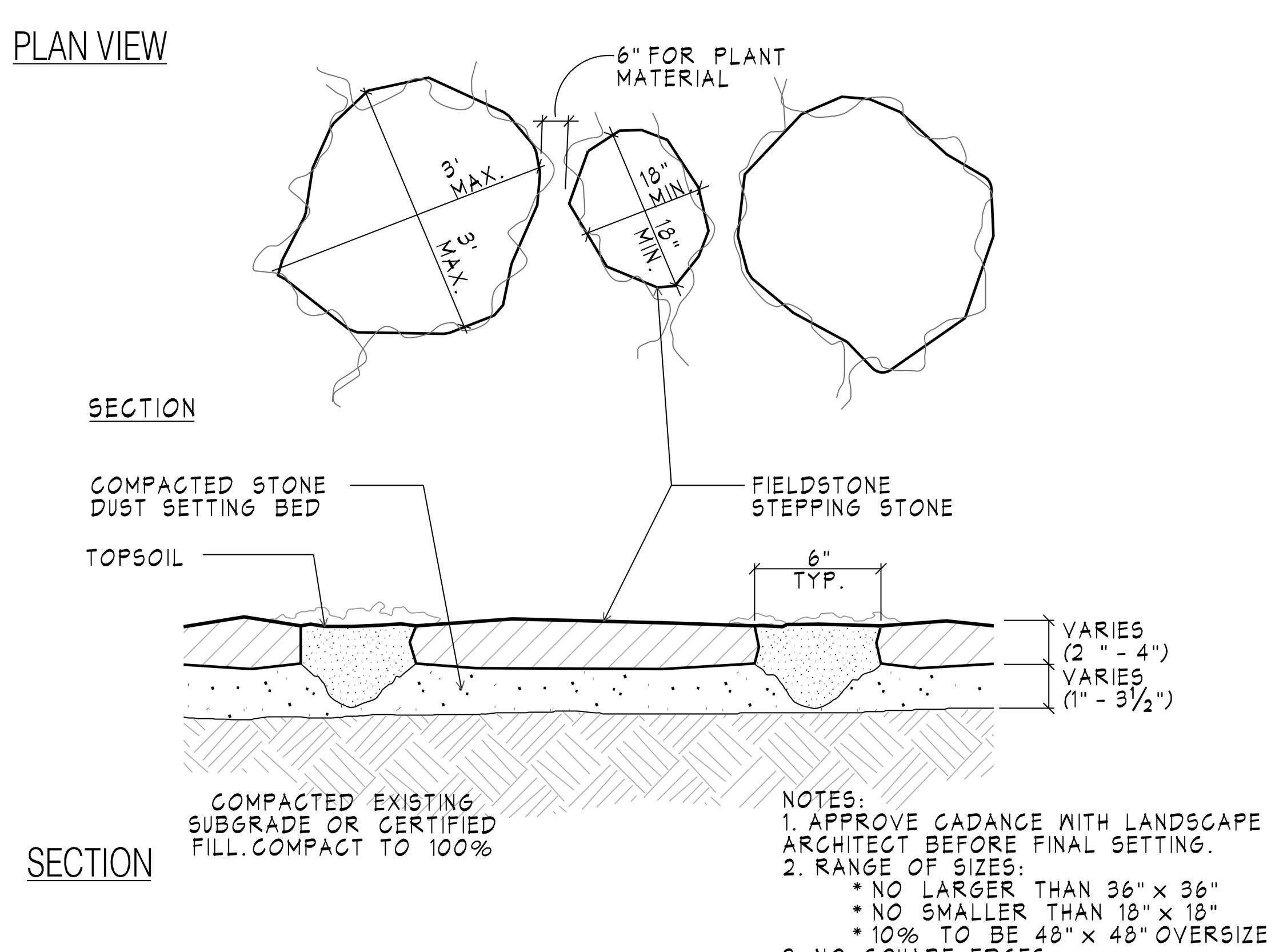
2 EXPANSION JOINT DETAIL

SCALE: 1" = 1'-0"



