

# ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION- LANDSCAPE-HARDSCAPE CONSTRUCTION



GRIMBALL  
& ASSOCIATES  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
COLUMBIA, SC 29205 (803) 786-9525



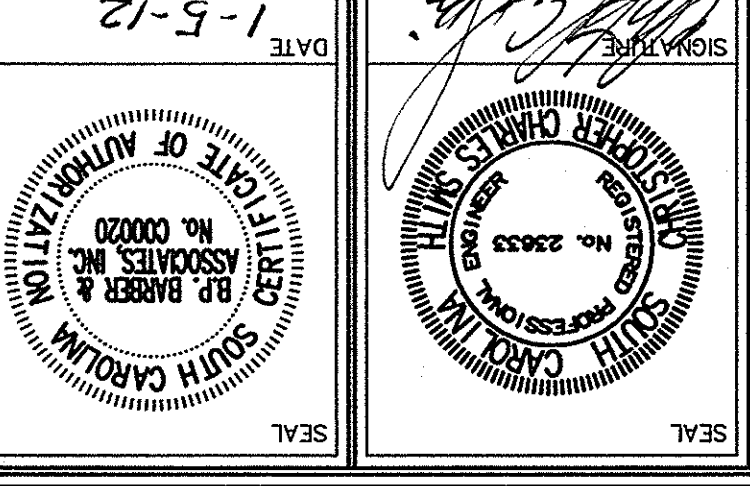
BP Barber  
Engineering • Experience • Excellence  
101 RESEARCH DRIVE (29203-9389)  
P.O. BOX 116  
COLUMBIA, S.C. 29202-1116  
(803) 254-4400

BID PLANS

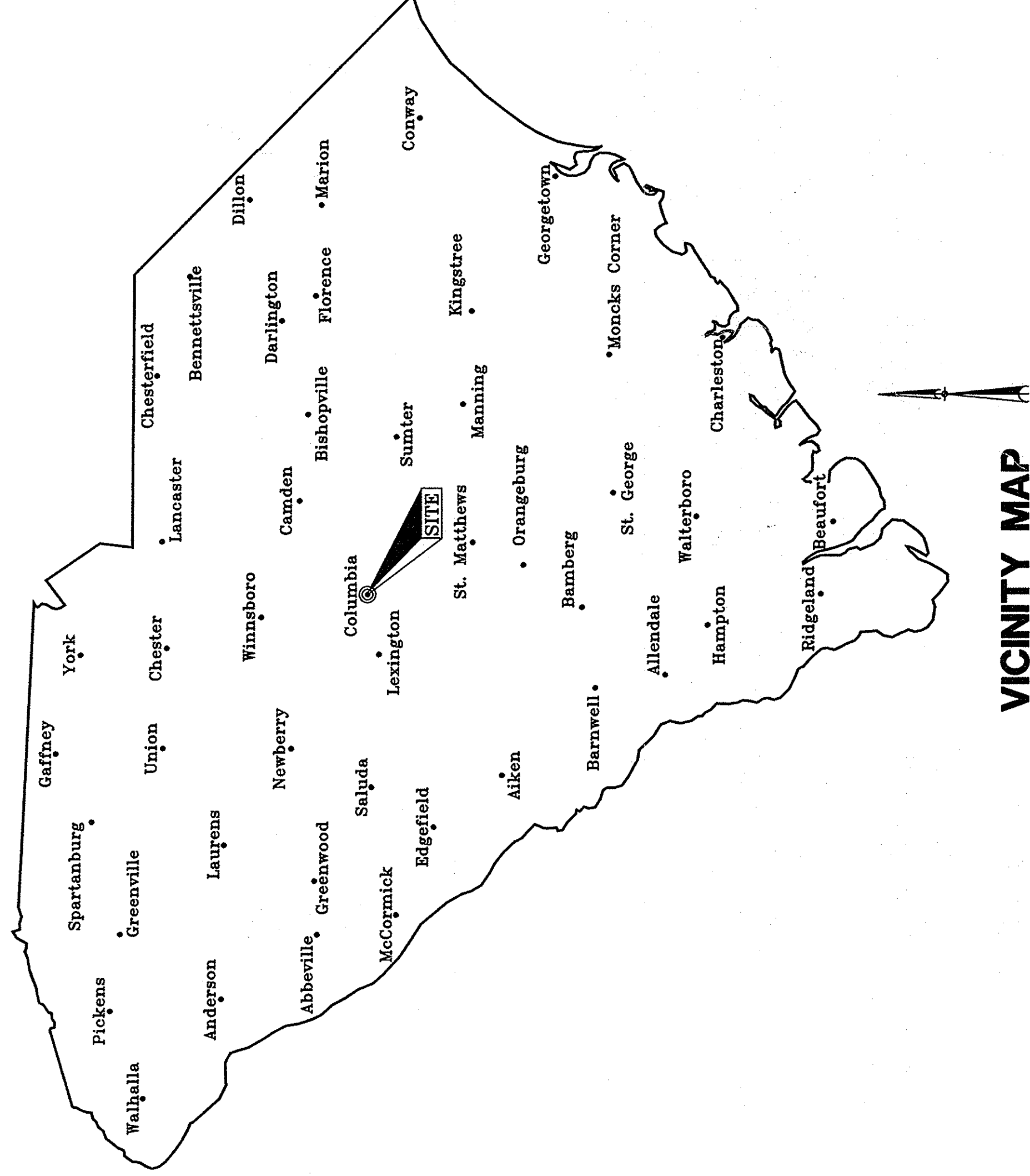
JANUARY 5, 2012

PROJECT NO.  
07578

FILE NO.  
35,786-888



**CONTRACTOR LICENSING NOTES:**  
1. THE PRIME BIDDER SHALL BE PROPERLY LICENSED IN ACCORDANCE WITH THE SOUTH CAROLINA CONTRACTORS' LICENSING LAWS.  
2. THE PRIME BIDDER SHALL BE LICENSED TO PERFORM A MINIMUM OF 40% OF THE LICENSED WORK OF THE PROJECT.



VICINITY MAP

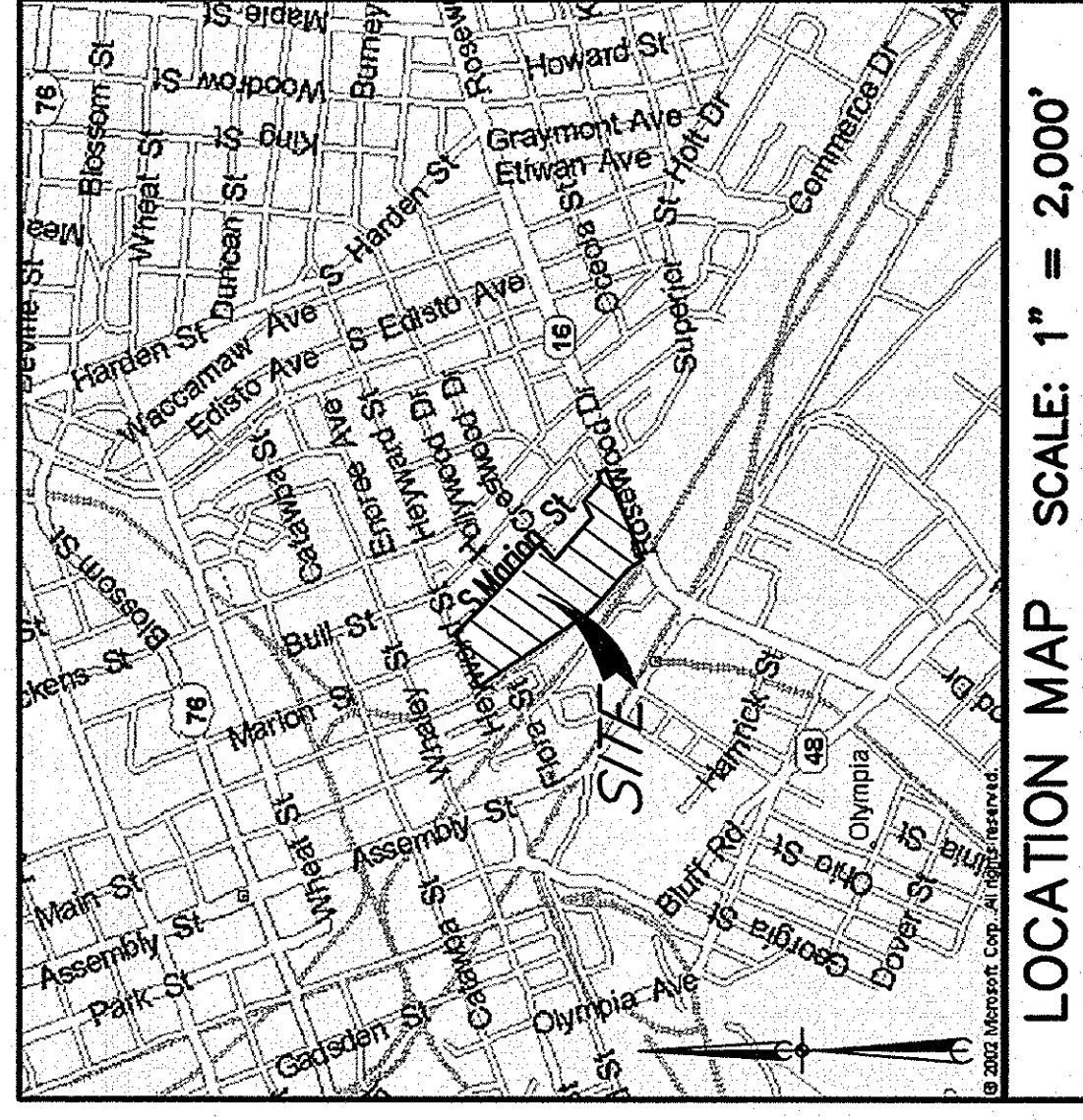
SHEET INDEX

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State Project Number:  
H27-6056-MJ-C

OWNER/DEVELOPER

UNIVERSITY OF SOUTH CAROLINA  
743 GREENE STREET  
COLUMBIA, SC 29208  
TELE: 803-777-5811  
FAX: 803-777-3126  
MS. ANN DERRICK



LOCATION MAP SCALE: 1" = 2,000'

**ORIGINATION OF VERTICAL DATUM:**  
 NNS MONUMENT - V 136 1978  
 PID NO. DE1381  
 ELEVATION = 168.15' (NAVD88)

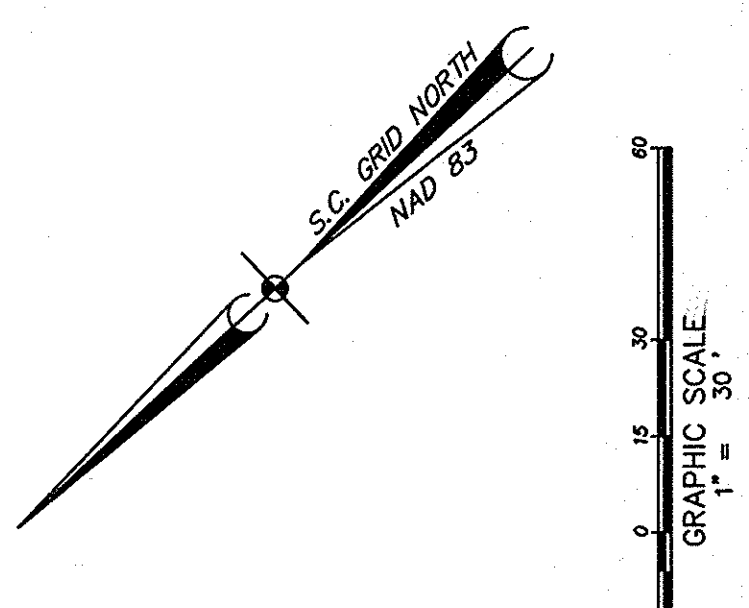
- REFERENCE IS MADE TO THE FOLLOWING:
- A PLAT OF PROPERTY SURVEYED FOR ATLANTIC BUILDING CO. BY TOMLINSON ENGINEERING CO. DATED OCTOBER 7, 1925, AND RECORDED IN PLAT BOOK F, PAGE 29 (FILE NO. 947-82).
  - A PLAT OF PROPERTY SURVEYED FOR PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY BY TOMLINSON ENGINEERING COMPANY DATED NOVEMBER 30, 1935, AND RECORDED IN PLAT BOOK 1, PAGE 304.
  - A MAP OF PROPERTY OF PACIFIC MILLS BY TOMLINSON ENGINEERING COMPANY DATED OCTOBER, 1939, AND RECORDED IN PLAT BOOK 1, PAGE 78.
  - A PLAT OF PROPERTY SURVEYED FOR SOUTHERN HOMES, INC. BY WINGFIELD & RUDISILL DATED NOVEMBER 24, 1946, AND RECORDED IN PLAT BOOK L, PAGE 70.
  - A PLAT OF PROPERTY SURVEYED FOR JOHN J. BARKER BY WINGFIELD & RUDISILL DATED MAY 19, 1950, AND RECORDED IN PLAT BOOK 1, PAGE 304.
  - A PLAT OF PROPERTY SURVEYED FOR MELTON KLOMAN & HELENE F. KLOMAN BY W. FRANK McALLAY, JR. DATED JUNE 16, 1986, AND RECORDED IN PLAT BOOK 51, PAGE 163.
  - A PLAT OF PROPERTY SURVEYED FOR WILLIAM B. HOTT & ELOISE C. HOTT BY COX AND DINKINS, INC. DATED APRIL 9, 1987, AND RECORDED IN PLAT BOOK 51, PAGE 619.3.
  - A PLAT OF PROPERTY SURVEYED FOR WILLIAM B. HOTT & ELOISE C. HOTT BY COX AND DINKINS, INC. DATED APRIL 9, 1987, AND RECORDED IN PLAT BOOK 51, PAGE 619.4.
  - A PLAT OF PROPERTY SURVEYED FOR JOHN A. CARULLO, JR. & CHARLES K. SUDETH BY HULEY G. SHUMPERT DATED APRIL 14, 1988, AND RECORDED IN PLAT BOOK 52, PAGE 1067.
  - BOUNDARY AND TOPOGRAPHIC SURVEY OF THE UNIVERSITY OF SOUTH CAROLINA SPORTS COMPLEX BY BP BARBER AND ASSOCIATES, INC. (FILE NO. 34-172-951) DATED MAY 16, 2007.
  - SCOOT HIGHWAY PLANS: DOCKET NO. 40369, SHEET 4  
 DOCKET NO. 40441, SHEET 21  
 DOCKET NO. 40766, PROJECT NO. M-TOM 5016(12), SHEETS 14-16
  - RICHLAND COUNTY TAX ASSESSOR'S MAP NUMBERS:  
 11301-08-01 11305-01-01  
 11301-08-02 11305-01-02  
 11301-08-03 11305-03-19  
 11301-08-04 11305-03-19  
 11301-08-05 11305-14-19  
 11301-08-07

MH-1 INV (A)=254.48' INV (B)=243.92' INV (C)=243.91'	MH-2 229.03' INV (A)=218.13' INV (B)=218.98' INV (C)=218.90' INV (D)=218.87'	MH-3 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-4 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-5 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-6 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-7 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-8 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-9 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-10 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-11 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-12 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-13 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-14 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-15 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-16 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-17 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-18 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-19 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-20 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-21 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-22 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-23 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-24 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-25 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-26 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-27 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-28 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-29 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-30 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-31 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'	MH-32 INV (A)=228.05' INV (B)=227.43' INV (C)=227.43' INV (D)=227.43'
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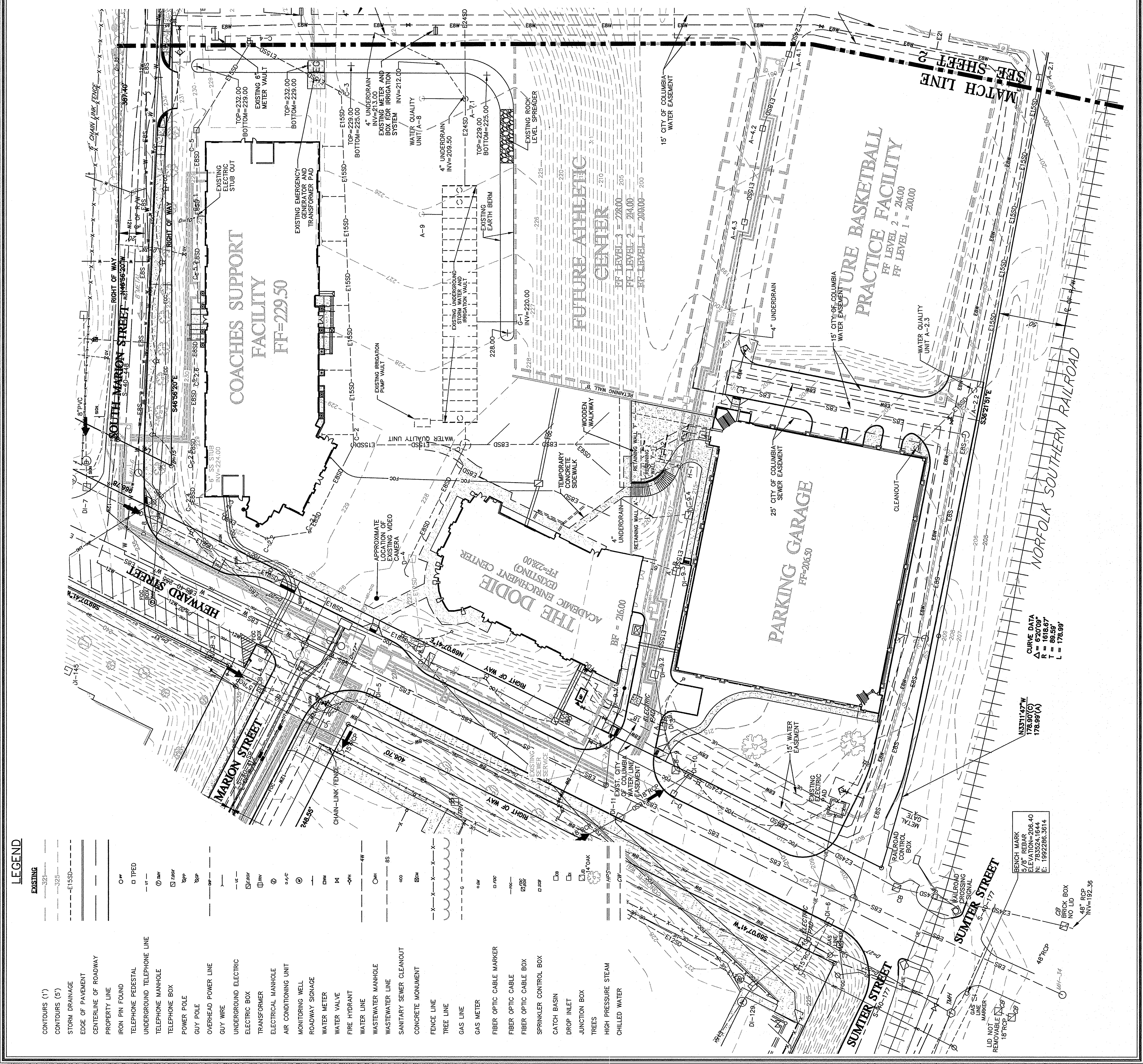
**EXISTING SANITARY SEWER STRUCTURE SCHEDULE**

**EXISTING CONDITIONS NOTES**

- Contractor shall verify all existing conditions prior to starting work. If any conditions are not shown on these drawings, the contractor shall be responsible for their discovery.
- Contractor shall mark and protect all existing utilities to remain prior to starting construction.
- Existing conditions shown on these drawings were compiled from field survey and review of available record drawings. Unknown conditions may exist that are not documented herein. The contractor shall be responsible for their discovery or discovery of any unknown existing conditions prior to beginning any work.