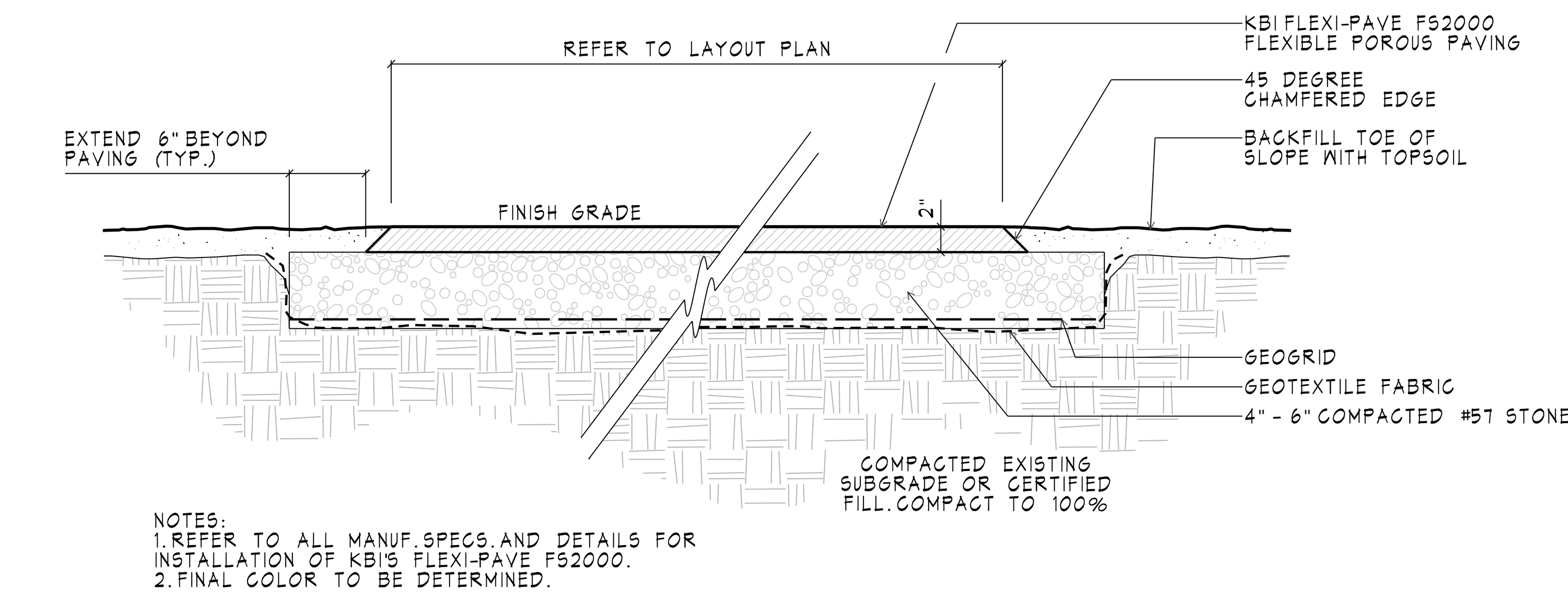
3 STAGGERED EXPANSION JOINT DETAIL

SCALE: N.T.S.