State Project Number:  
**H27-6056-MJ-C**



- LEGEND**
- EXISTING**
- CONTOURS (1')
  - CONTOURS (5')
  - STORM DRAINAGE
  - EDGE OF PAVEMENT
  - CENTERLINE OF ROADWAY
  - PROPERTY LINE
  - IRON PIN FOUND
  - TELEPHONE PEDESTAL
  - UNDERGROUND TELEPHONE LINE
  - TELEPHONE MANHOLE
  - TELEPHONE BOX
  - POWER POLE
  - GUY POLE
  - OVERHEAD POWER LINE
  - GUY WIRE
  - UNDERGROUND ELECTRIC
  - ELECTRIC BOX
  - TRANSFORMER
  - ELECTRICAL MANHOLE
  - AIR CONDITIONING UNIT
  - MONITORING WELL
  - ROADWAY SIGNAGE
  - WATER METER
  - WATER VALVE
  - FIRE HYDRANT
  - WATER LINE
  - WASTEWATER MANHOLE
  - WASTEWATER LINE
  - SANITARY SEWER CLEANOUT
  - CONCRETE MONUMENT
  - FENCE LINE
  - TREE LINE
  - GAS LINE
  - GAS METER
  - FIBER OPTIC CABLE MARKER
  - FIBER OPTIC CABLE
  - FIBER OPTIC CABLE BOX
  - SPRINKLER CONTROL BOX
  - CATCH BASIN
  - DROP INLET
  - JUNCTION BOX
  - TREES
  - HIGH PRESSURE STEAM
  - CHILLED WATER

CURVE DATA  
 A = 620.00'  
 R = 80.59'  
 L = 178.89'

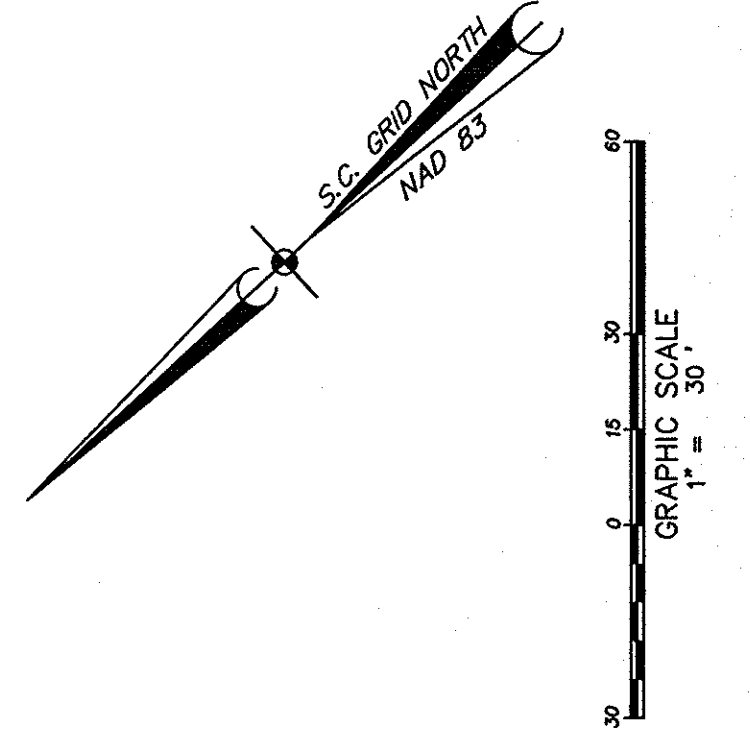
BENCH MARK  
 5/8" REBAR  
 ELEVATION=206.40  
 N= 1922266.3514  
 E= 1922266.3514

48" COX BOX  
 NO LID  
 INV=192.36



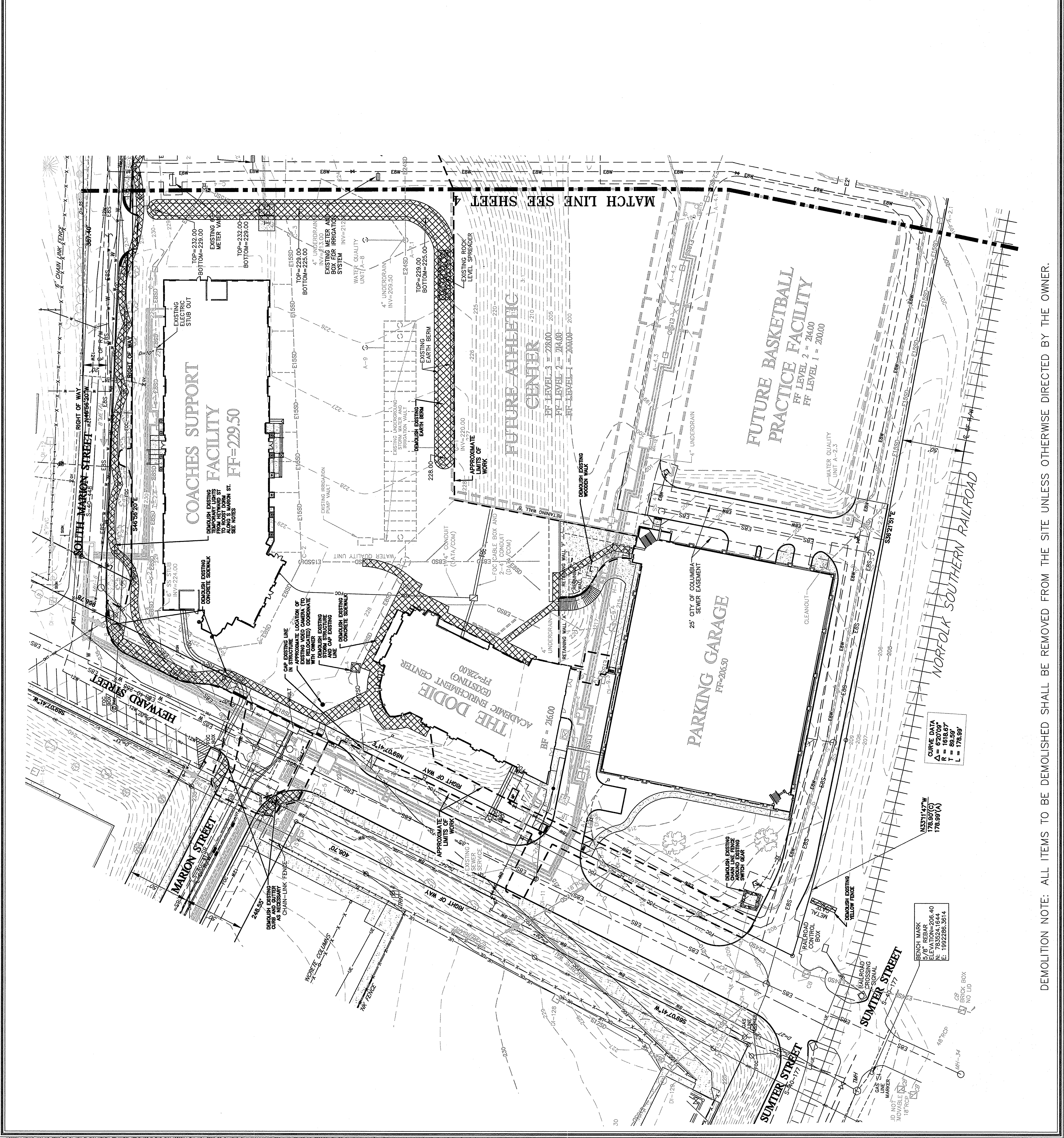
<b>REVISIONS</b> NO. DESCRIPTION DATE BY	<b>APPROVALS</b> PROJECT ENGR: _____ DESIGNED BY: _____ CHECKED BY: _____ DATE: 1-5-12	 	<b>BP Barber</b> Engineering • Experience • Excellence FLORENCE • CHARLOTTE • CHARLESTON COLUMBIA • GREENVILLE • SAVANNAH	DATE: JANUARY 5, 2012 SCALE: 1" = 30' <b>DEMOLITION PLAN</b> <b>SHEET 1</b>	IN THE CITY OF COLUMBIA RICHLAND COUNTY, S.C. <b>UNIVERSITY OF SOUTH CAROLINA</b> <b>LANDSCAPE-HARDSCAPE</b> DEVELOPMENT CONSTRUCTION ATHLETIC VILLAGE INFRASTRUCTURE	SHEET TITLE PROJECT NO. 34,357-882 DRAWING NO. 2003, 2039 SHEET 27 OF 27 PROJECT NO. 07578 FILE NO. 35,786-888
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- DEMOLITION NOTES**
1. Conduct a comprehensive evaluation of all items to be demolished. Consult with Engineer to determine proper demolition methods and safety precautions. Concrete will be crushed and graded for use as pavement base course.
  2. Asphalt pavements, to be crushed and graded for use as pavement base course.
  3. Remove everything within the Limits of Demolition, unless noted otherwise.
  4. Existing trees shall be protected with tree protection fencing as shown on detail sheet.
  5. Sanitary sewer and water service to Root Dorn and Building #199 shall not be interrupted unless the structure.
  6. All buildings and/or slab demolition shall include removal of any foundations which are part of the structure.
  7. All concrete sidewalks around the Dods shall be demolished and replaced with brick pavers as shown on the Landscaping Plans, at the end of the project, maintain access to the Dods at all times.
  8. Refer to detail A on sheet 22 for details regarding demo around Root Dorn and South Marion St.
  9. Provide hand surface temporary pedestrian access between garage and Dods during construction.
  10. Contractor will maintain a lighted pedestrian pathway during construction along South Marion St.
  11. Provide hand surface from Tennis Facility to sidewalk near building 199 at all times.

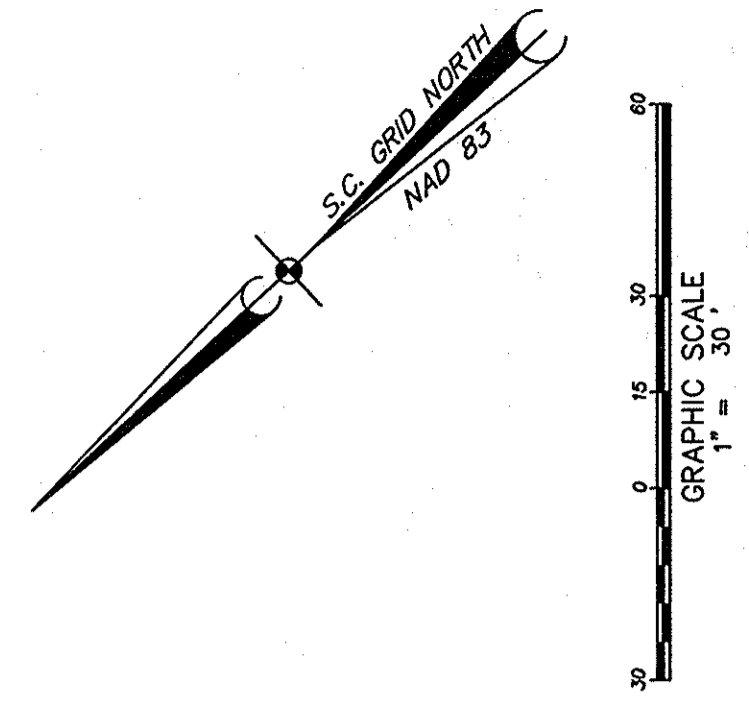


State Project Number:  
**H27-6056-MJ-C**

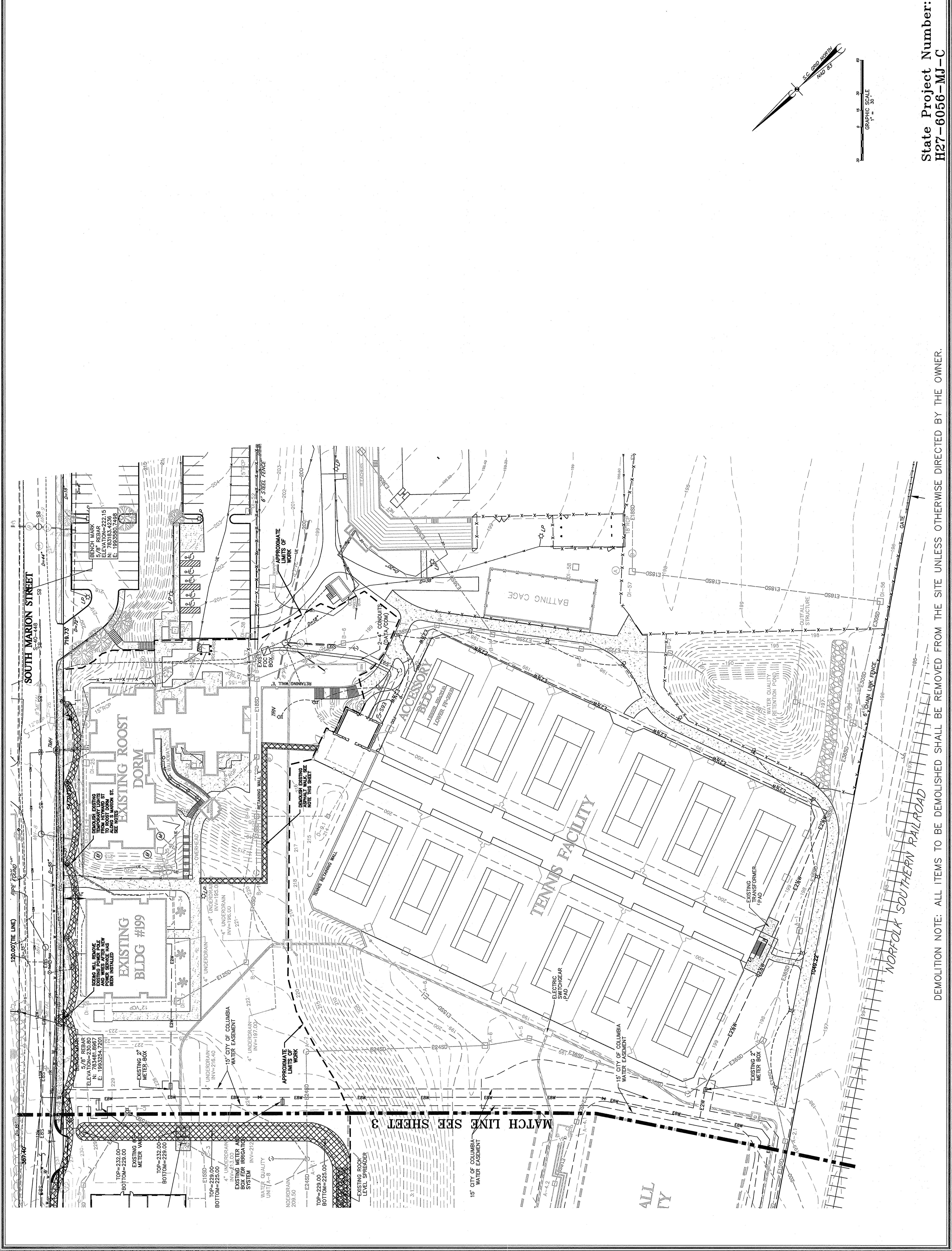
DEMOLITION NOTE: ALL ITEMS TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.



REVISIONS NO. DESCRIPTION DATE BY	APPROVALS PROJECT ENG. CCS DESIGNED BY: CCS CHECKED BY: CCS DRAWN BY: CCS APPROVED: CCS DATE: 1-5-12	STATE OF SOUTH CAROLINA PROFESSIONAL ENGINEER No. 23633 B.P. BARBER & ASSOCIATES, INC.	STATE OF SOUTH CAROLINA PROFESSIONAL ENGINEER No. 23633 B.P. BARBER & ASSOCIATES, INC.	Engineering • Experience • Excellence <b>BP Barber</b> COLUMBIA • GREENVILLE • CHARLESTON FLORENCE • CHARLOTTE • SPANNAH	SHEET TITLE <b>DEMOLITION PLAN</b> <b>SHEET 2</b>	PROJECT ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION <b>CONSTRUCTION</b> <b>LANDSCAPE-HARDSCAPE</b> UNIVERSITY OF SOUTH CAROLINA RICHLAND COUNTY, S.C.	SHEET <b>4</b> OF <b>27</b> DWG. NAME SHEET NO. 2039 DATE 5/4/2012 PROJECT NO. 07578 FILE NO. 35.786-888
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State Project Number:  
**H27-6056-MJ-C**



DEMOLITION NOTE: ALL ITEMS TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.

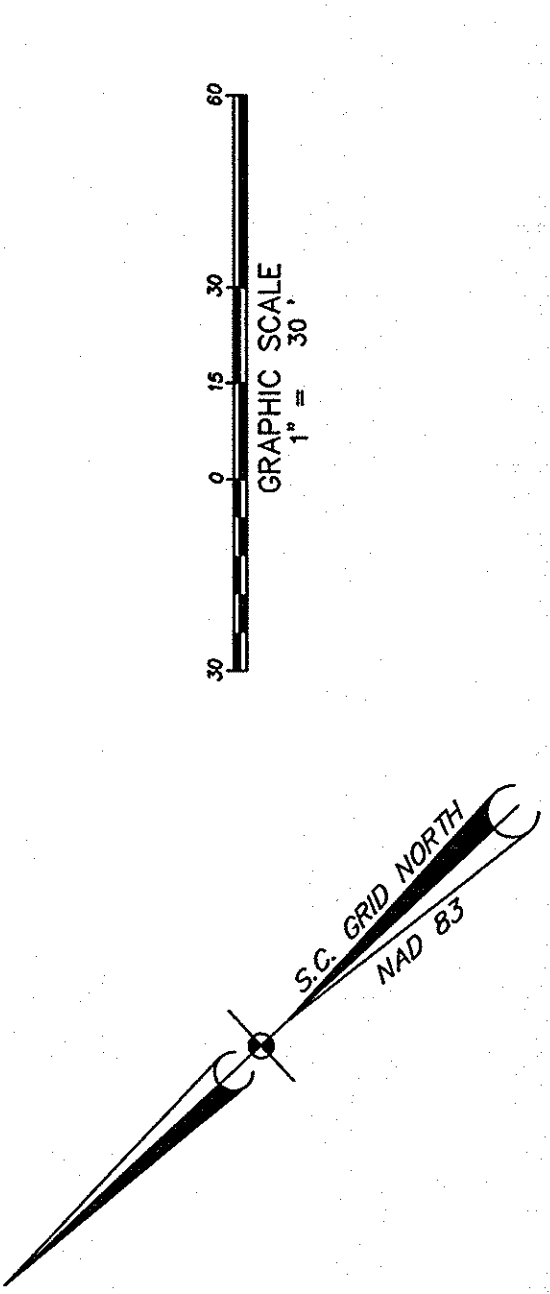
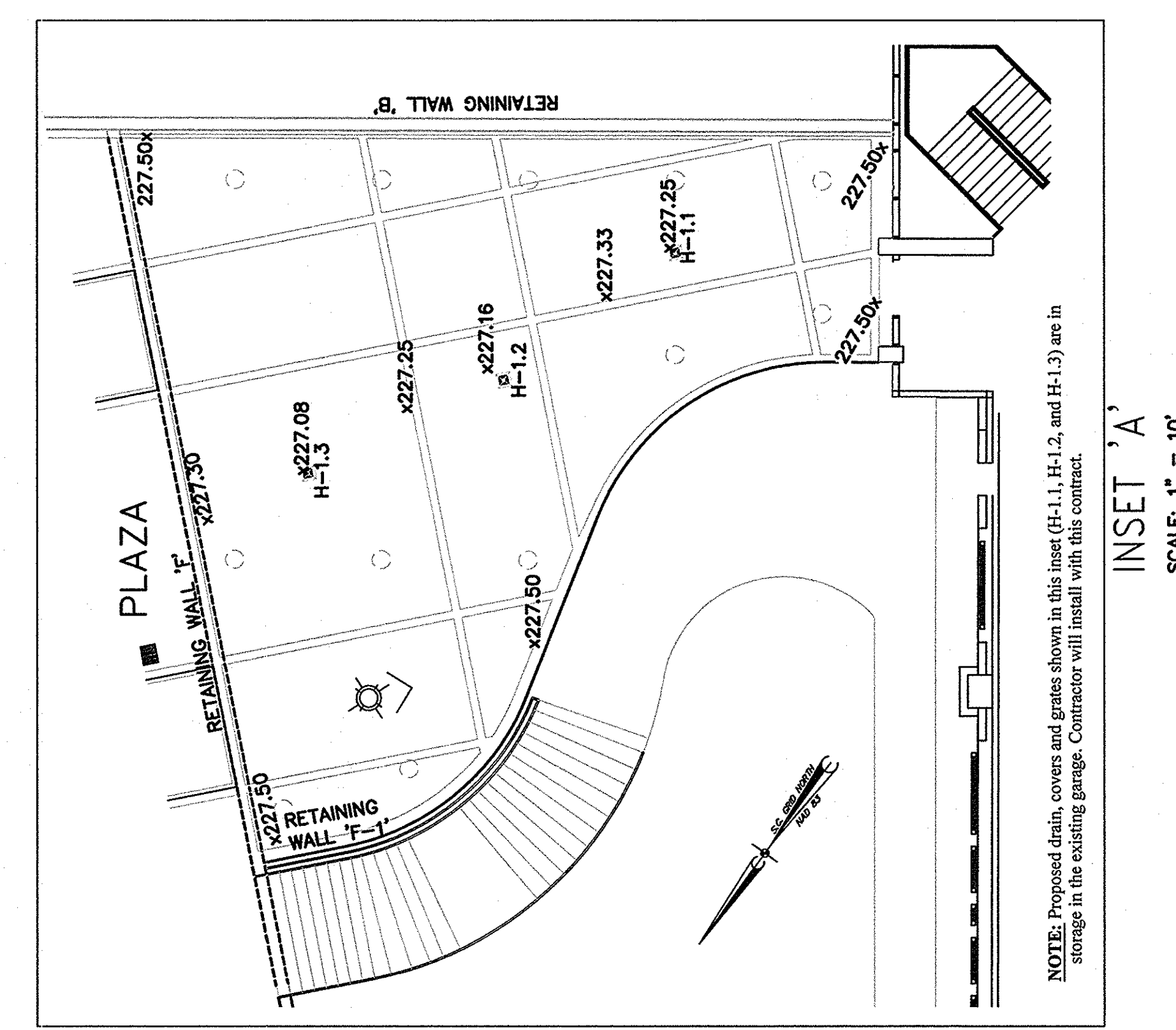
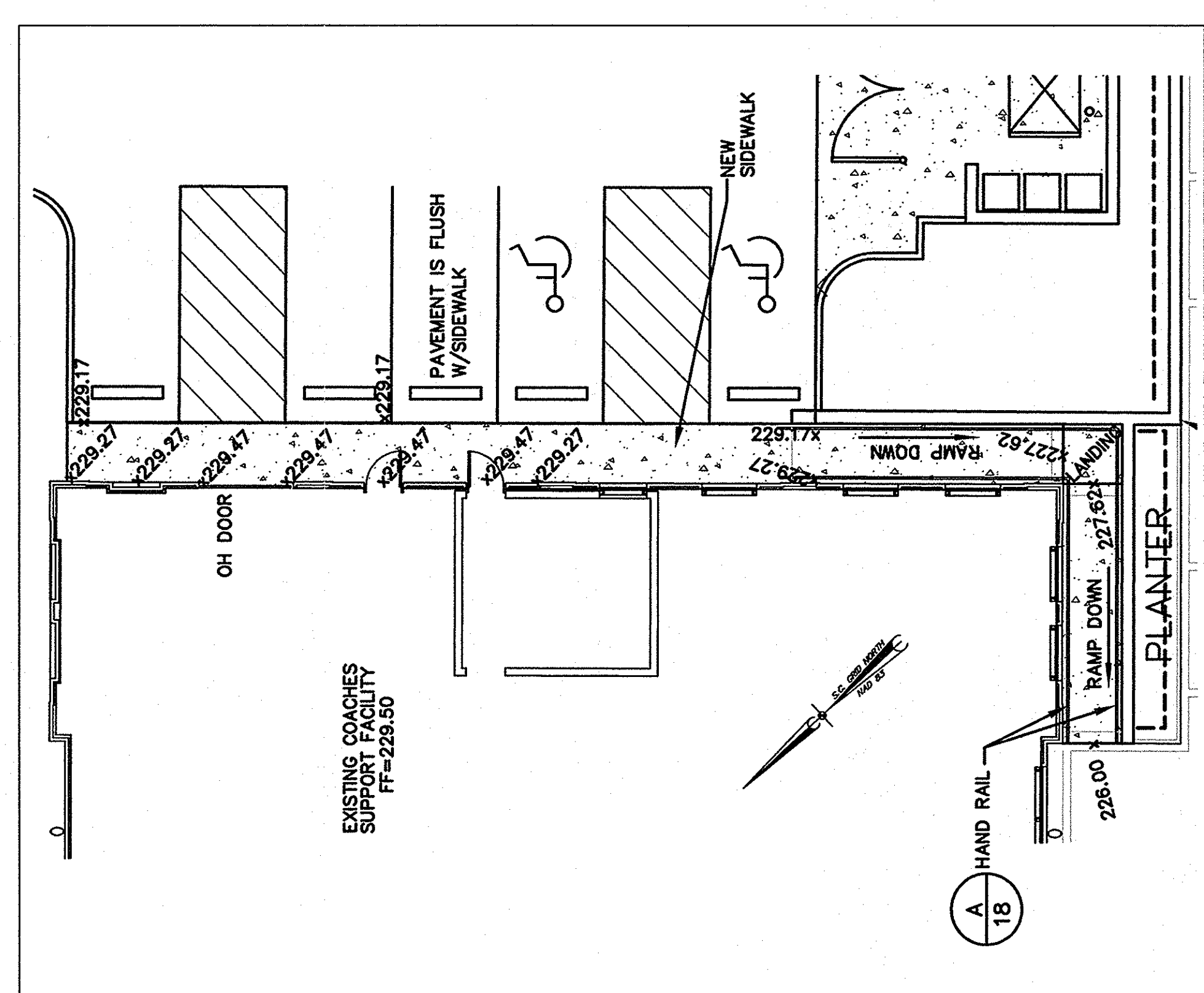
THIS DRAWING IS THE PROPERTY OF B.P. BARBER & ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN AND IS NOT TO BE USED ON ANY OTHER PROJECT.