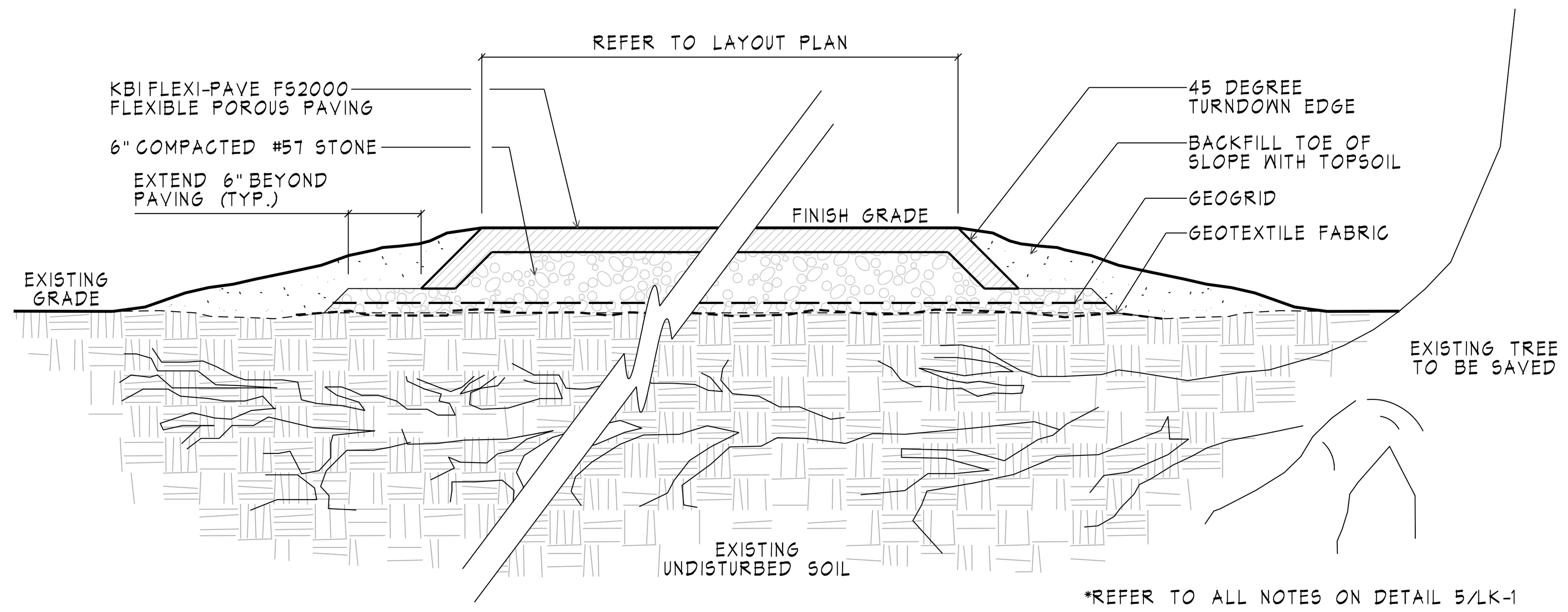
4 STAGGERED EXPANSION JOINT DETAIL

SCALE: N.T.S.