**GRADING NOTES**

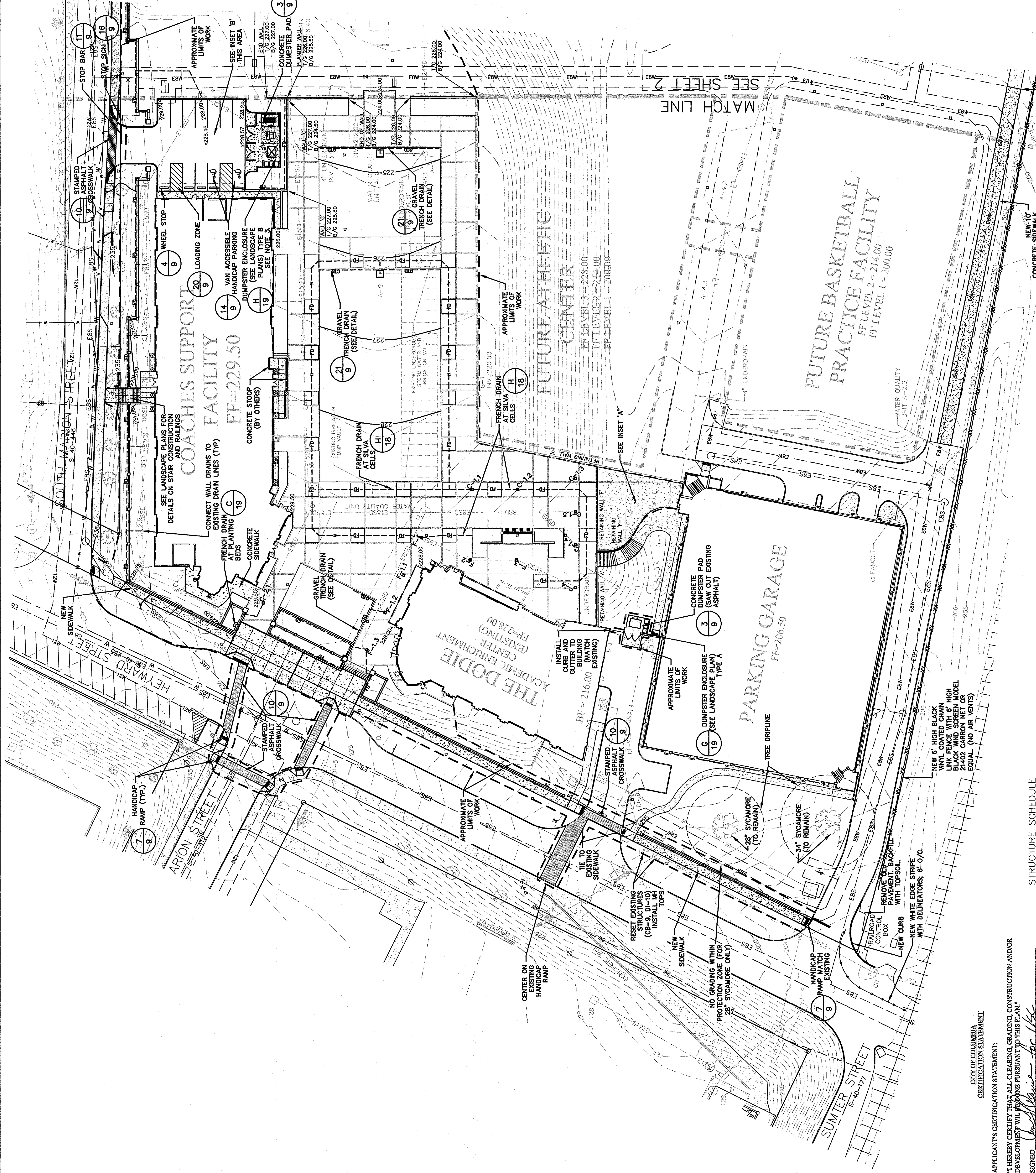
1. All grading shall be reviewed from the site.
2. All land disturbance, earthwork, erosion controls and related activities shall be performed in accordance with the Land Disturbance Permit issued for the project.
3. All pavers, pavements, and other impervious surfaces will be installed on consistent even grades.
4. Prior to installation of pavers, the contractor will bring the area to be covered with pavers to the existing ground level. The contractor will match the existing grade. Replace spots with matching pavers.
5. Reset existing CB-9 and DI-10. Match proposed grade. Replace spots with matching pavers.

**NOTES TO CONTRACTOR**

1. See landscape plan for the new finished grade elevations at structure top.
2. "Plan" concrete water proofing, drains, and pavers are included in this contract. The owner will supply the drains and piping. See expansion joint detail A on sheet 20 for further information and detail.
3. All existing structures and improvements for existing support facility, dumpsters enclosure are existing. The new dumpster enclosure shall be built around these units and the new concrete pad poured flush to meet existing pads.
4. See irrigation plans for steves, coordinate with work shown on this plan.



State Project Number:  
**H27-6056-MJ-C**



STRUCTURE SCHEDULE

STRUCTURE	GRATE	INVERT	IE MAIN RUN	TYPE
F-1.3	227.65	224.65	12"x12" ZURN	-
F-1.2	227.65	224.36	-	-
F-1.1	227.65	224.07	-	-
F-4	227.35	224.35	12"x12" ZURN	-
F-3	227.50	223.89	-	-
F-2	227.65	223.57	-	-
F-1	227.65	223.19	-	-
C-1.5	227.35	224.35	224.00	12"x12" ZURN
C-1.4	227.35	224.35	224.00	-
C-1.3	227.35	224.35	224.00	-
C-1.2	227.65	224.65	224.67	-
C-1.1	227.65	224.65	223.34	-
C-2.1	228.42	223.65	-	-

CITY OF COLUMBIA  
 CERTIFICATION STATEMENT

APPLICANT'S CERTIFICATION STATEMENT:  
 "I HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN."

SIGNED: *[Signature]*  
 PERMIT APPLICANT

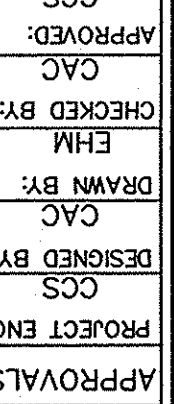
DATE: 11-16-11

DESIGNER'S CERTIFICATION STATEMENT:  
 "I HEREBY CERTIFY THAT THIS PLAN IS DESIGNED TO MEET STORM DRAINAGE REQUIREMENTS AND TO CONTAIN SILT ON THE PROPERTY AND TO PROVIDE THE MAXIMUM EXTENSIBLE EROSION CONTROL WITH THE COLUMBIA SEDIMENT AND EROSION CONTROL AND STORM DRAINAGE ORDINANCE."

SIGNED: *[Signature]*  
 REGISTERED PROFESSIONAL ENGINEER

DATE: 11-16-11

NO.	DESCRIPTION	DATE

APPROVED: 

DATE: 1-5-12

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION

DESIGNED BY: B.P. BARBER & ASSOCIATES, INC.

CHECKED BY: B.P. BARBER

PROJECT NO.: 34,357-B82

DATE: 1-5-12

STATE OF SOUTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER

J. BARBER

License No. 23888

**BP Barber**

Engineering • Experience • Excellence

COLUMBIA • GREENVILLE • CHARLOTTE • SAVANNAH

SHEET TITLE: SITE LAYOUT, GRADING AND UTILITY

DATE: JANUARY 5, 2012

SCALE: 1"=30'

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION

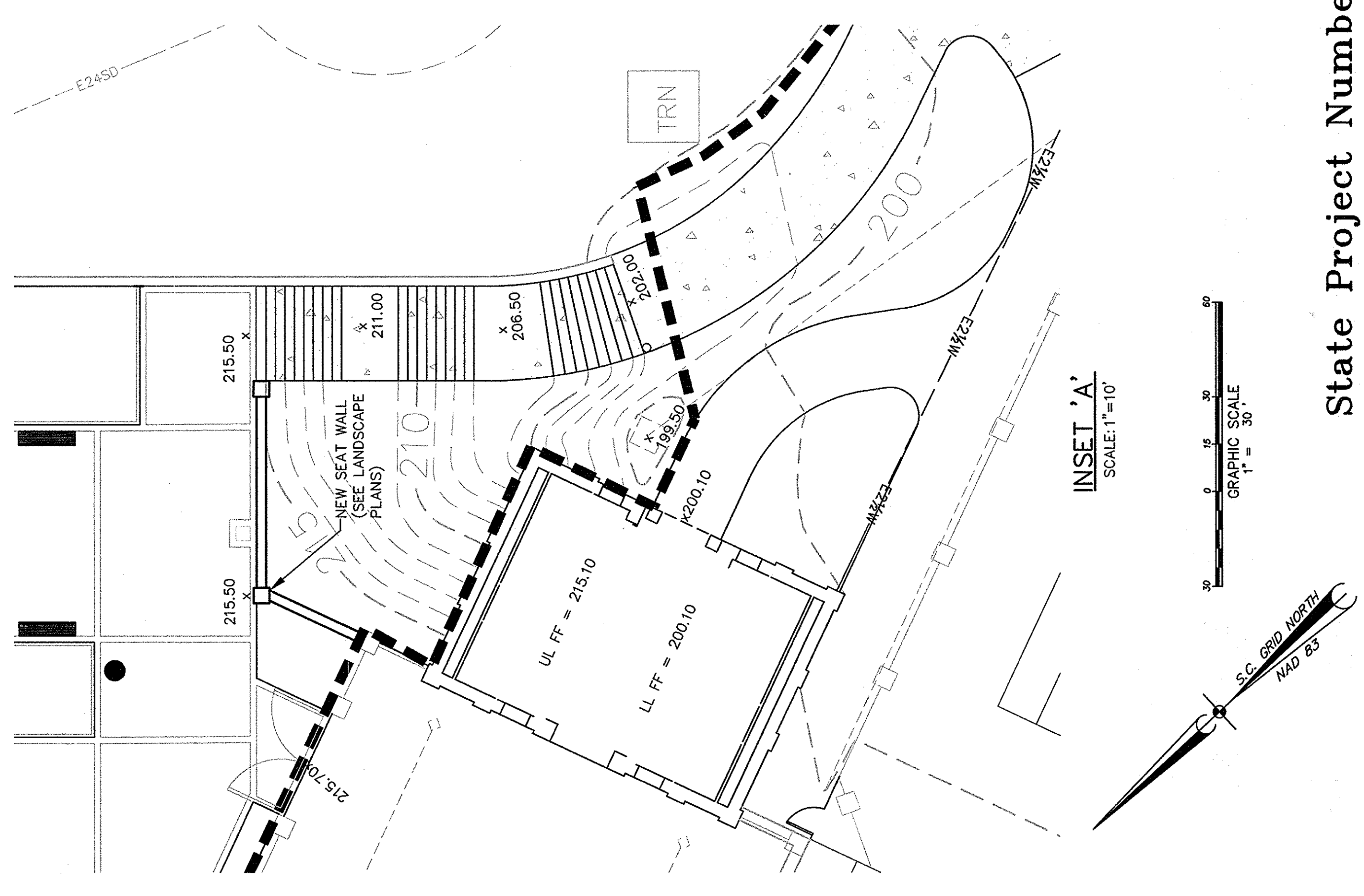
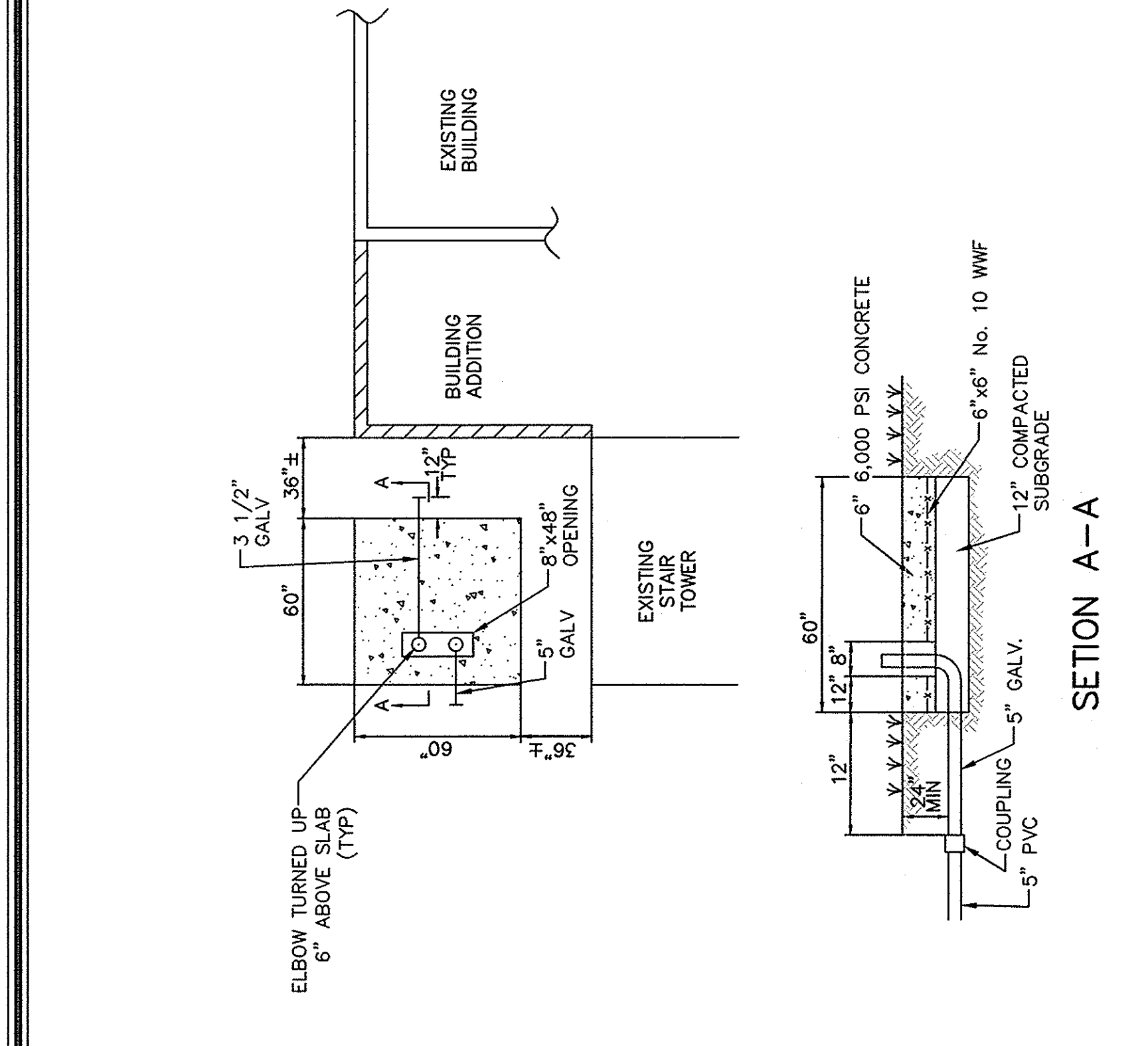
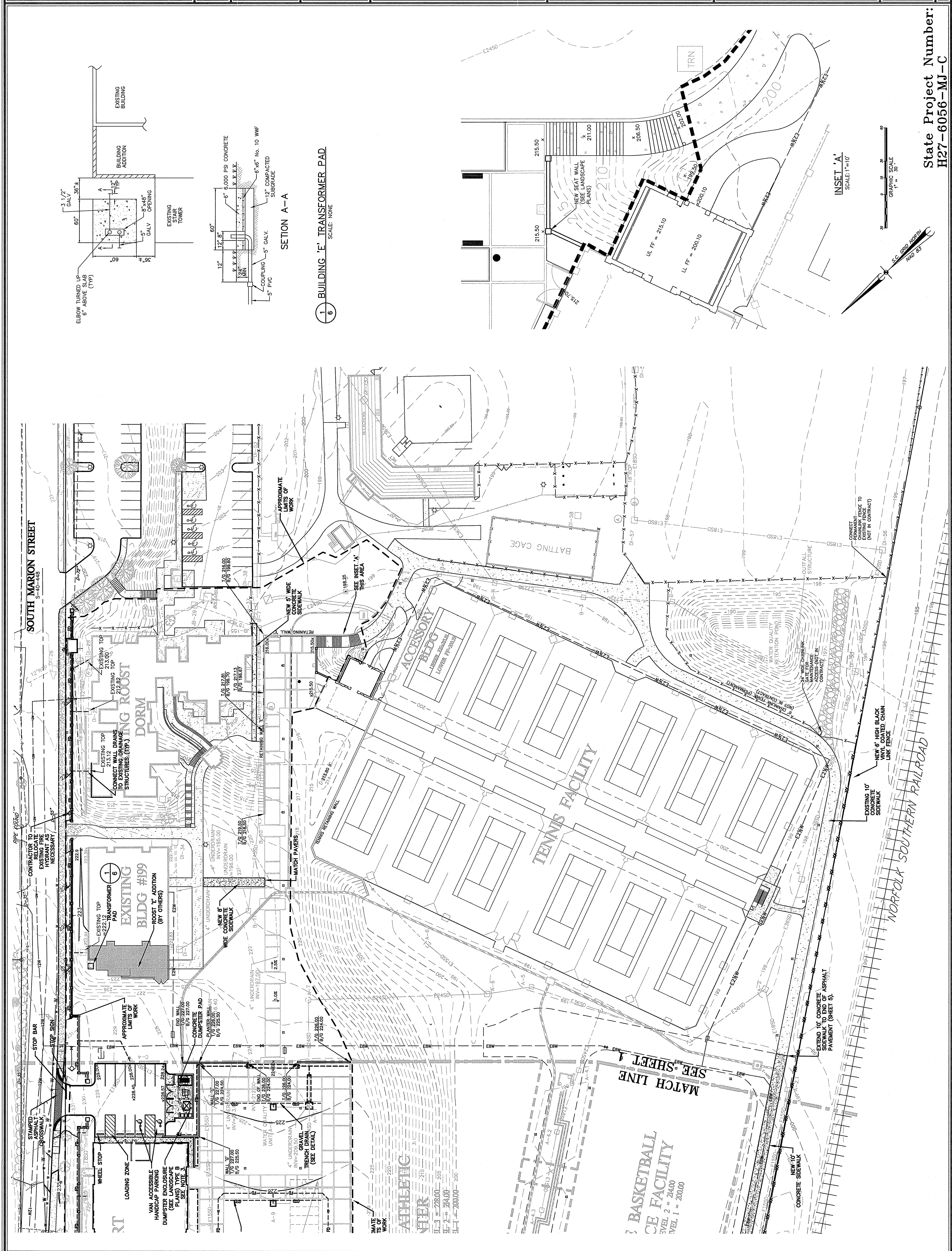
FOR: LANDSCAPE-HARDSCAPE CONSTRUCTION

UNIVERSITY OF SOUTH CAROLINA

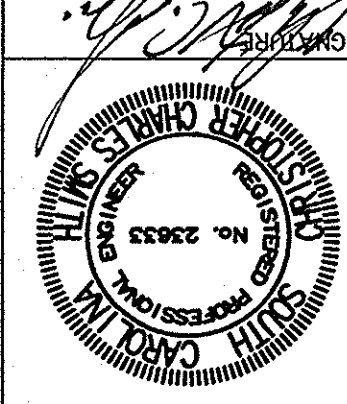
IN THE CITY OF COLUMBIA

RICHLAND COUNTY, S.C.

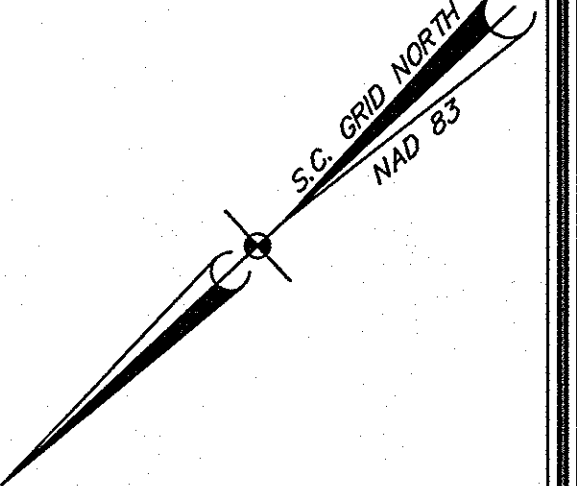
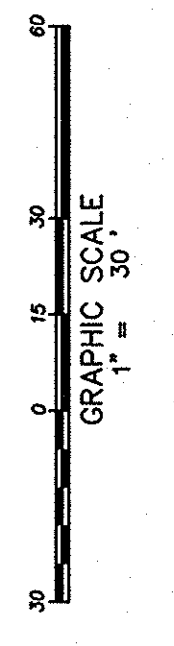
SHEET	6	OF	27
DWG NAME			
DWG NO.	2039	REV.	34,357-B82
DATE	1-5-12	PROJECT NO.	07578
FILE NO.	35,796-B89		



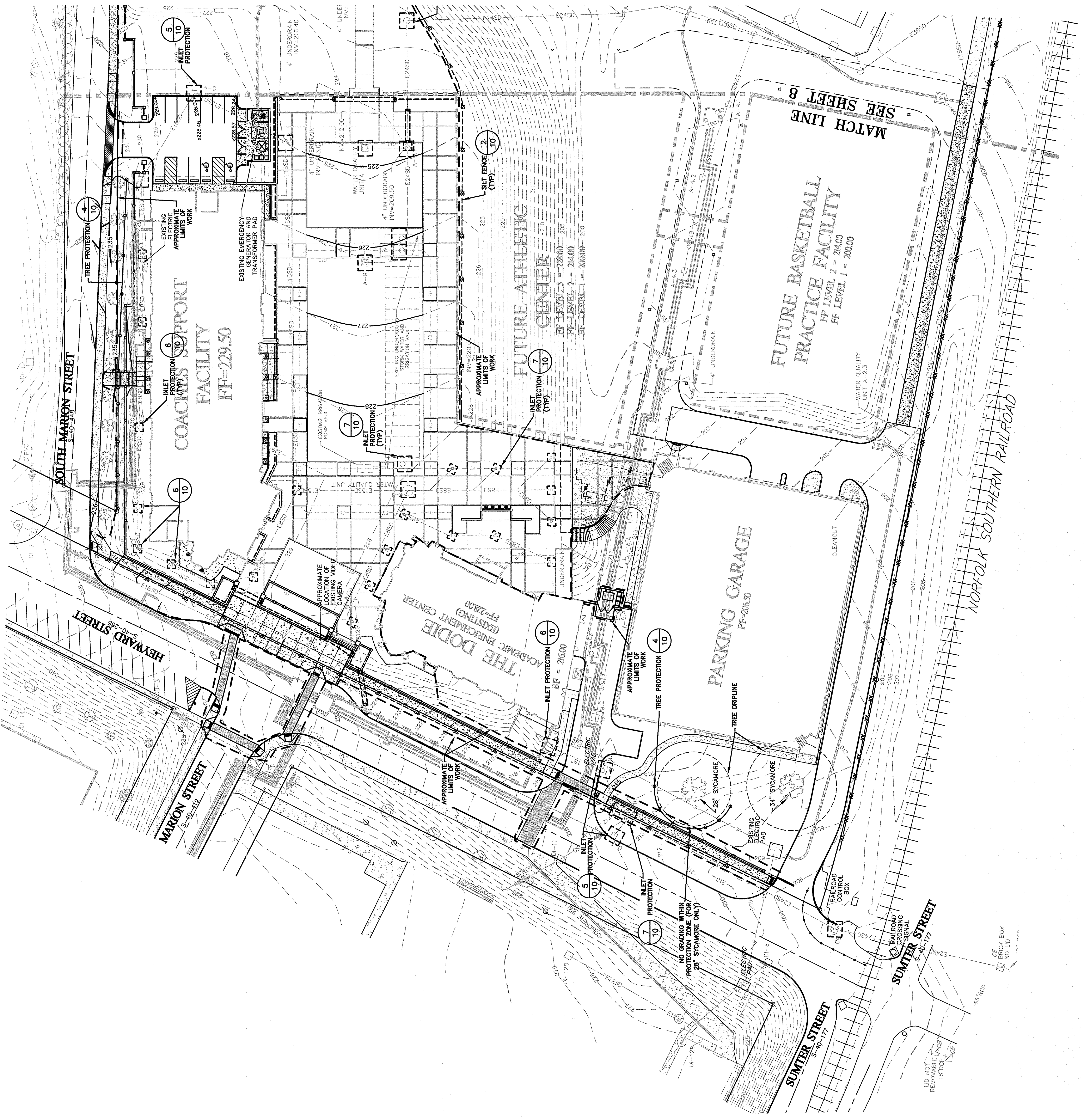
State Project Number:  
H27-6056-MJ-C

REVISIONS NO. DESCRIPTION DATE BY	APPROVALS PROJECT ENGR. _____ DESIGNED BY _____ CHECKED BY _____ E.I.M. CAC	DATE 1-5-12 STATE OF SOUTH CAROLINA PROFESSIONAL ENGINEER NO. 23633 B.P. BARBER & ASSOCIATES, INC.	SIGNATURE  B.P. BARBER & ASSOCIATES, INC.	Engineering • Experience • Excellence <b>BP Barber</b> COLUMBIA • GREENVILLE • CHARLOTTE • CHARLESTON FLORENCE • SPARTANBURG • MYRTLE BEACH	DATE: JANUARY 5, 2012 SCALE: 1" = 30' <b>STORM WATER POLLUTION PREVENTION PLAN</b> <b>SHEET 1</b>	IN THE CITY OF COLUMBIA RICHLAND COUNTY, S.C. <b>UNIVERSITY OF SOUTH CAROLINA</b> <b>LANDSCAPE-HARDSCAPE CONSTRUCTION</b> DEVELOPMENT CONSTRUCTION ATHLETIC VILLAGE INFRASTRUCTURE	PROJECT DWG NAME SHEET 7 of 27 NO. NO. 2039 34,357-B82 PROJECT NO. 07578 FILE NO. 35,786-B88
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FOR NOTES AND LEGEND REFER TO SWPPP SHEET 2



State Project Number:  
**H27-6056-MJ-C**





APPROVED BY: [Signature]  
DATE: 1-5-12  
COUNCIL OF ENGINEERS & SURVEYORS  
STATE OF SOUTH CAROLINA

APPROVED BY: [Signature]  
DATE: 1-5-12  
COUNCIL OF ENGINEERS & SURVEYORS  
STATE OF SOUTH CAROLINA

ENGINEERING & CONSTRUCTION  
B.P. BARBER & ASSOCIATES  
COLUMBIA • GREENVILLE • CHARLOTTE • CHARLESTON  
FLORENCE • CHARTER • SWANNAH

NO.	DESCRIPTION	DATE

REVISIONS

### STORM WATER POLLUTION PREVENTION NOTES

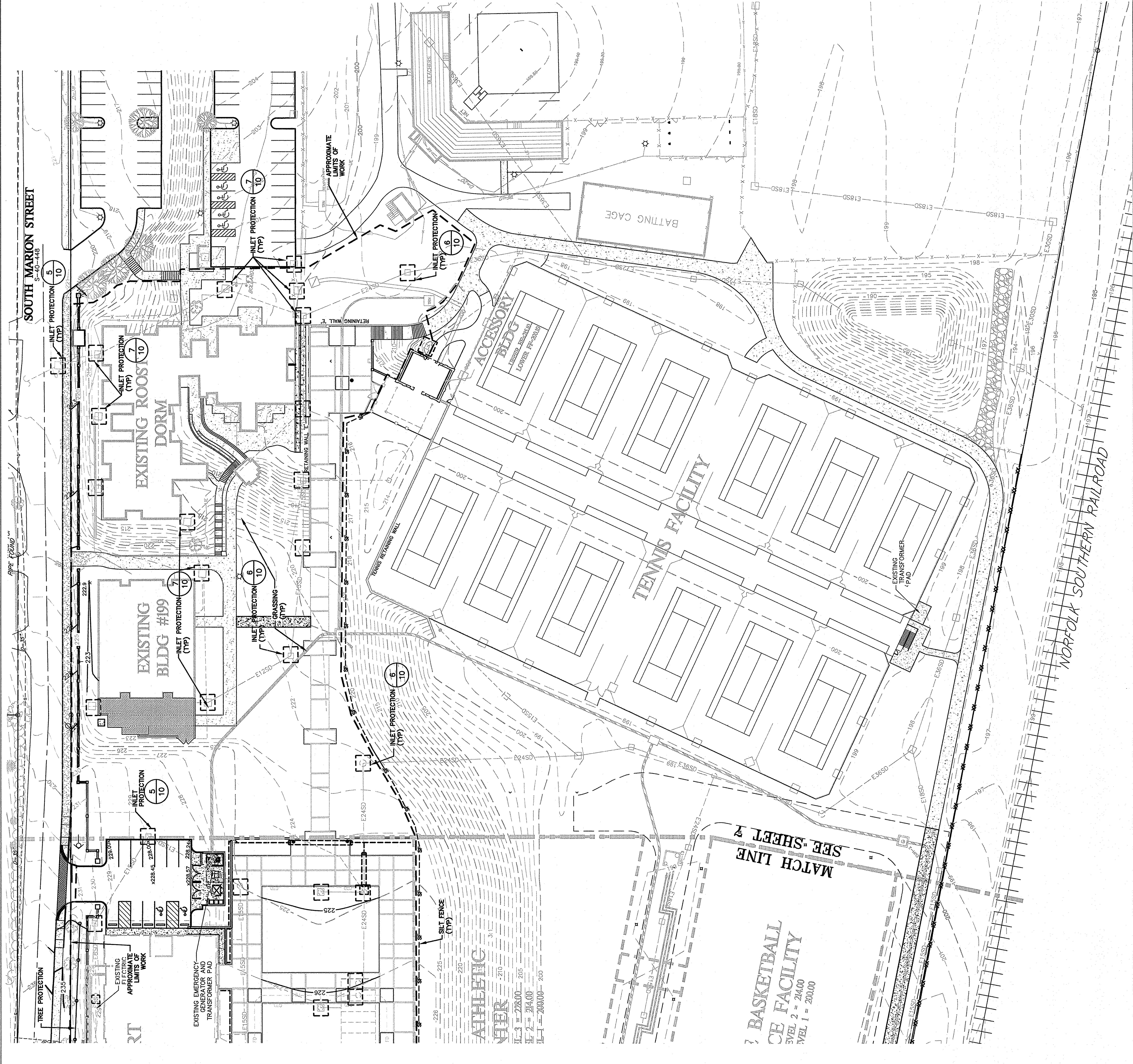
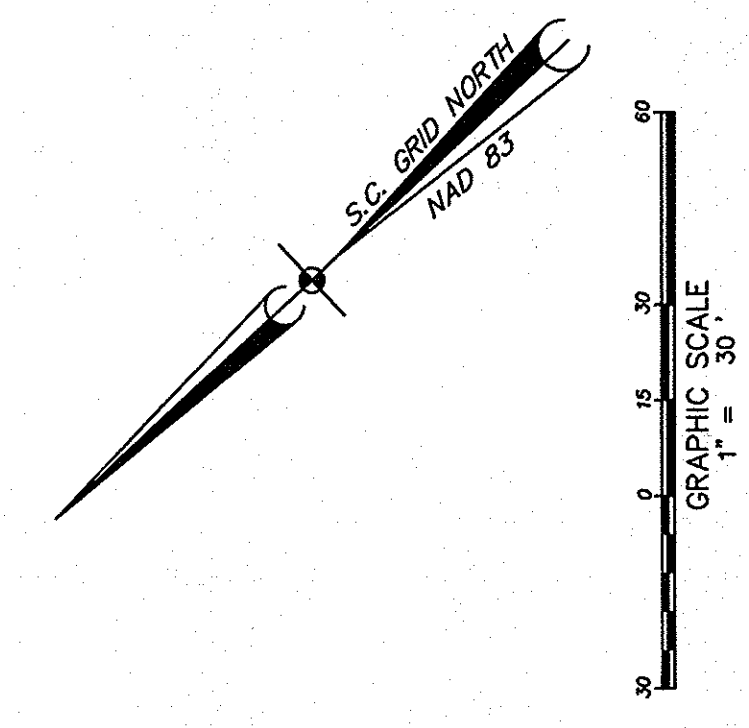
1. Any soils deemed as unacceptably shall be removed from the site.
2. All land disturbance, earthwork, erosion controls and related activities shall be performed in accordance with the Land Disturbance Erosion Control Plan (LDECP) and related documents.
3. Provide for handling of the increased runoff caused by changed soil and surface conditions. Use effective means to conserve water, including the use of diversion ditches, grassed waterways and storm sewers.
4. Place silt fence barriers at locations shown on erosion control plan. Silt fence barriers shall be maintained in place and in good working order.
5. Silt fence barriers shall be cleaned or replaced when silt accumulation reaches 1/2 the height of the fence. Sediment shall be re-spaced often.
6. Additional erosion control devices may be required during construction to control erosion and/or off-site sedimentation. Contractor is responsible for maintaining the stability of all graded and/or eroded areas until permanent ground cover is established. Additional erosion control devices may be required by the Inspector in addition to those shown on the LDECP. Additional sediment and erosion control methods or devices may be required by the Inspector during construction. These will be provided by the contractor at no additional expense to the Owner.
6. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction and the site is stabilized. All temporary control devices shall be removed once construction is completed and the site is stabilized.

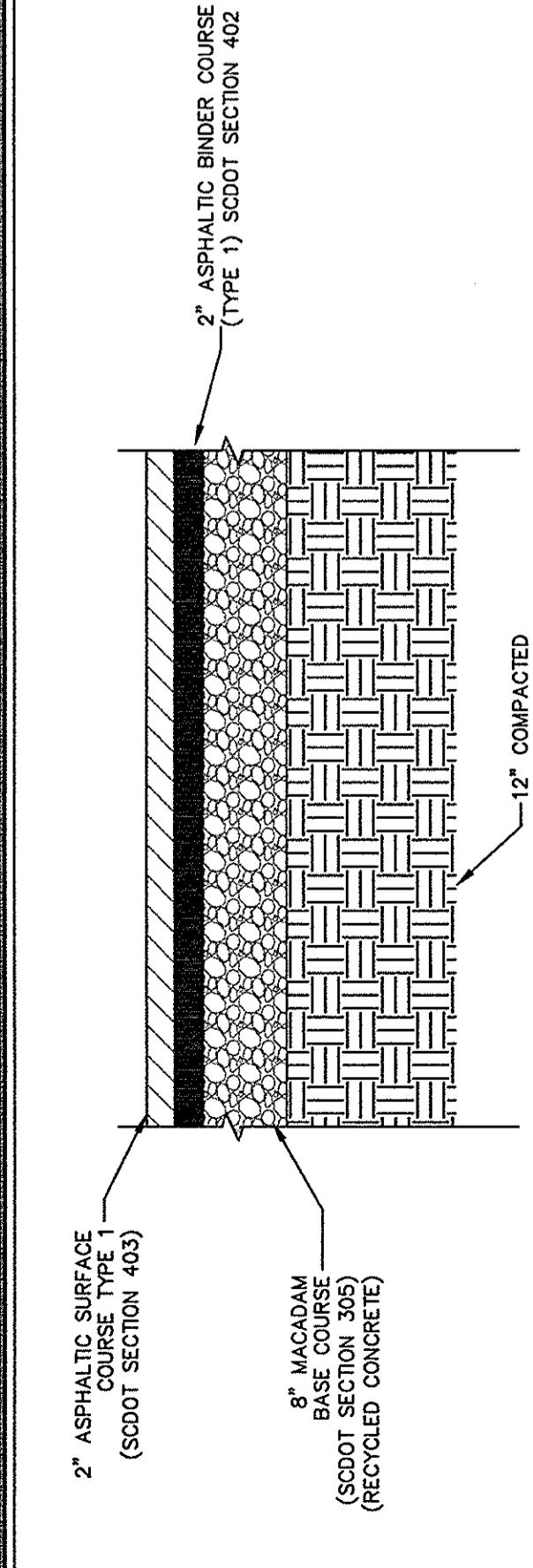
### Standard Notes

- 1) If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to silt fencing. If necessary, temporary stabilization measures should be installed as shown on this plan.
- 2) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below. a. Areas which are left exposed to weather shall be protected by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable. b. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
- 3) Grading activities shall be performed in accordance with the approved erosion control plan. Erosion control devices shall be damaged or are not operating effectively, maintenance must be performed as soon as practical or as reasonably possible and before the next storm event whenever practicable.
- 4) Provide silt fence and other erosion control devices, as may be required, to control soil erosion during construction. All disturbed areas shall be stabilized by approved erosion control methods. If water is encountered while trenching, the water should be filtered to the surface and pumped back into any waters of the State.
- 5) All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction and the site is stabilized. All temporary control devices shall be removed once construction is completed and the site is stabilized.
- 6) The contractor must take necessary action to minimize the tracking of mud onto paved roadways from construction areas. All vehicles shall be properly cleaned before exiting the site. The contractor shall be responsible for cleaning all vehicles that enter the site before beginning work on the site with all fences and install all perimeter controls as shown on this plan. All perimeter controls shall be well maintained and secure before construction. The contractor will verify this with the engineer at the pre-construction conference.
- 4) Contractor shall be aware of existing utility lines during pipe line installation. Contractor shall notify utility companies such as electric, gas, water, sewer, telephone, cable, and other utilities at least 72 hours prior to construction. Contact LSCC to locate private lines (888-231-7877) for underground utilities prior to construction, contact LSCC to locate private lines.
- 5) Promptly inform the engineer of any error or discrepancies discovered in the drawings or specifications or conflicts between the drawings and specifications in order for corrections to be made.
- 6) The contractor shall follow all applicable rules, regulations and specifications of the Richland County and City of Columbia regulations and specifications. All new construction shall comply with all applicable rules, regulations and specifications of the Richland County and City of Columbia regulations and specifications.
- 7) All newly constructed slopes which are steeper than 2:1 must be stabilized by installation of erosion control matting. Other areas such as channel bottoms, channel sideslopes, and slopes near sensitive wetland areas may also require erosion control matting. Use North American Green 3.05 or approved equal. Erosion control matting shall be approved by the engineer prior to installation.

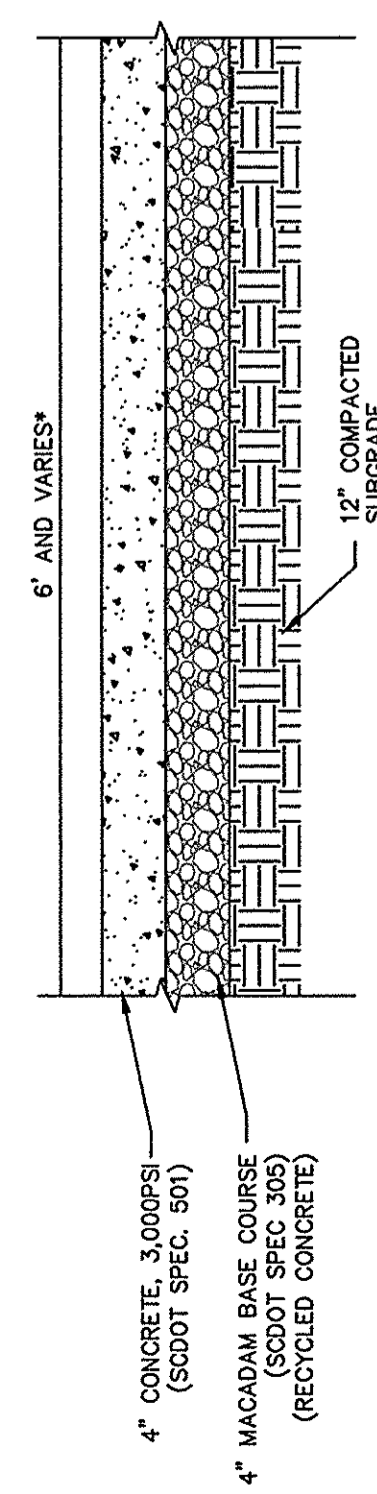
### LEGEND

- INLET PROTECTION: [Symbol]
- SILT FENCE: [Symbol]
- TREE PROTECTION: [Symbol]