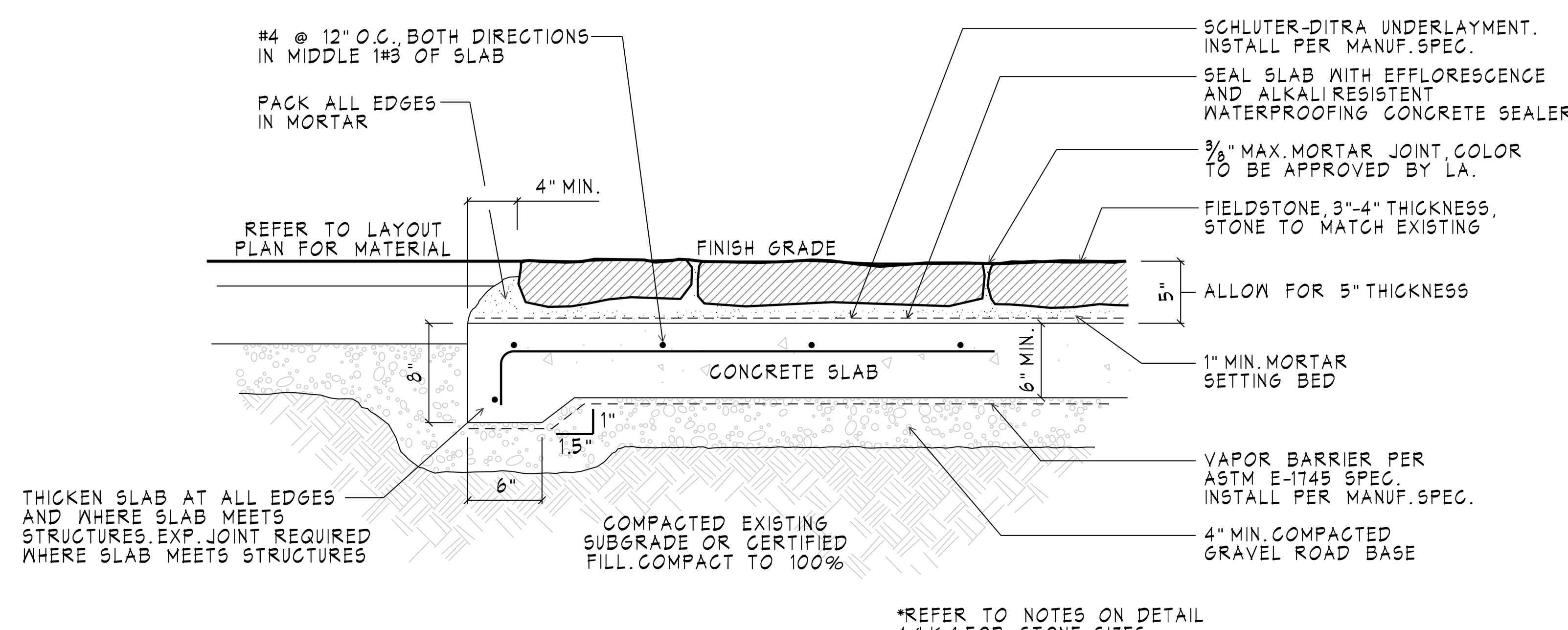
5 PERMEABLE PAVEMENT DETAIL

SCALE: 1" = 1'-0"



6 PERMEABLE PAVEMENT DETAIL IN CRITICAL ROOT ZONES

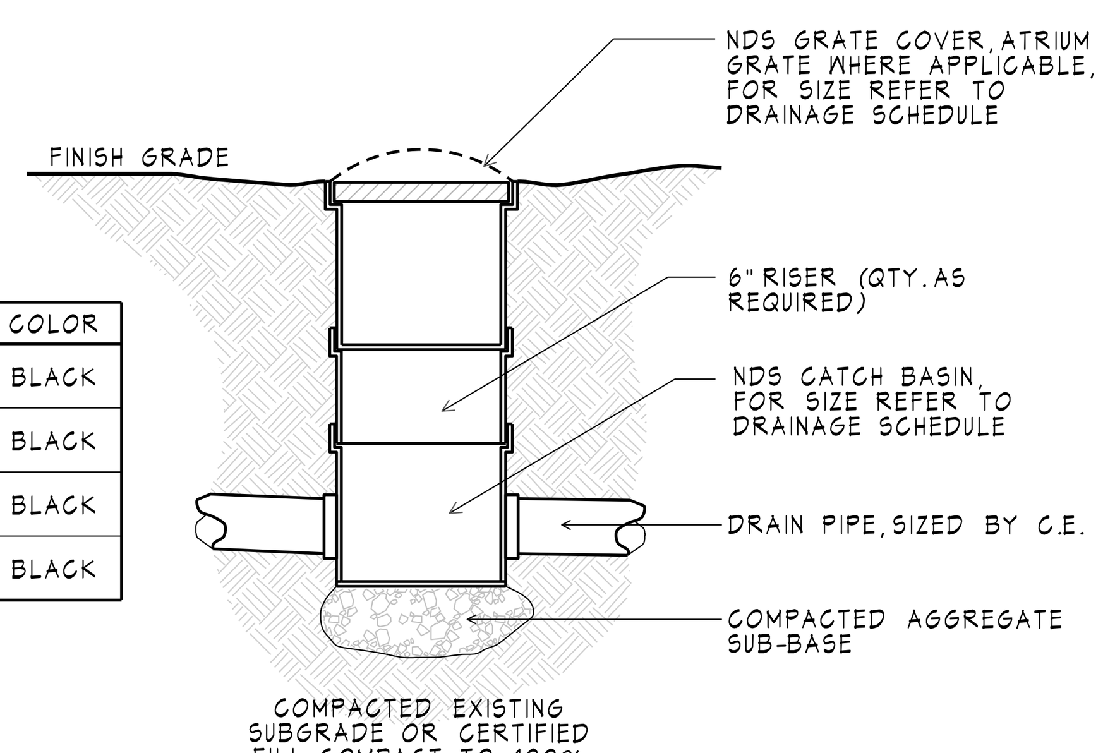
SCALE: 1" = 1'-0"



7 FIELDSTONE ON CONCRETE SLAB DETAIL

SCALE: N.T.S.