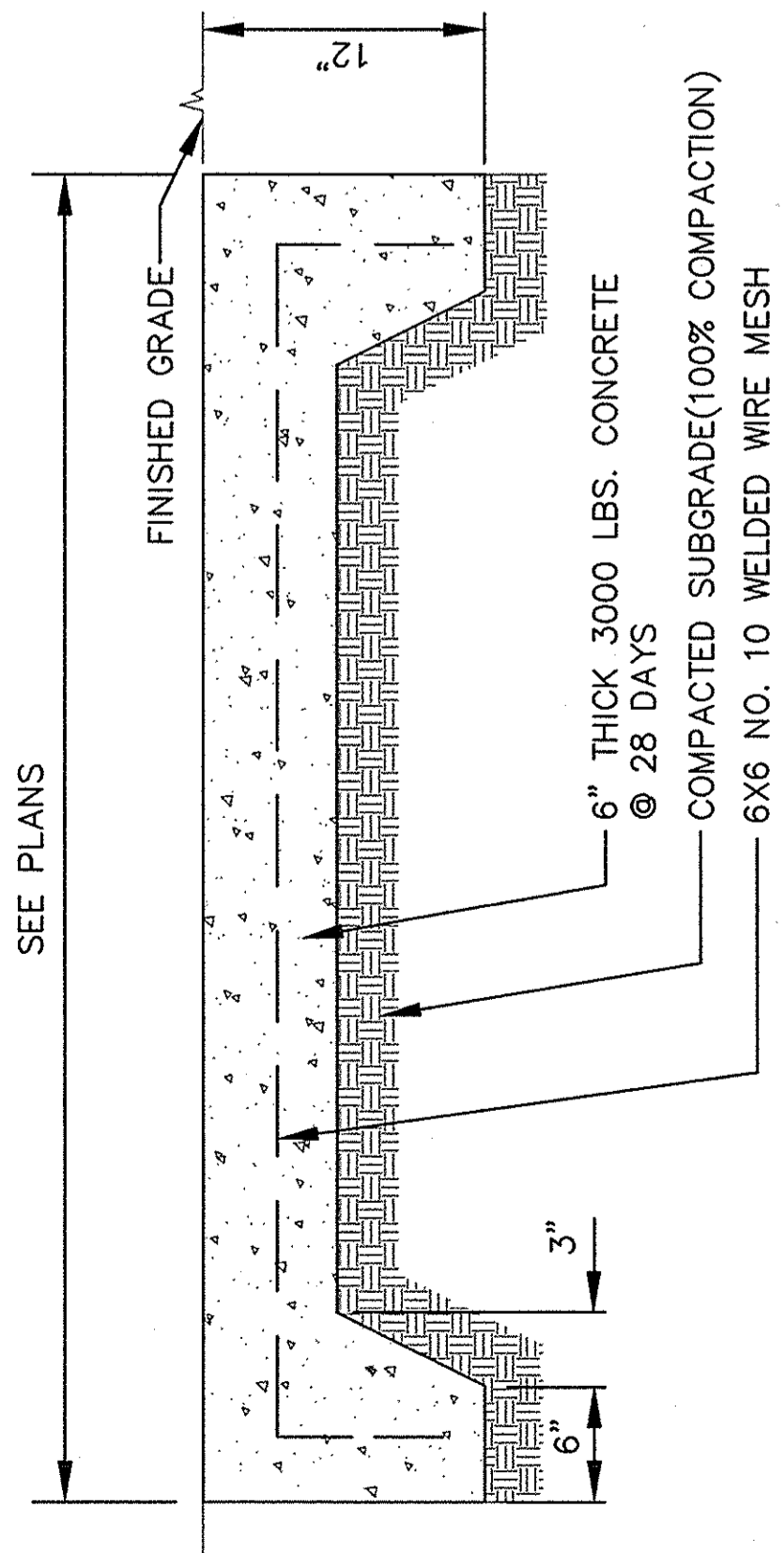




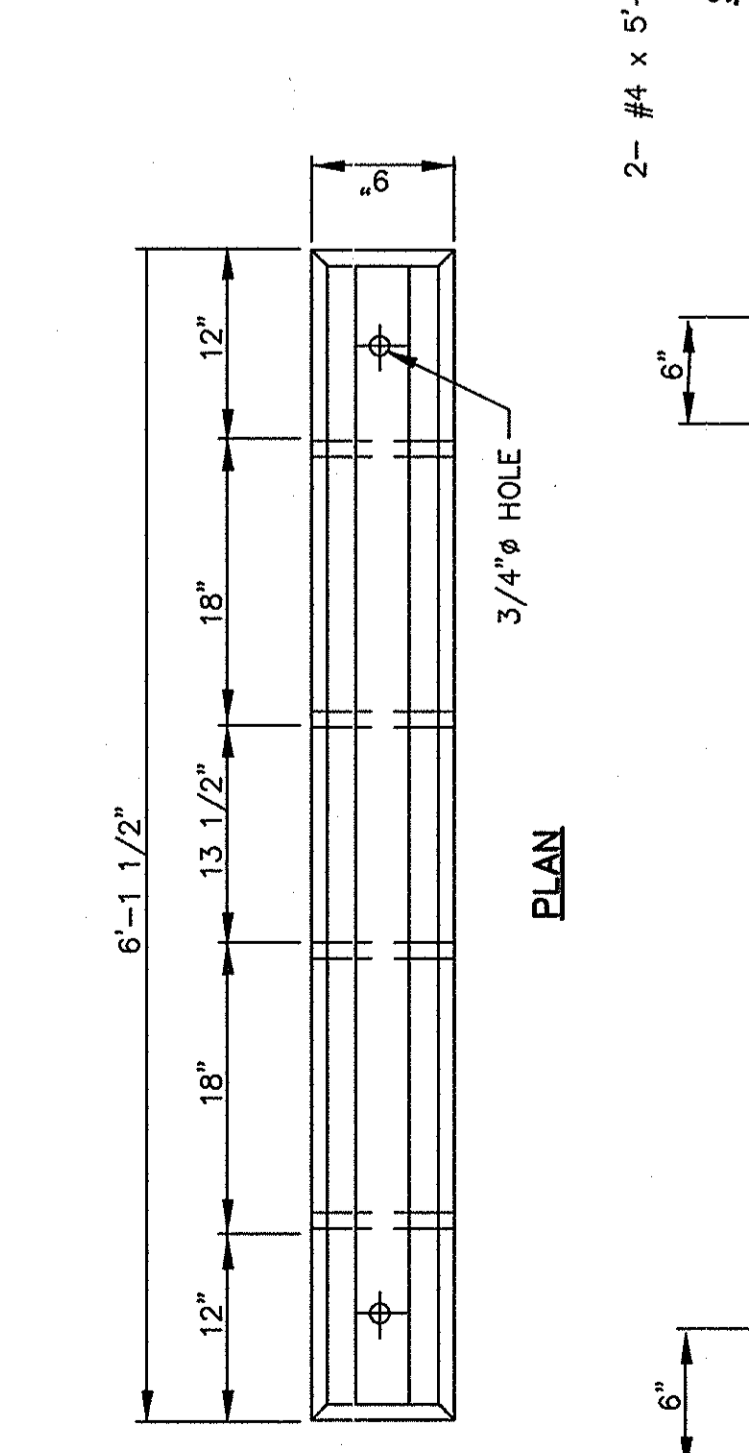
**ASPHALTIC PAVEMENT SECTION (1)**  
SCALE: 1" = 1'-0"



**CONCRETE SIDEWALK DETAIL (2)**  
SCALE: 1" = 1'-0"

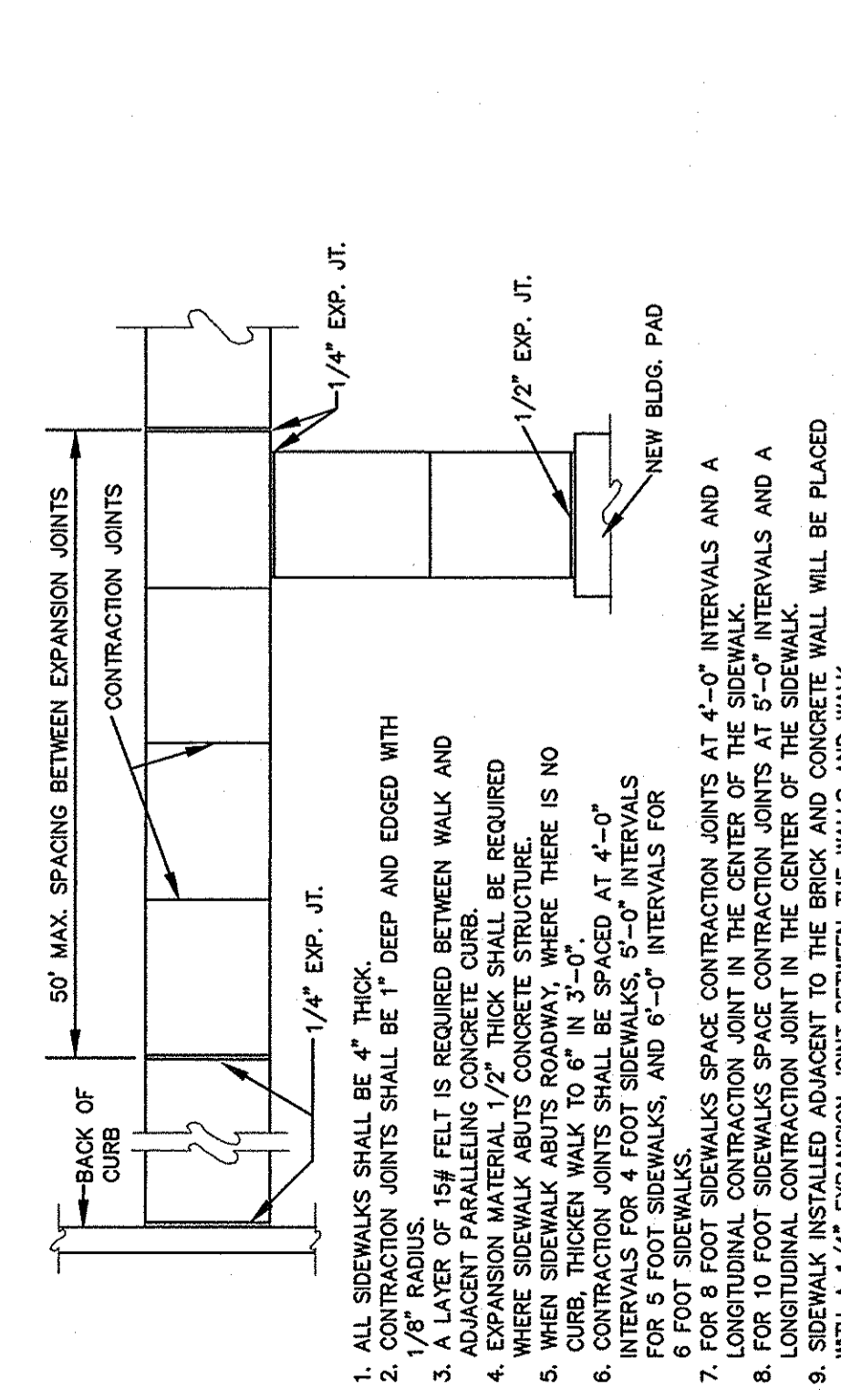


**CONCRETE DUMPSTER PAD (3)**  
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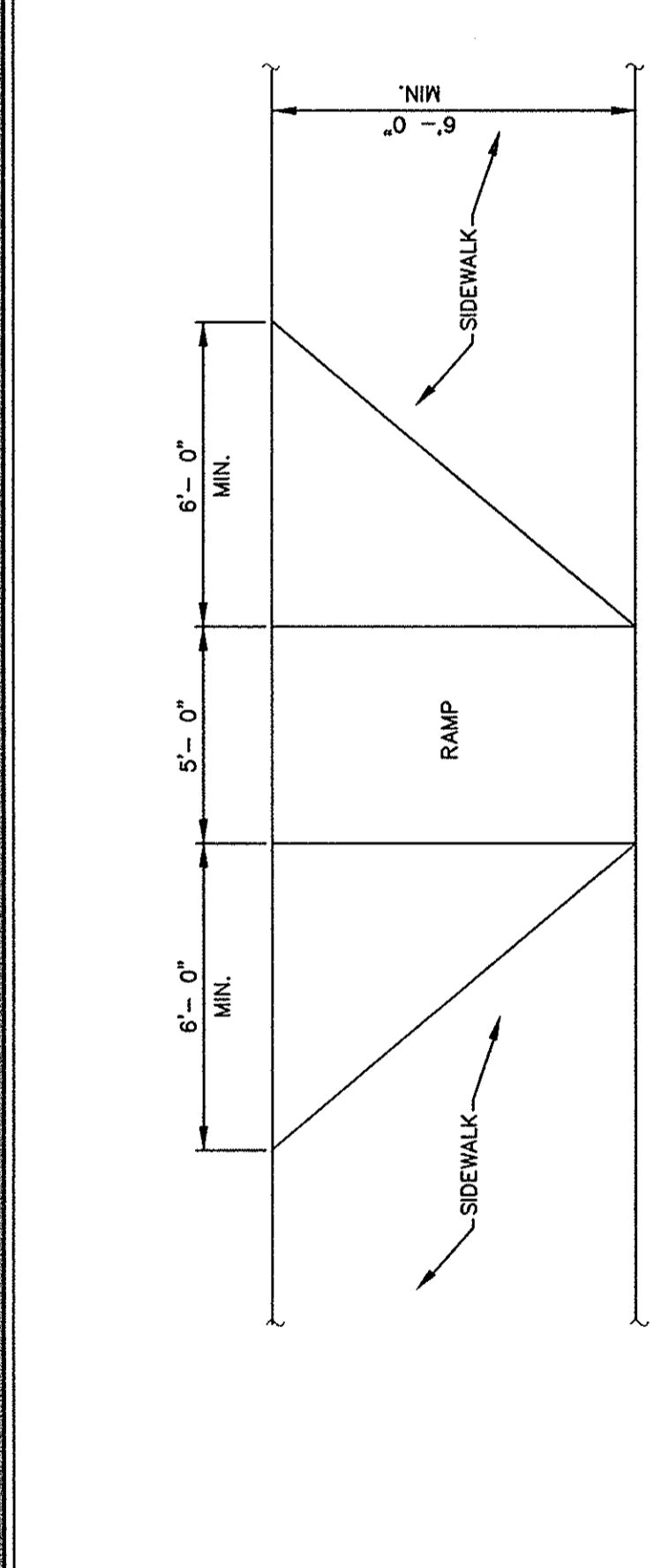