TYPE	SIZE	COVER	COLOR
A	8"	ATRIUM	BLACK
B	12"	ATRIUM	BLACK
C	12"	FLAT	BLACK
D	18"	FLAT	BLACK



8 AREA DRAIN IN PLANTING BED DETAIL

SCALE: N.T.S.

STRUCTURAL NOTES

1. **GENERAL**

A. THE STRUCTURE IS DESIGNED UNDER THE PROVISIONS OF THE 2012 INTERNATIONAL RESIDENTIAL CODE.

B. THE FOLLOWING LIVE LOADS WERE USED IN THE DESIGN:

EXTERIOR PATIO/YARD	40 PSF
DRIVEWAYS	250 PSF

C. SEE LANDSCAPE DRAWINGS FOR ANGLES, CLIPS, PLATES, ETC., AND OTHER MISCELLANEOUS ITEMS. VERIFY AND COORDINATE ALL FRAMES, OPENINGS, ETC. WITH THE MECHANICAL AND ELECTRICAL CONTRACTORS.

D. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING ITEMS. SUBMITTALS INCLUDE BUT MAY NOT BE LIMITED TO:

--CONCRETE MIX DESIGN
--REINFORCING STEEL

DO NOT USE CONTRACT DRAWINGS AS A BASE FOR SHOPS. REVIEW IS LIMITED TO DESIGN CONFORMANCE. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS.

E. CONTRACTOR SHALL COORDINATE WITH THE QUALIFIED AGENCY RETAINED BY THE OWNER TO PERFORM INSPECTION AND TESTING. INSPECTIONS REQUIRED INCLUDE, BUT MAY NOT BE LIMITED TO:

--SOILS AND FOUNDATIONS
--CONCRETE
--MASONRY

2. **EARTHWORK**

A. FOUNDATIONS ARE DESIGNED TO BEAR ON ENGINEERED FILL OR NATURAL SOIL WITH A CAPACITY OF 3000 PSF IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY HYNES & ASSOCIATES AND DATED JULY 20, 2012. THIS VALUE IS TO BE VERIFIED IN THE FIELD BY A QUALIFIED INSPECTOR.

B. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2 FOOT6 INCH BELOW FINISH EXTERIOR GRADE. WHERE REQUIRED, STEP FOOTINGS IN RATIO OF 2 HORIZONTAL TO 1 VERTICAL.

C. COMPACTED BACKFILL BELOW BUILDING SLABS AND FOOTINGS: ALL SOIL FILL MATERIAL MUST BE APPROVED BY SOILS ENGINEER PRIOR TO PLACEMENT. PROOFROLL SUBGRADE REMOVING AND REPLACING SOFT OR COMPRESSIVE MATERIALS. FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 8INCH AND COMPACTED TO MIN. 95 PERCENT OF THE DRY MAXIMUM DENSITY AS DETERMINED BY ASTM D698.

3. **CONCRETE**

A. CONCRETE CONSTRUCTION SHALL BE PER THE APPLICABLE BUILDING CODE, ACI 318 AND ACI 301, LATEST EDITIONS.

B. CONCRETE SHALL ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI PER ASTM A39.

C. VERIFY CONCRETE STRENGTHS WITH A MINIMUM OF ONE SET OF SIX COMPRESSION CYLINDERS (2 @ 7 DAYS, 2 @ 28, 2 SPARE) PER DAY WITH AN ADDITIONAL SET FOR EACH 100 YARDS OF CONCRETE.

D. EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED TO PROVIDE AN AIR CONTENT OF 6+/-1 PERCENT BY VOLUME.

E. PROVIDE CLEAR DISTANCE TO OUTERMOST REINFORCING AS FOLLOWS:

BEAMS AND SLABS EXPOSED TO WEATHER	2”
FOOTINGS (BOTTOM)	3”
WALLS	2”

F. REINFORCING STEEL SHALL CONFORM TO A615GR60; PLACING PLANS AND SHOP FABRICATION DETAILS SHALL BE IN ACCORDANCE WITH "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". FURNISH SUPPORT BARS AND ACCESSORIES IN ACCORDANCE WITH C.R.S.I. STANDARDS.

G. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING IN WALLS AND FOOTINGS. SPLICE LAPS SHALL BE A MINIMUM OF 30 BAR DIAMETERS, UNLESS NOTED OTHERWISE. PROVIDE DOWELS BETWEEN FOOTINGS AND WALLS OR PIERS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING.

4. **MASONRY**

A. MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE AND THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" TMS 402/ACI-530/ASCE 5 AND THE “SPECIFICATIONS FOR MASONRY STRUCTURES”TMS 602/ACI-530.1/ASCE 6, LATEST EDITIONS.

B. MASONRY TO CONFORM TO THE FOLLOWING SPECIFICATIONS:

HOLLOW LOADBEARING C.M.U	ASTM C90
CONCRETE BUILDING BRICK	ASTM C55, GRADE A
MORTAR	ASTM C270, TYPE M OR S
GROUT	ASTM C476

C. MASONRY ASSEMBLIES SHALL HAVE COMPRESSIVE STRENGTH (F'M) GREATER THAN OR EQUAL TO 1350 PSI.

D. WALLS SHALL BE CONSTRUCTED USING A FULL BED OF MORTAR. VERTICAL REINFORCING SHALL BE GROUTED IN PLACE WITH 2500 PSI GROUT (GROUT SLUMP SHALL FALL BETWEEN 8 AND 11 INCHES) POUR HEIGHT AND LIFT HEIGHT SHALL NOT EXCEED 5 FEET - 0 INCHES.

E. PROVIDE CONTINUOUS HORIZONTAL JOINT REINFORCING IN MASONRY WALLS AT 16 INCHES O.C.

F. CAVITY WALLS OF BRICK AND BLOCK SHALL BE CONSTRUCTED WITH JOINT REINFORCING IN MASONRY AND ADJUSTABLE METAL ANCHORS TO BRICK.

G. MASONRY WALLS SHALL HAVE CONTROL JOINTS AT 30 FEET ON CENTER UNLESS NOTED OTHERWISE.

H. REINFORCING STEEL SHALL CONFORM TO ASTM A615-GR60. LAP BARS A MINIMUM OF 48 BAR DIAMETERS. GROUT ALL REINFORCED CORES SOLID.

5. **STEEL**

A. STEEL CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE AND SHALL CONFORM TO AISC 360. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

STEEL PLATES, CHANNELS AND ANGLES	A36

B. WELDING OF STRUCTURAL STEEL SHALL BE WITH E70XX ELECTRODES

WARNING: THE STRUCTURAL INTEGRITY OF THE BUILDING SHOWN ON THESE PLANS IS DEPENDENT UPON COMPLETION ACCORDING TO PLANS AND SPECIFICATIONS. STRUCTURAL MEMBERS ARE NOT SELFBRACING UNTIL PERMANENTLY AFFIXED TO THE STRUCTURE. THE STRUCTURAL ENGINEERS ASSUME NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION.

GENERAL MASONRY NOTES

1. PRIOR TO CONSTRUCTION, CONTRACTOR TO PROVIDE A 4'X6' SAMPLE OF EACH PAVING TYPE. SAMPLES SUBJECT TO REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT FOR, BUT NOT LIMITED TO, MATERIAL, COLOR, TEXTURE, COURSING, JOINT WORK, AND GENERAL WORKMANSHIP.