**CONCRETE CURB GUTTER (9)**  
NOT TO SCALE

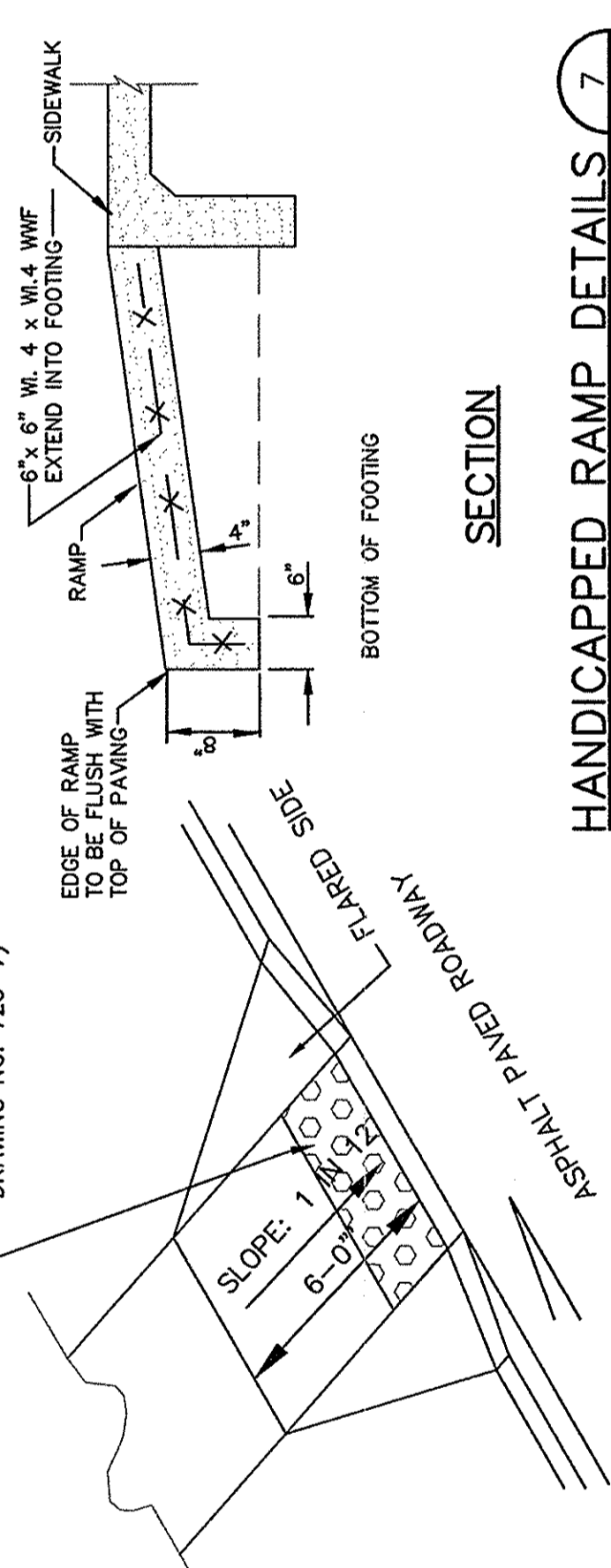
**PRECAST CONC. WHEEL-STOP DETAIL (4)**  
NOT TO SCALE



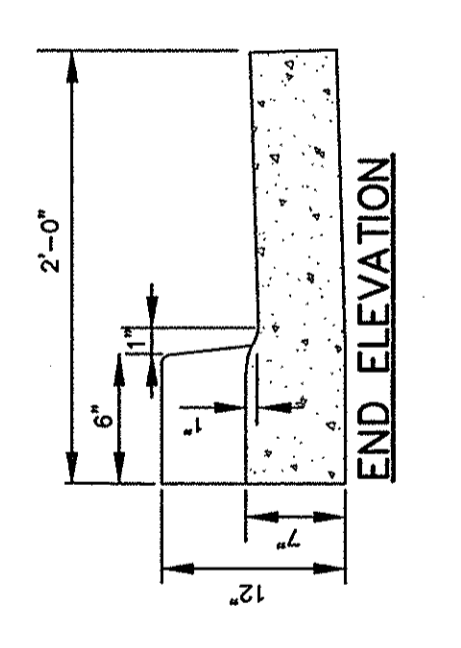
**STANDARD JOINT LAYOUT FOR CONCRETE SIDEWALKS (5)**  
NOT TO SCALE



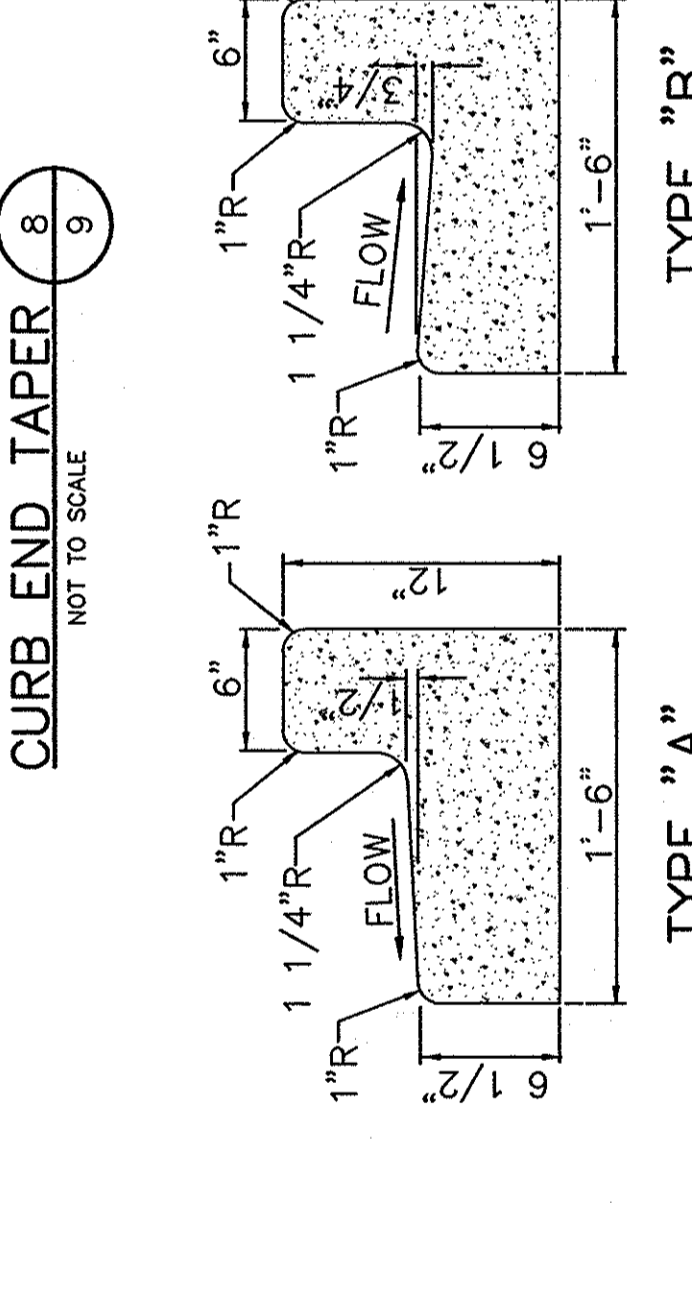
**HANDICAPPED RAMP DETAILS (7)**  
NOT TO SCALE



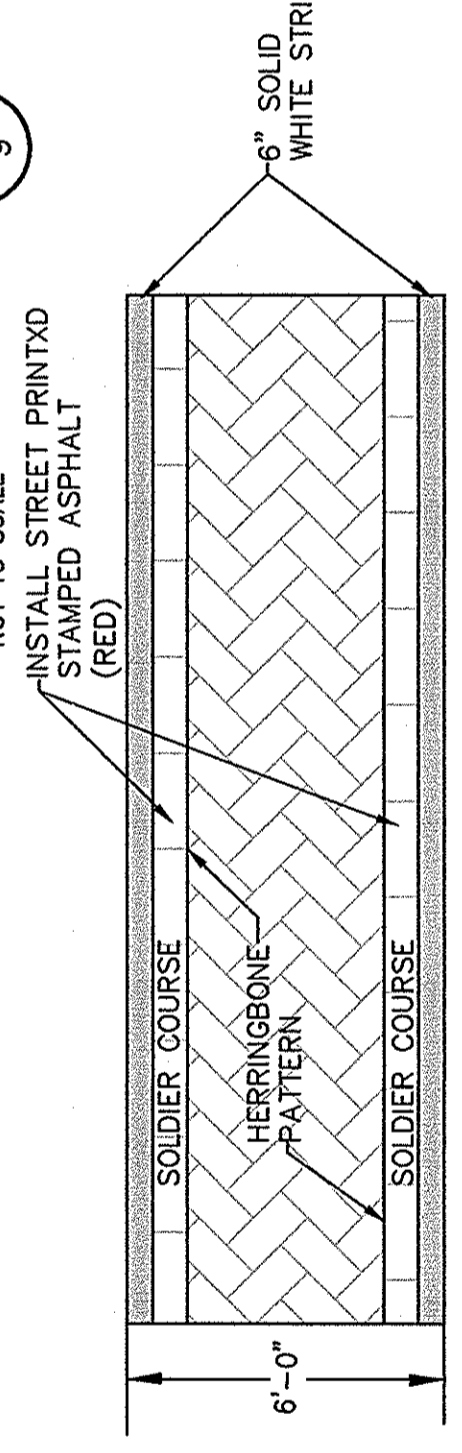
**ASPHALT PAVED FOOTWAY**



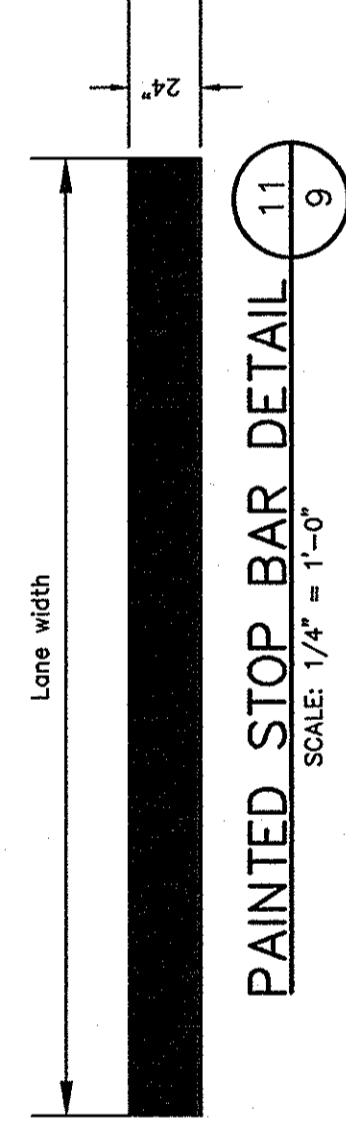
**CURB END TAPER (8)**  
NOT TO SCALE



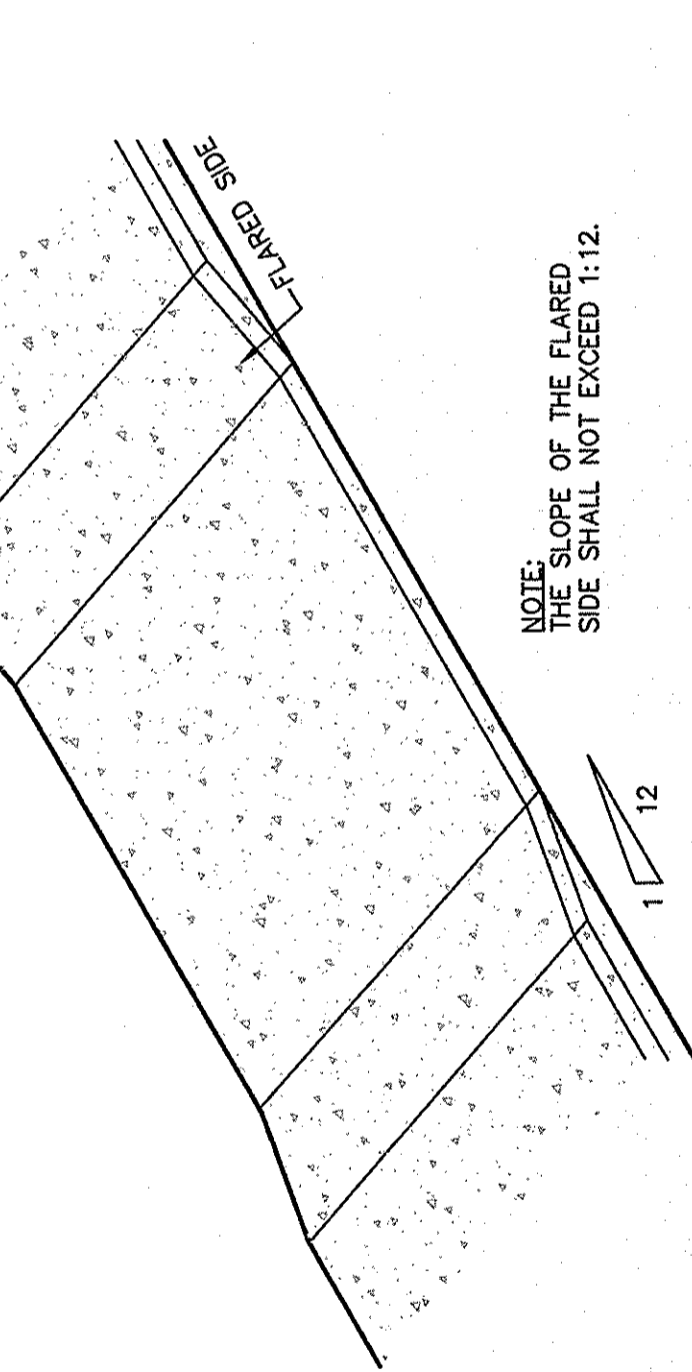
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NOT TO SCALE



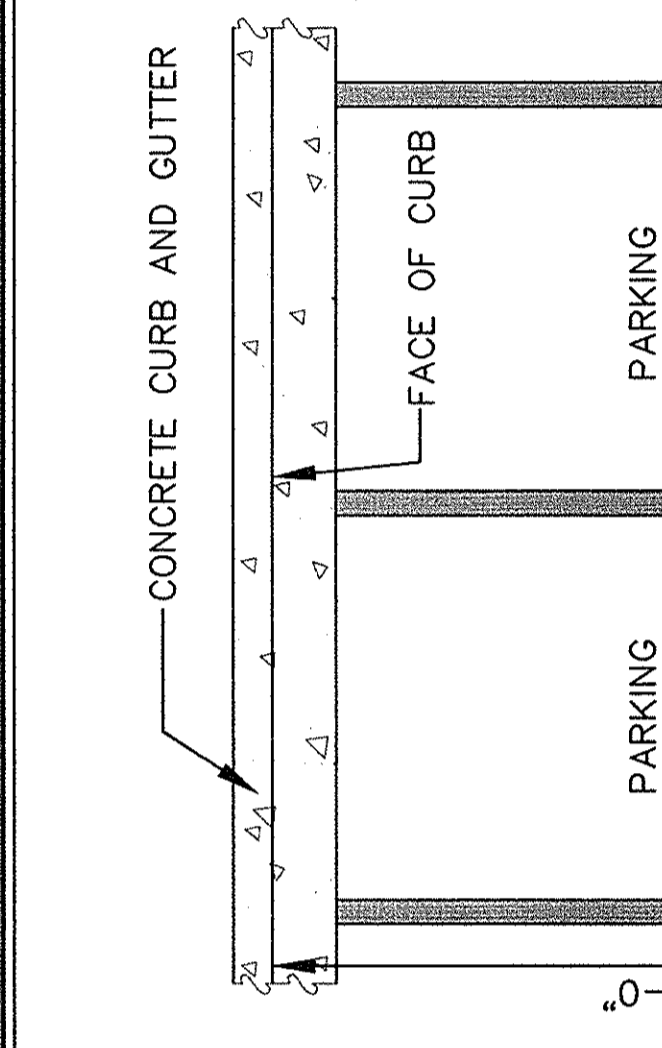
**HANDICAPPED PARKING SIGN DETAIL (15)**  
NOT TO SCALE



**PAINTED STOP BAR DETAIL (11)**  
SCALE: 1/4" = 1'-0"



**DROPPED SIDEWALK DETAIL (12)**  
NOT TO SCALE

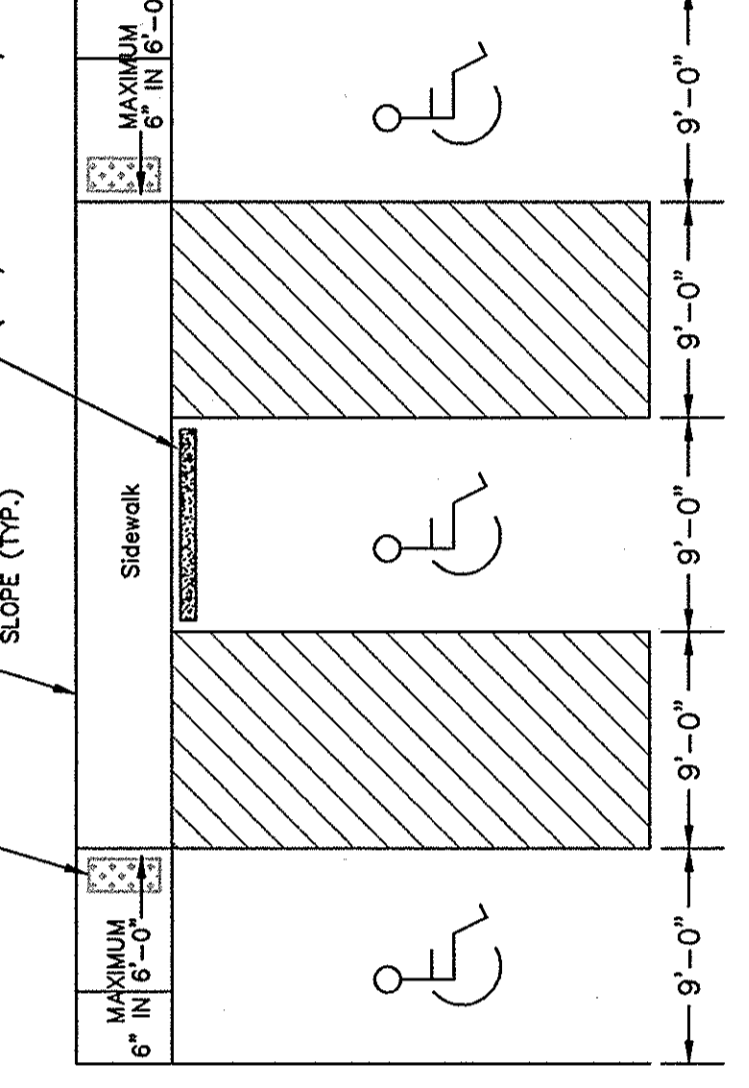


**HANDICAP PARKING SYMBOL (17)**  
NOT TO SCALE

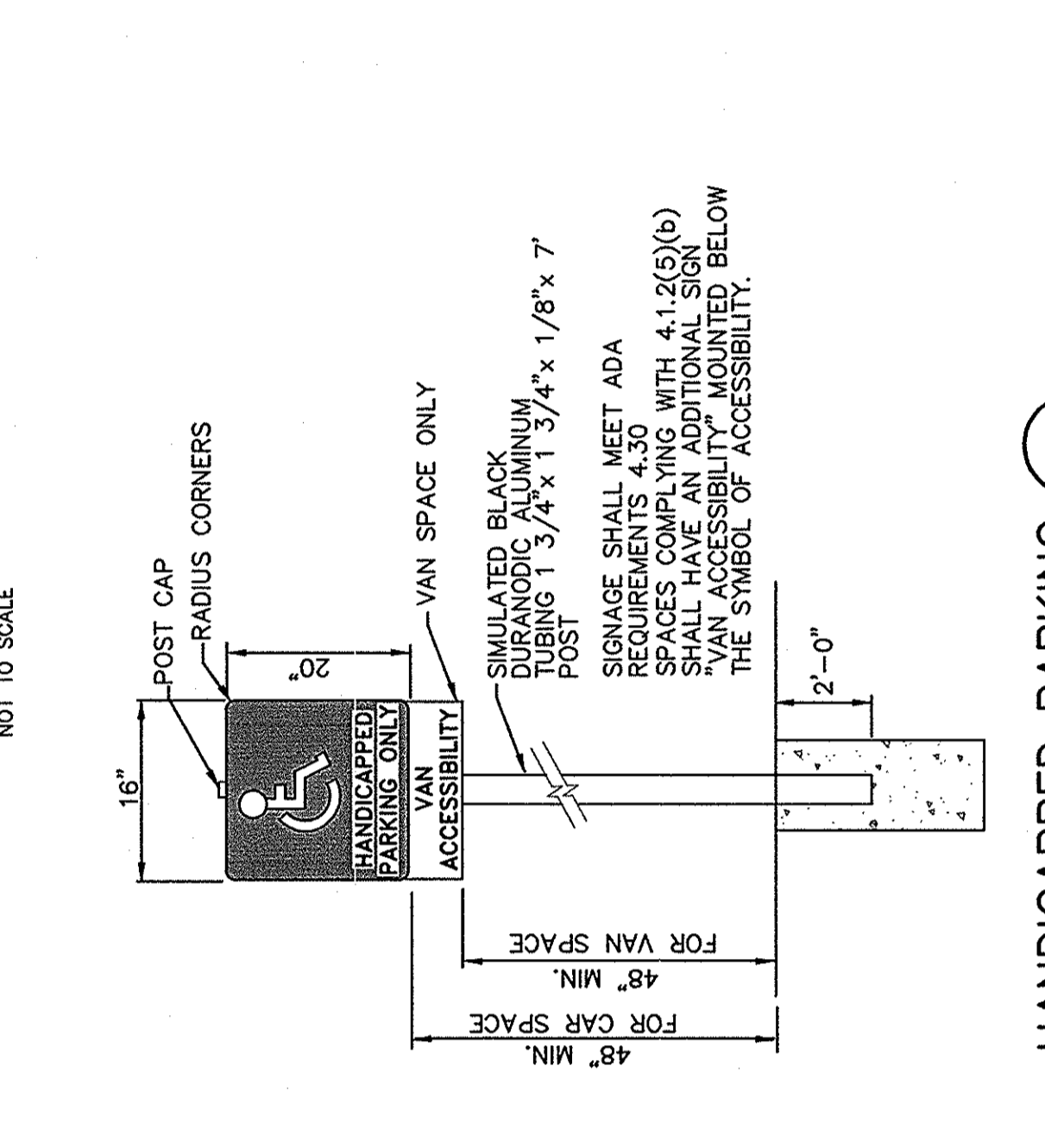
PANTS. THE PAINT SHALL BE WHITE TRAFFIC PAINT CONFORMING TO SECTION 710.06 OF THE SOUTH CAROLINA STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

STRIPIINGS. PRIOR TO APPLICATION OF STRIPING PAINT, ASPHALT SURFACES SHOULD BE CLEANED OF MATERIAL THAT WOULD PREVENT ADHERENCE OF PAINT. PAINT SHALL BE APPLIED ONLY TO A DRY SURFACE USING EITHER TEMPLATE OF STRIPING MACHINE; STRIPES SHALL BE 4" WIDE OF UNIFORM WEIGHT WITH NO "SKIPS" OR BARE SPOTS. FINISHED STRIPING SHALL BE APPROVED BY THE OWNER.

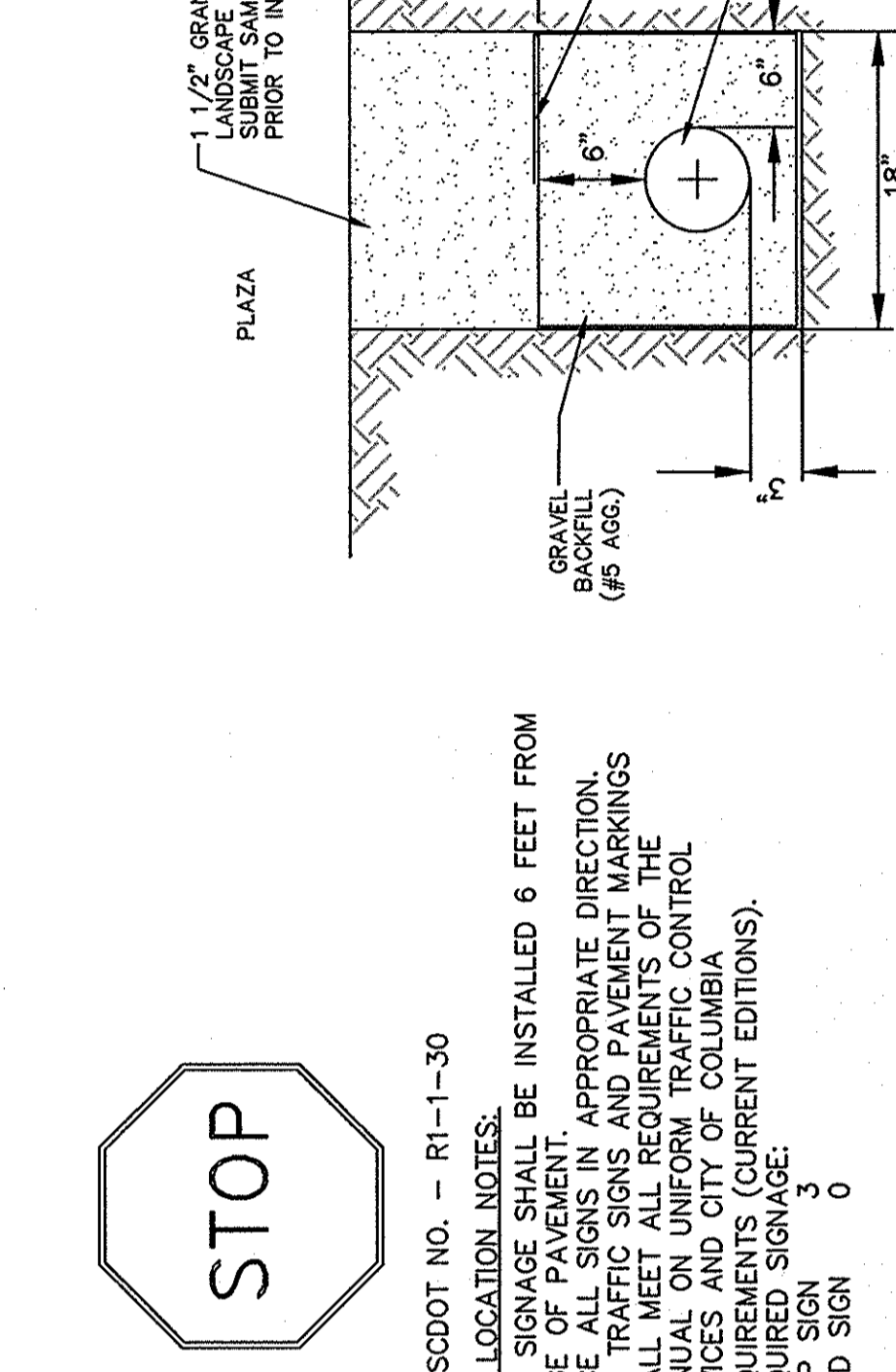
**PAINTED VEHICULAR PARKING STRIPES DETAIL (13)**  
NOT TO SCALE



**PAINTED VEHICULAR PARKING STRIPES DETAIL (13)**  
NOT TO SCALE



**LOADING ZONE STRIPING DETAIL (20)**  
NOT TO SCALE



**TRENCH DRAIN LAYOUT SCHEMATIC (21)**  
NOT TO SCALE

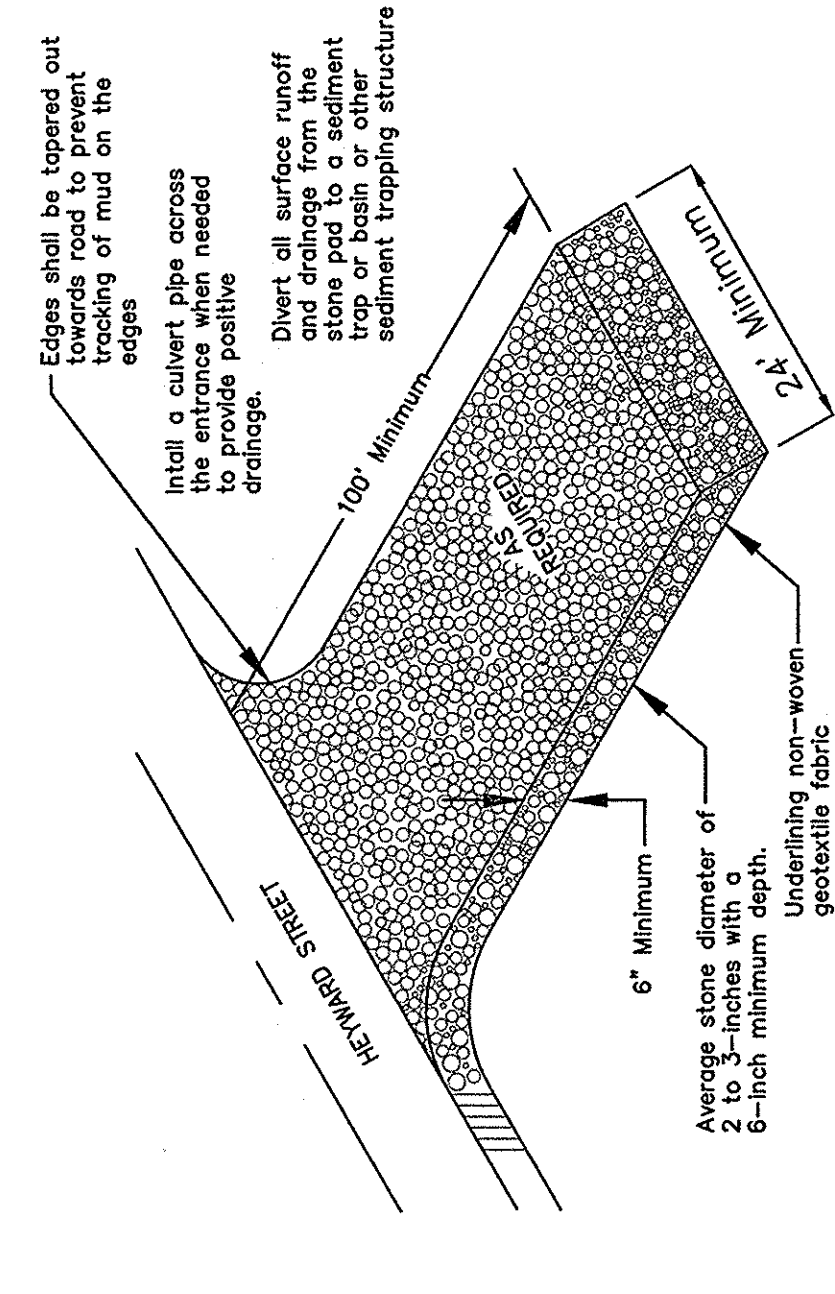
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DESCRIPTION	DATE										<p>PROJECT NO. 07578</p> <p>PROJECT NAME: LANDSCAPE-HARDSCAPE CONSTRUCTION FOR ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT</p> <p>UNIVERSITY OF SOUTH CAROLINA RICHLAND COUNTY, S.C.</p> <p>DATE: JANUARY 5, 2012</p> <p>SCALE: AS NOTED</p> <p>SHEET TITLE: SITE DETAILS</p>	<p>FILE NO. 35,786-B88</p> <p>SHEET 9 OF 27</p> <p>DATE: 1-5-12</p> <p>DATE: 1-5-12</p> <p>DATE: 1-5-12</p>
	NO.	DESCRIPTION	DATE											
<p>APPROVED: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>DRAWN BY: [Signature]</p> <p>DESIGNED BY: [Signature]</p> <p>PROJECT ENG: [Signature]</p>	<p>Engineering • Experience • Excellence</p> <p>BP Barber</p> <p>COLUMBIA • GREENVILLE • CHARLESTON FLORENCE • CHARLOTTE • SPANNAH</p>	<p>STATE OF SOUTH CAROLINA</p> <p>REGISTERED PROFESSIONAL ENGINEER</p> <p>NO. 23833</p>												
<p>APPROVED: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>DRAWN BY: [Signature]</p> <p>DESIGNED BY: [Signature]</p> <p>PROJECT ENG: [Signature]</p>	<p>Engineering • Experience • Excellence</p> <p>BP Barber</p> <p>COLUMBIA • GREENVILLE • CHARLESTON FLORENCE • CHARLOTTE • SPANNAH</p>	<p>STATE OF SOUTH CAROLINA</p> <p>REGISTERED PROFESSIONAL ENGINEER</p> <p>NO. 23833</p>												

State Project Number:  
H27-6056-MJ-C

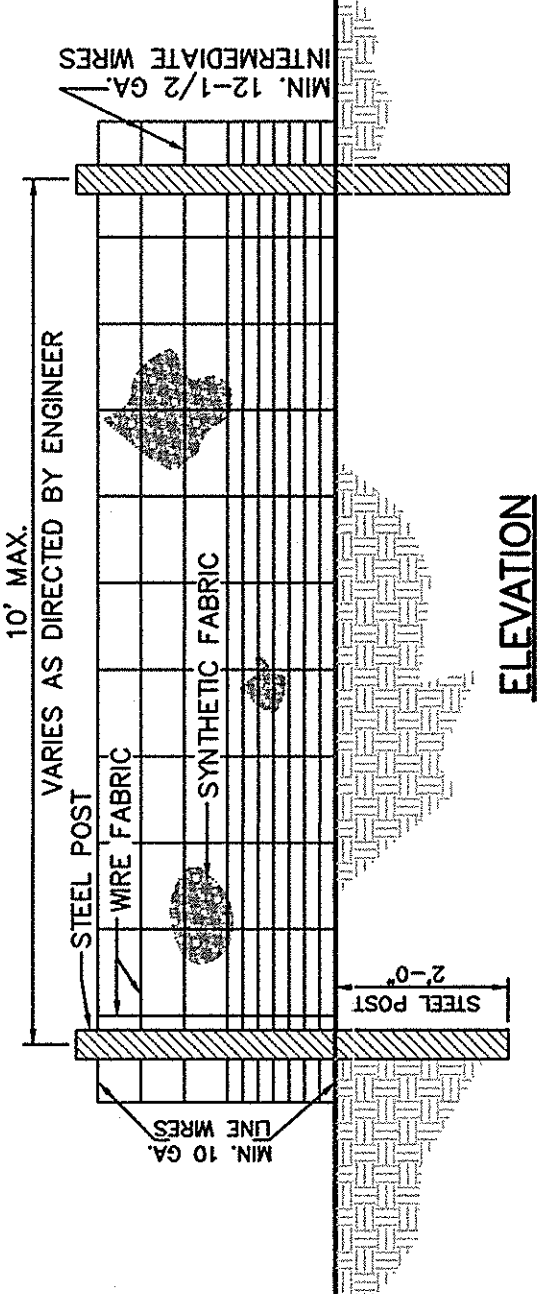
**SEEDING SCHEDULE**

1. Seeding Schedule: Present type of seed for the various schedule shall be weighed and mixed in the proper proportions in the presence of the owners' representatives. This is for temporary erosion control seeding only.
- B. Schedule No. 2 - All temporary grasses:
 

Common name of seed	Rate A (lb./1000 sq. ft.)	Rate B (lb./1000 sq. ft.)
Brown Top Millet	5.0	2.0
Annual Ryegrass	0.0	2.0
Common Bermudagrass	0.0	1.5
Common Ryegrass	0.0	1.5
10-10-10 Fertilizer	25.0	25.0
Agricultural Lime	75.0	75.0
- C. Use Rate A pounds per 1,000 sq. ft. on slopes steeper than 5' horizontal to 1' vertical in height and use Rate B pounds per 1,000 sq. ft. on slopes flatter than 5' horizontal to 1' vertical.
2. Permanent Grass: See landscaping plans and specifications.



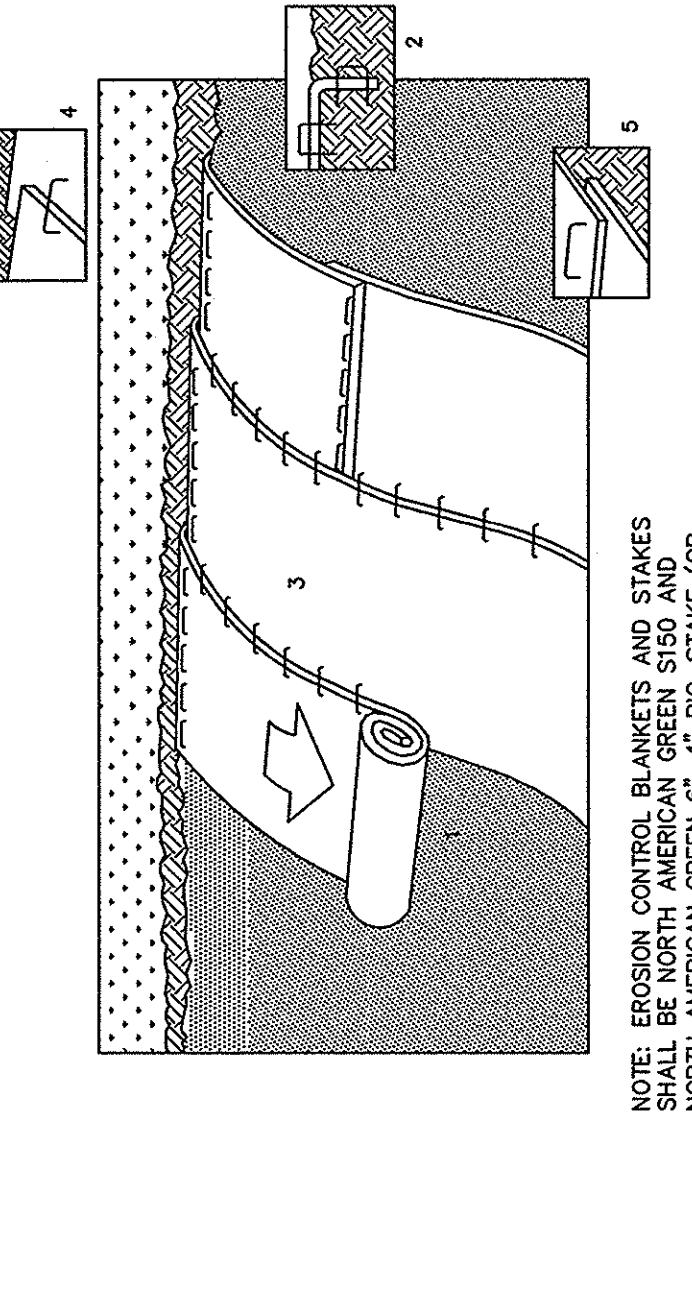
**GRAVEL CONSTRUCTION ENTRANCE/EXIT** (10) NOT TO SCALE



**SILT FENCE WITH WIRE FABRIC DETAIL** (10) NOT TO SCALE

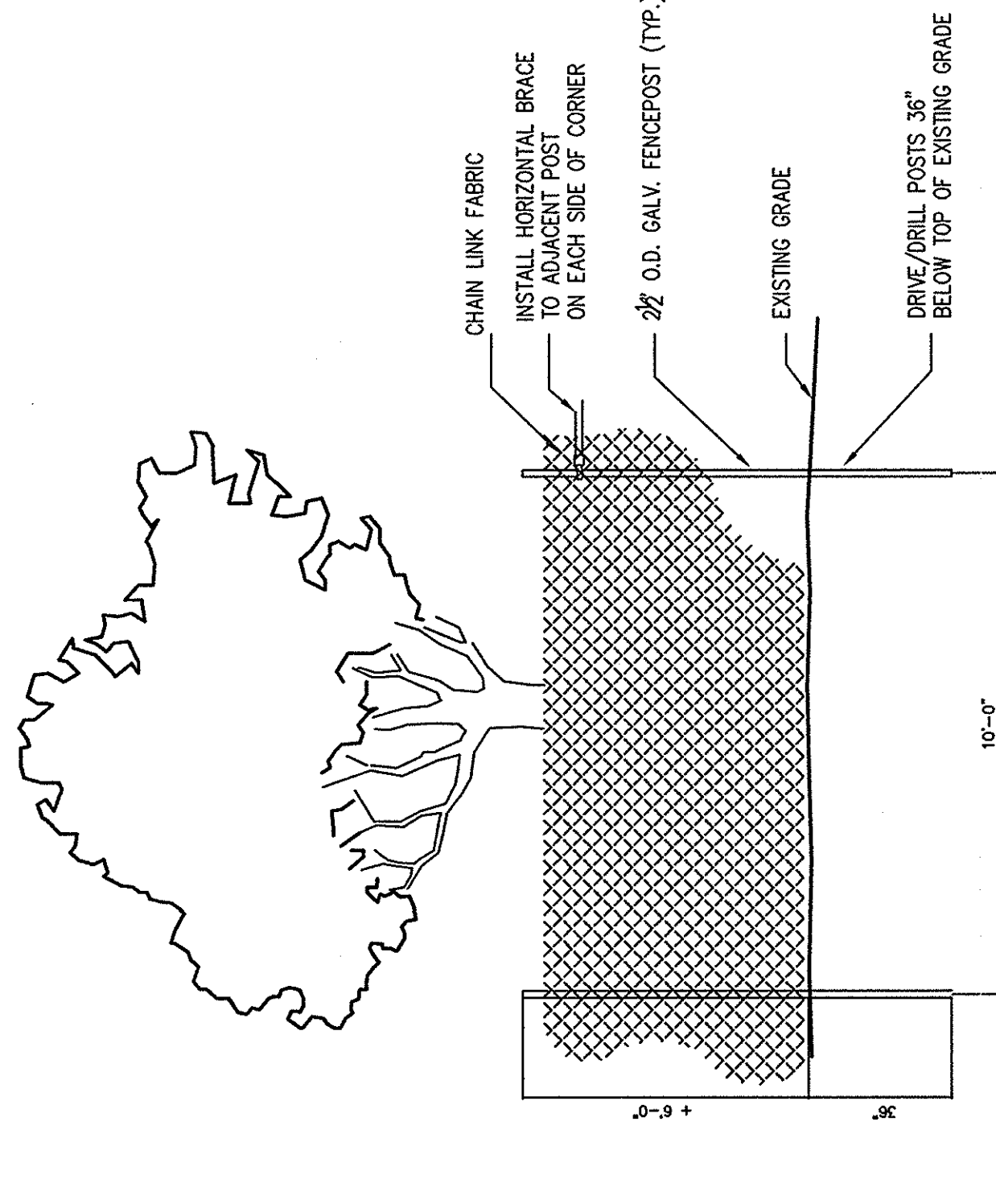
- NOTES:**
1. FENCE FABRIC SHALL BE A MINIMUM OF 3/2" IN WIDTH WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
  2. SYNTHETIC FABRIC SHALL BE 7-1/2 OZ. WEIGHT AND A MINIMUM OF 3/2" WIDTH. FABRIC SHALL BE STAPLED TO THE FABRIC AS DIRECTED BY THE ENGINEER.
  3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF 1/2" DIA. GALV. PIPE.
  4. CONTRACTOR SHALL PERFORM INSPECTION AND MAINTENANCE OF SILT FENCES FOLLOWING ALL APPLICABLE REGULATIONS AND SPECIFICATIONS. SILT FENCES SHALL BE ERECT AND CLEAR, AND REPLACING ALL TORN FENCING.
  5. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN ACCUMULATION REACHES 1/2 THE HEIGHT OF THE FENCE.
  6. DOUBLE SILT FENCE WHERE SHOWN ON THE PLAN SHALL BE ERECT WITH A MINIMUM SEPARATION OF 3' BETWEEN FENCES.

**EROSION CONTROL BLANKET DETAIL** (10) NOT TO SCALE



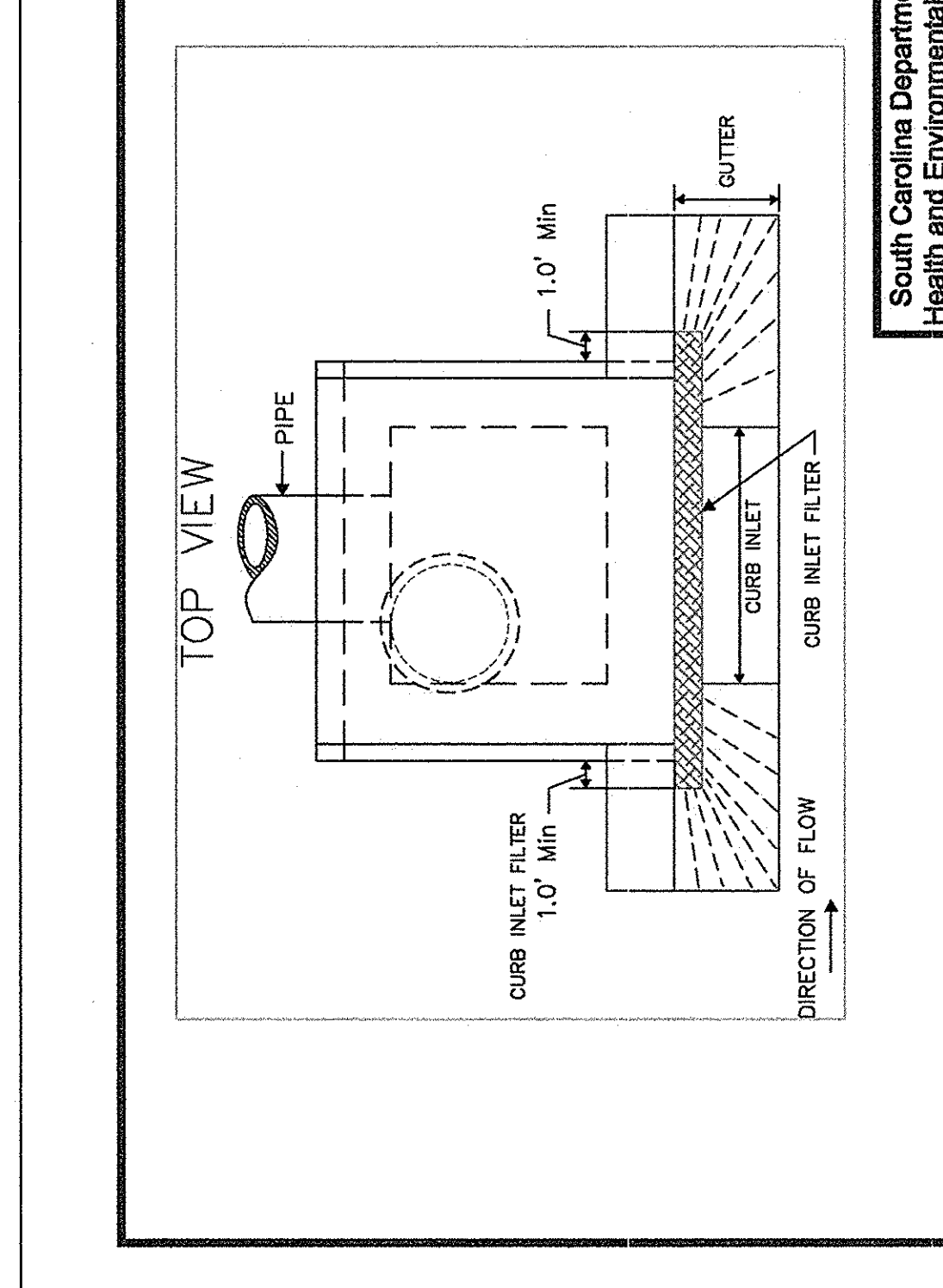
- NOTE:** EROSION CONTROL BLANKETS AND STAKES SHALL BE NORTH AMERICAN GREEN ST50 AND NORTH AMERICAN GREEN 6"-6" 80-STAKE (OR EQUIVALENT APPROVED EQUIVALENTS).
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND MULCH.
  2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH.
  3. ROLL THE BLANKETS DOWN THE SLOPE.
  4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
  5. STAPLES WITH APPROXIMATELY 90° TO EDGES, INSTALLED THROUGH OVERLAP ARE APPROXIMATELY 12" APART.
  6. EROSION CONTROL BLANKET SHALL CONFORM TO SCOTT SPECIFICATIONS FOR CLASS A TEMPORARY EROSION CONTROL BLANKET.

**EROSION CONTROL BLANKET DETAIL** (10) NOT TO SCALE

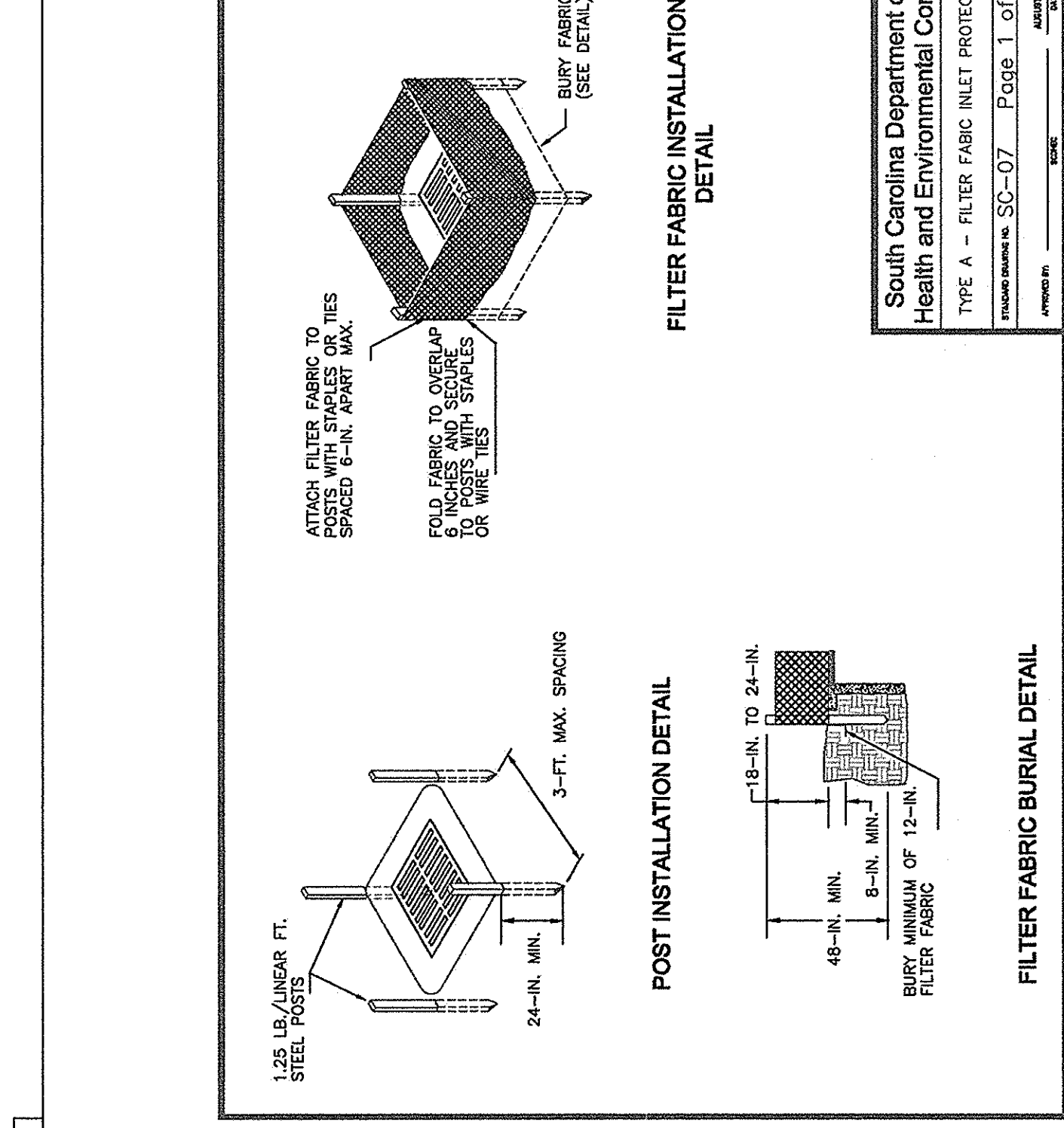


- NOTES:**
1. SEE "USC SUPPLEMENTAL GENERAL CONDITIONS FOR CONSTRUCTION PROJECTS" AND SECTION 02231 TREE PROTECTION AND MAINTENANCE FOR ADDITIONAL INFORMATION.
  2. PROTECTION FENCING FOR ALL TREES TO REMAIN.
  3. PROTECTION FENCING TO BE PLACED OUTSIDE OR BOUNDARY OF TREE CANOPY UNLESS OTHERWISE INDICATED ON LANDSCAPE PLAN OR APPROVED BY USC PROJECT MANAGER.
  4. A 4" LAYER OF HARDWOOD MULCH SHALL BE PLACED OVER TREE PROTECTION AREA.
  5. PROTECTION FENCING SHALL BE IN PLACE AND HARDWOOD MULCH PLACED PRIOR TO BEGINNING CONSTRUCTION.
  6. REQUESTS FOR PAYMENT SHALL NOT BE APPROVED UNTIL PROTECTION FENCING AND MULCH IS IN PLACE.
  7. FENCING SHALL BE MARKED BY USGS ASPERSIST AND APPROVED BY USC PROJECT MANAGER BEFORE INSTALLATION.
  8. CONSTRUCTION IS LIKELY TO OCCUR WITHIN 5' OF PROPOSED LOCATION OF PROTECTION FENCING. CONTRACTOR SHALL HAVE LIMITS OF CONSTRUCTION MARKED BY SURVEY BEFORE PROTECTION FENCING IS INSTALLED.