2. PRIOR TO CONSTRUCTION, CONTRACTOR TO PROVIDE A FULL HEIGHT (AS INDICATED ON GRADING PLAN), BY 6' LONG SECTION OF EACH WALL TYPE. SAMPLES SUBJECT TO REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT FOR, BUT NOT LIMITED TO, MATERIAL, COLOR, TEXTURE, COURSING, JOINT WORK, AND GENERAL WORKMANSHIP.

3. SAMPLE WALL AND PAVING INSTALLATIONS SHALL CONTAIN ENOUGH STONE TO ILLUSTRATE COLOR VARIATION AND RANGE OF MATERIAL.

4. SAMPLE WALL AND PAVING INSTALLATIONS SHALL CONTAIN APPLICABLE DETAILS AND MATERIALS INCLUDING BUT NOT LIMITED TO PATTERN, EDGE RESTRAINT, MORTAR, SUBBASE, BASE, BED, TIES, ANCHORS, FASTENERS, WEEPS, AND JOINTS.

5. PAVER STORAGE: STORE OFF GROUND AND COVER TO PREVENT CONTAMINATION BY MUD, DUST, AND MATERIALS LIKELY TO CAUSE STAINING.

6. MORTAR: ALL MORTAR SHALL BE MODIFIED WITH ACRYL 60 OR APPROVED ALTERNATIVE. STORAGE SHALL PROTECT MORTAR MATERIALS AGAINST CONTAMINATION AND MOISTURE.

7. ALL ACCESSORY MASONRY MATERIALS SHALL BE SUBMITTED FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.

8. PAVEMENT TYPE: REFER TO LAYOUT PAGES, STONE SCHEDULE, AND DETAILS.

9. REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONS, COMPACTION, AND REINFORCING OF CONCRETE.

10. DRAINTILE: 4" CORRUGATED PERFORATED DRAINTILE WRAPPED IN FILTER FABRIC. SET 2"-3" ABOVE FINISHED GRADE ON LOW SIDE OF WALL. DAYLIGHT PIPE IN LOCATION APPROVED BY LANDSCAPE ARCHITECT OR THROUGH WALL WEEP SET 8'-0" O.C. VISIBLE WEEPS SHALL DAYLIGHT WITH TERRA COTTA COLLAR (OR APPROVED EQUAL). VISIBLE PVC WEEPS WILL NOT BE ACCEPTED. NDS EZ-FLOW IS AN ACCEPTABLE ALTERNATIVE.

11. WALL BRICK: ALL WALL BRICK, RISER BRICKS, AND MORTAR JOINTS TO MATCH HOUSE. INSTALLATION PER APPROVED SITE SAMPLES. LANDSCAPE ARCHITECT TO APPROVE.

12. DAMP PROOFING: ENTIRE CMU WALL AND CONCRETE SLABS TO BE DAMP PROOFED WITH THORO-SEAL (OR APPROVED EQUAL). IN PAVING APPLICATIONS, INSTALL SCHLUTER-DITRA BOARD (OR APPROVED EQUAL) BETWEEN CONCRETE SLAB AND MORTAR. INSTALL MIRA DRAIN BOARD (OR APPROVED EQUAL) BEHIND BRICK OR STONE WALL VENEER AND BETWEEN STRUCTURAL WALL AND MORTAR. CONTRACTOR RESPONSIBLE FOR INSTALLING APPROPRIATE DRAIN TILES, CAVITY WEEPS, ETC, TO ALLOW WATER TO ESCAPE.

13. MASON'S PRICING SHALL INCLUDE MATERIAL COST FOR ALL BRICK. STONE PAVEMENT SHALL BE PROVIDED BY G.C. MASON TO PROVIDE COST FOR UNLOADING AND INSPECTION OF STONE. MASON TO SUPPLY LABOR AND MATERIAL COST FOR INSTALLATION OF STONE.

arentz
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BROWN RESIDENCE
317 MANSION DRIVE
ALEXANDRIA, VIRGINIA 22302

ISSUE DATE: 06-28-2013

DETAILS

SCALE: AS SHOWN

BID SET

LK-1

JOB NO. 1235