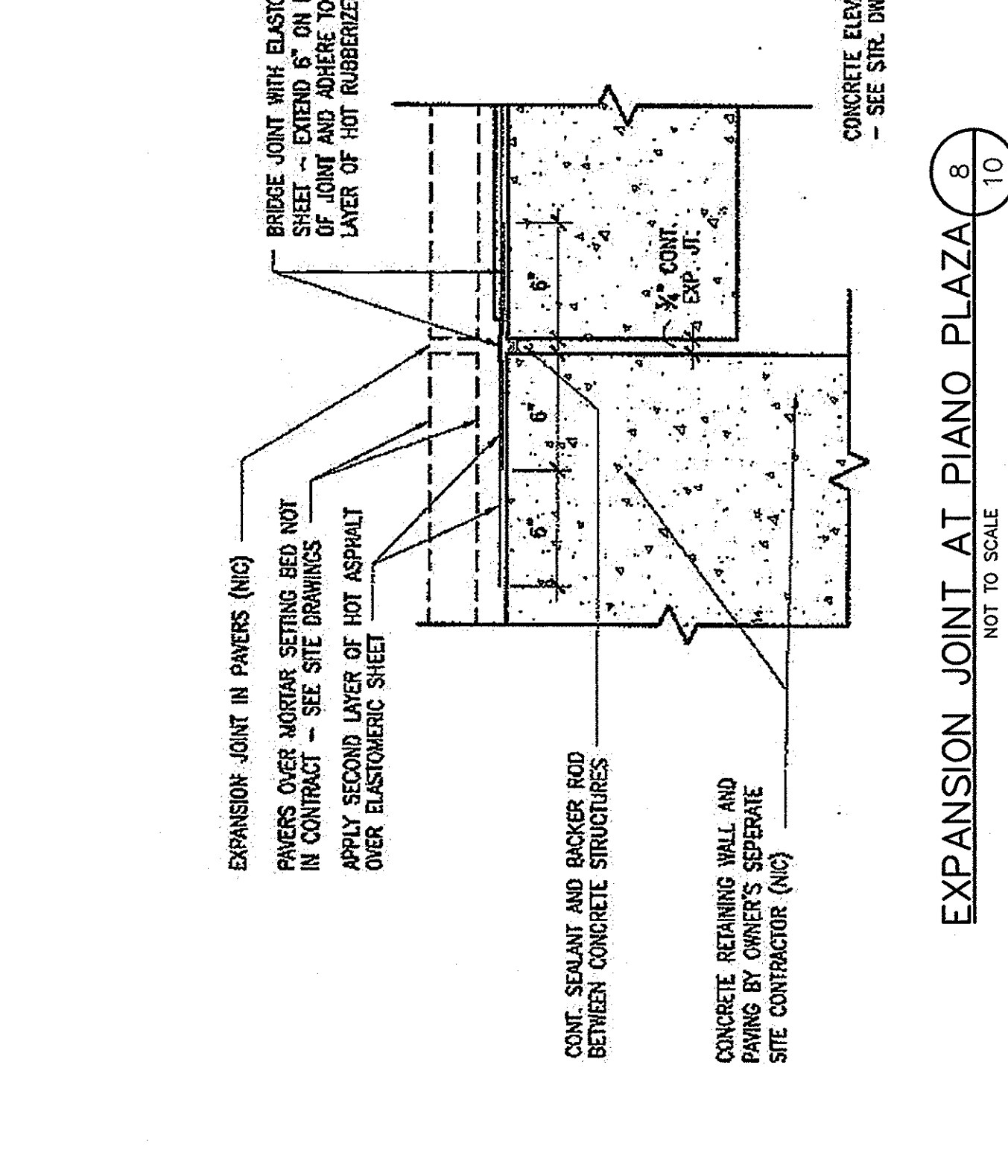
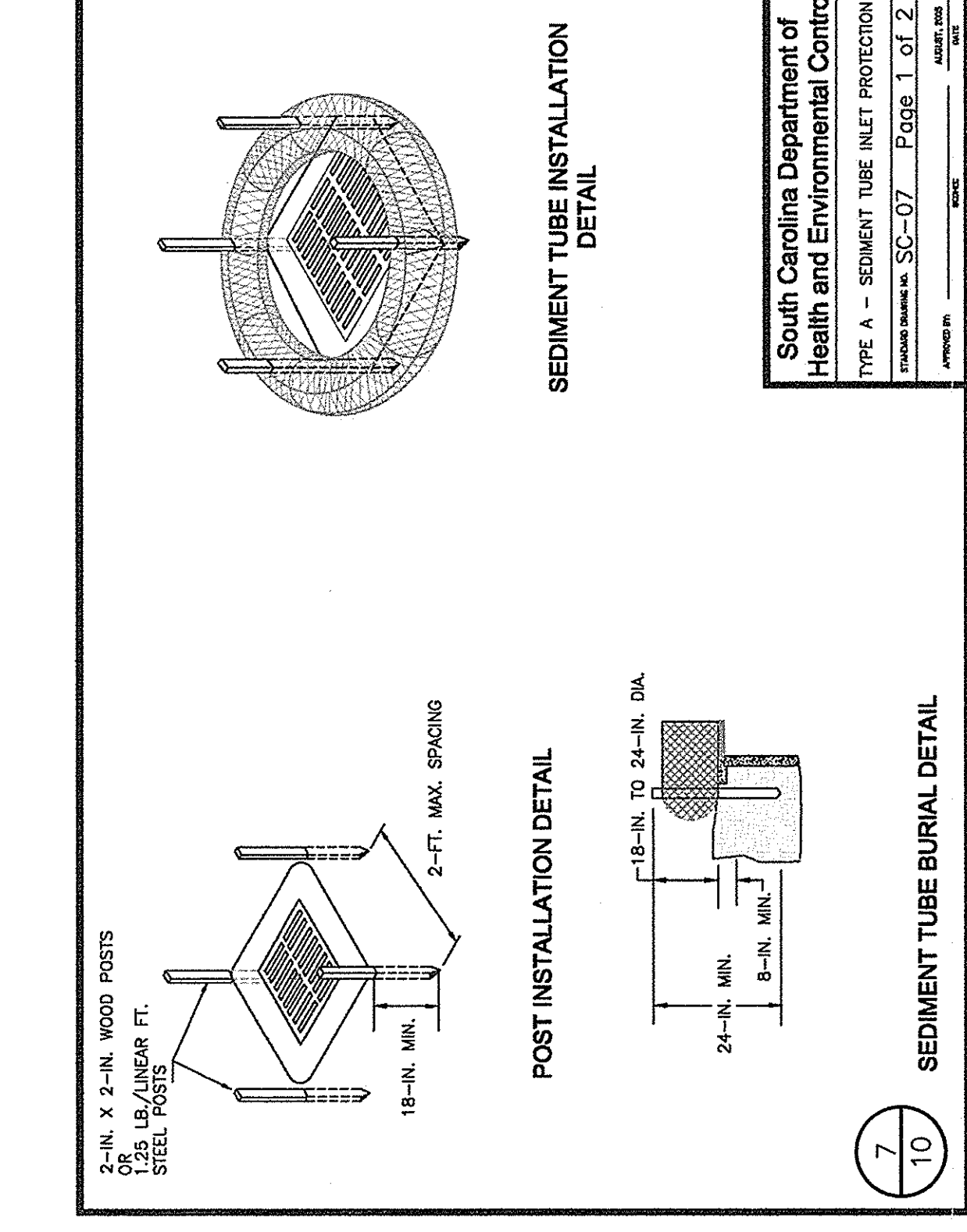
**TREE PROTECTION FENCE PANEL** (10) NOT TO SCALE



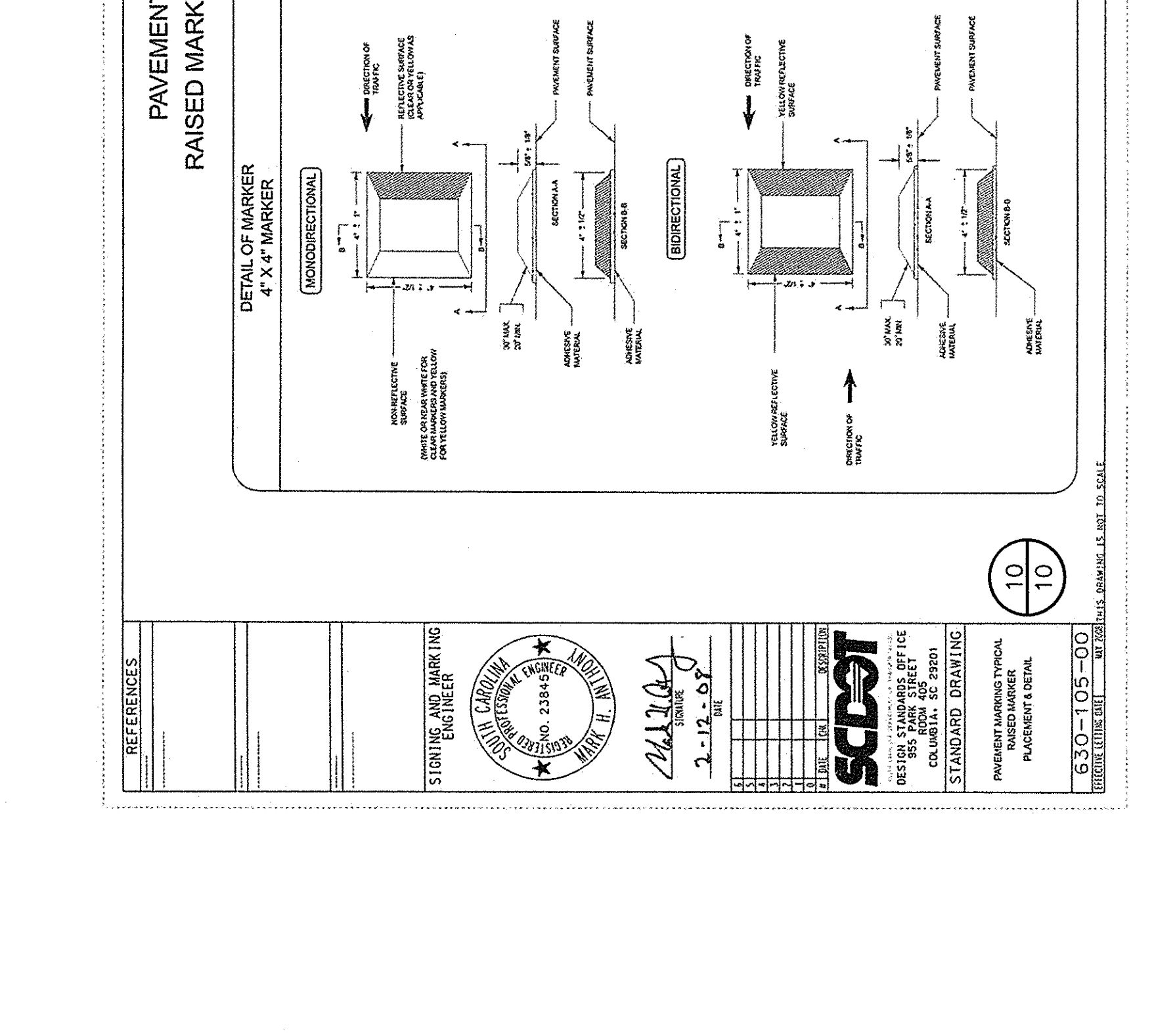
**TEMPERARY INLET PROTECTION** (10) NOT TO SCALE



**TEMPERARY INLET PROTECTION** (10) NOT TO SCALE



**EXPANSION JOINT AT PIANO PLAZA** (8) (10) NOT TO SCALE



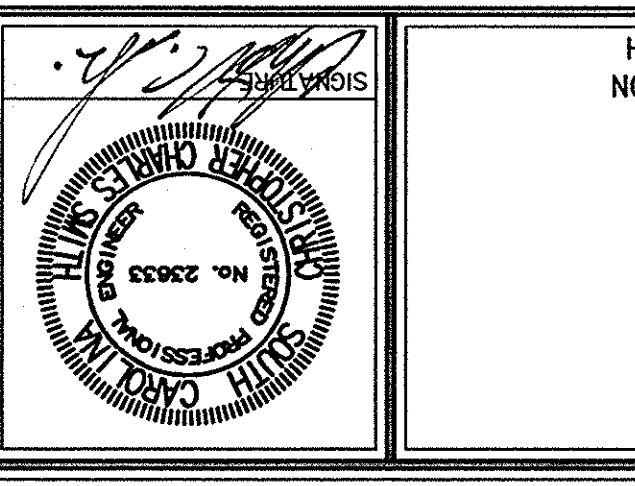
**SECTION DETAIL AT PIANO PLAZA** (9) (10) NOT TO SCALE

**REVISIONS**

NO.	DESCRIPTION	DATE	BY

**APPROVALS**

PROJECT ENG.	DESIGNED BY	CHECKED BY	APPROVED BY



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FLORENCE • CHARLOTTE • SAVANNAH

**SITE AND EROSION CONTROL DETAILS**

DATE: JANUARY 5, 2012 SCALE: AS NOTED

**UNIVERSITY OF SOUTH CAROLINA**  
DEPARTMENT OF CONSTRUCTION  
LANDSCAPE-HARDSCAPE  
ATHLETIC VILLAGE INFRASTRUCTURE

IN THE CITY OF COLUMBIA  
RICHLAND COUNTY, S.C.

**PROJECT**

LINE NO.	DESCRIPTION	DATE	BY
10			
2103			
34,357-882			
07578			

FILE NO. 35.786-888

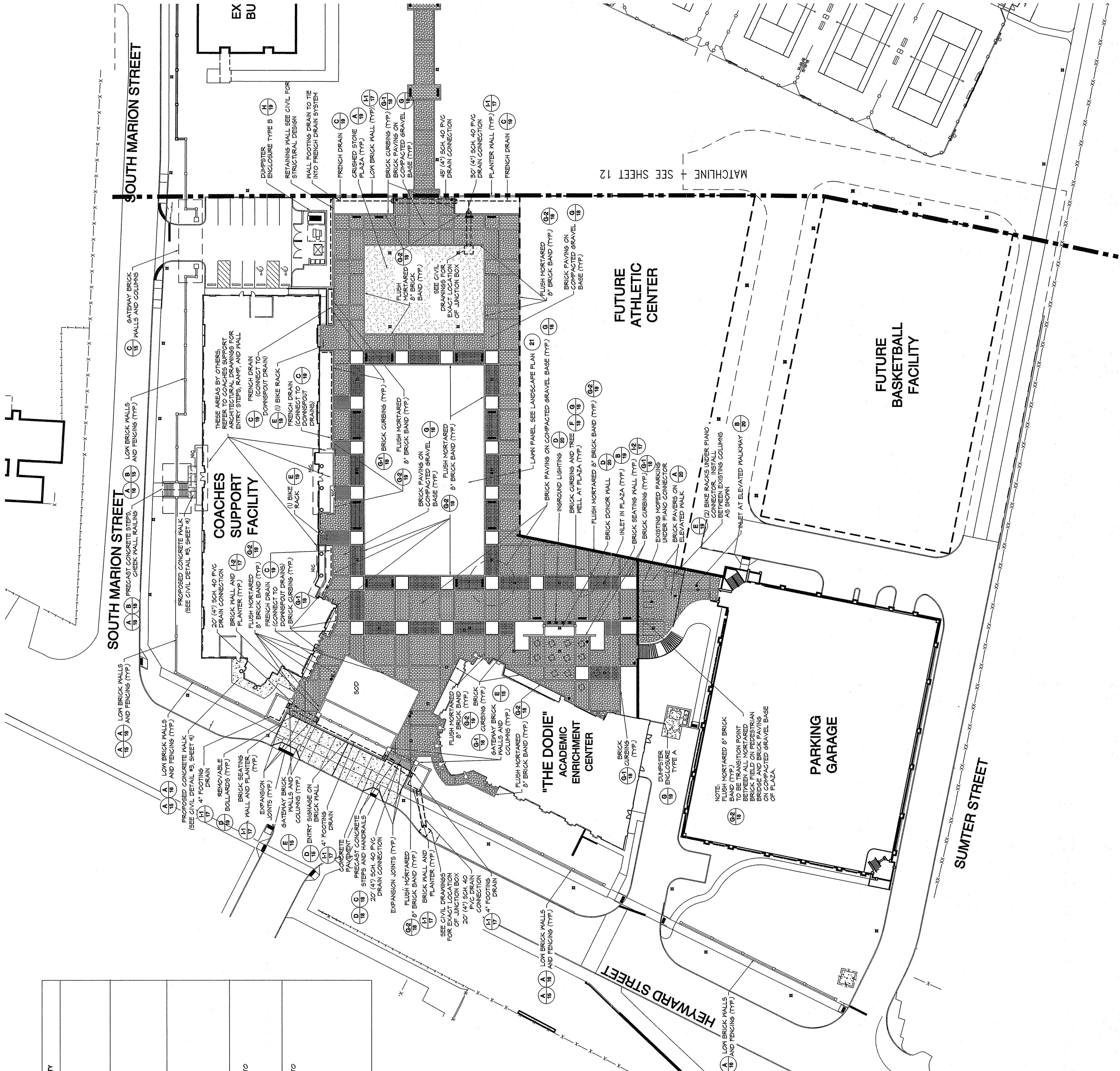
State Project Number:  
H27-6056-MJ-C

**SITE ACCESSORIES LEGEND**

SYMBOL	MODEL AND MANUFACTURER	QUANTITY	RESPONSIBLE PARTY
	TRADITIONAL SERIES TD-BENCH FAIRWEATHER SITE FURNISHINGS, 2000 17TH ST, WASHINGTON, DC 20037-1786, 1-800-928-1786	31	N.I.C. - TO BE PROVIDED BY OWNER
	GAROBEL (TM) TABLE 42" DIA. WITH 4 SEATS FREESTANDING, BLACK POWDER COAT LANDSCAPE FURNIS, 1000 17TH ST, WASHINGTON, DC 20037-1786, 1-800-928-1786	12	N.I.C. - TO BE PROVIDED BY OWNER
	THE ECONOMY SERIES EP-242 LITTER RECEPTACLES, VICTOR STANLY, INC., P.O. DRAWER 330, DUNKIRK, MARYLAND, 21048, 1-800-521-2846	12	N.I.C. - TO BE PROVIDED BY OWNER
	B4 REMOVABLE BOLLARDS, 6" DIA. WITH COLLARS, BLACK FINISH FAIRWEATHER SITE FURNISHINGS, FORT ORCHARD, WASHINGTON, 1-800-928-1786	3	CONTRACTOR TO FURNISH AND INSTALL.
	BICYCLE RACK 2, SCHEDULE 40 STEEL PIPE T-POSITION CONFIGURATION WITH IN-GROUND ANCHOR POINT, BLACK FINISH, 1500 17TH ST, WASHINGTON, DC 20037-1786, 1-800-928-1786	4	CONTRACTOR TO FURNISH AND INSTALL.

**GENERAL NOTES**

- EXISTING ECOLOGY AND AESTHETICS WILL OFTEN CAUSE ADJUSTMENT OF THESE PLANS TO FIT THE SITE. STAKE-OUT BY THE CONTRACTOR AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT IS ABSOLUTELY NECESSARY.
- LOCATIONS OF THOSE UTILITIES SHOWN ARE APPROXIMATE AND FOR THE CONTRACTOR'S USE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS, AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE RESULTING FROM THE FAILURE TO DO SO. CONTACT PALMETTO UTILITY PROTECTION SERVICE AT 1-866-121-1811 AT LEAST 12 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL INFORM LANDSCAPE ARCHITECT IF PROPOSED DESIGN IS IN CONFLICT WITH EXISTING OR PROPOSED UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN AND ADJUST PROPOSED DESIGN OR UTILITIES AS NECESSARY TO RESOLVE CONFLICTS.
- BASE PLAN DATA DERIVED FROM SITE SURVEY PROVIDED BY B.P. BARBER.



**REVISIONS**

NO.	DESCRIPTION	DATE	BY

**APPROVALS**

PROJECT ENGR.	DESIGNER	CHECKED BY	DATE

**GRIMBALL ASSOCIATES**  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
COLUMBIA, SC 29205 803-738-1925  
COLUMBIA, SC 29205 803-738-1925

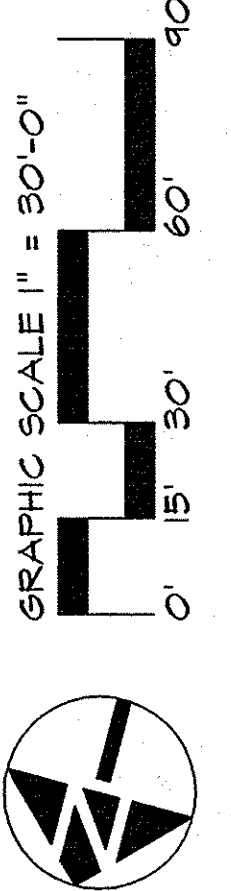
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COLUMBIA • CHARLOTTE • CHARLESTON  
COLUMBIA • CHARLOTTE • CHARLESTON

**UNIVERSITY OF SOUTH CAROLINA**  
ATHLETIC VILLAGE INFRASTRUCTURE  
DEVELOPMENT CONSTRUCTION  
FOR  
**LANDSCAPE-HARDSCAPE CONSTRUCTION**  
IN THE CITY OF COLUMBIA  
RICHLAND COUNTY, S.C.

DATE: JANUARY 5, 2012  
SCALE: 1/8" = 1'-0"  
SHEET 1  
ACCESSORIES PLAN  
SITE DETAIL KEY AND

PROJECT: 2003-2039  
SHEET: 11 OF 27  
DRAWING NO.: 34-357-582  
REVISED NO.: 07578  
FILE NO.: 35,786-888

**State Project Number: H27-6056-MJ-C**



NO.	DESCRIPTION	DATE	BY

PROJECT ENGR.	
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
CAC	
APPROVED:	
CCS	

STATE OF SOUTH CAROLINA  
 PROFESSIONAL ENGINEER  
 No. 22823  
 DATE: 1/5/12

STATE OF SOUTH CAROLINA  
 PROFESSIONAL ARCHITECT  
 No. 22823  
 DATE: 1/5/12

**bpb**  
 Engineering • Experience • Excellence  
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 COLUMBIA • GREENVILLE • CHARLESTON  
 FLORENCE • CHARLOTTE • SAVANNAH

STATE OF SOUTH CAROLINA  
 PROFESSIONAL ENGINEER  
 No. 470  
 DATE: 1/5/12

STATE OF SOUTH CAROLINA  
 PROFESSIONAL ARCHITECT  
 No. 470  
 DATE: 1/5/12

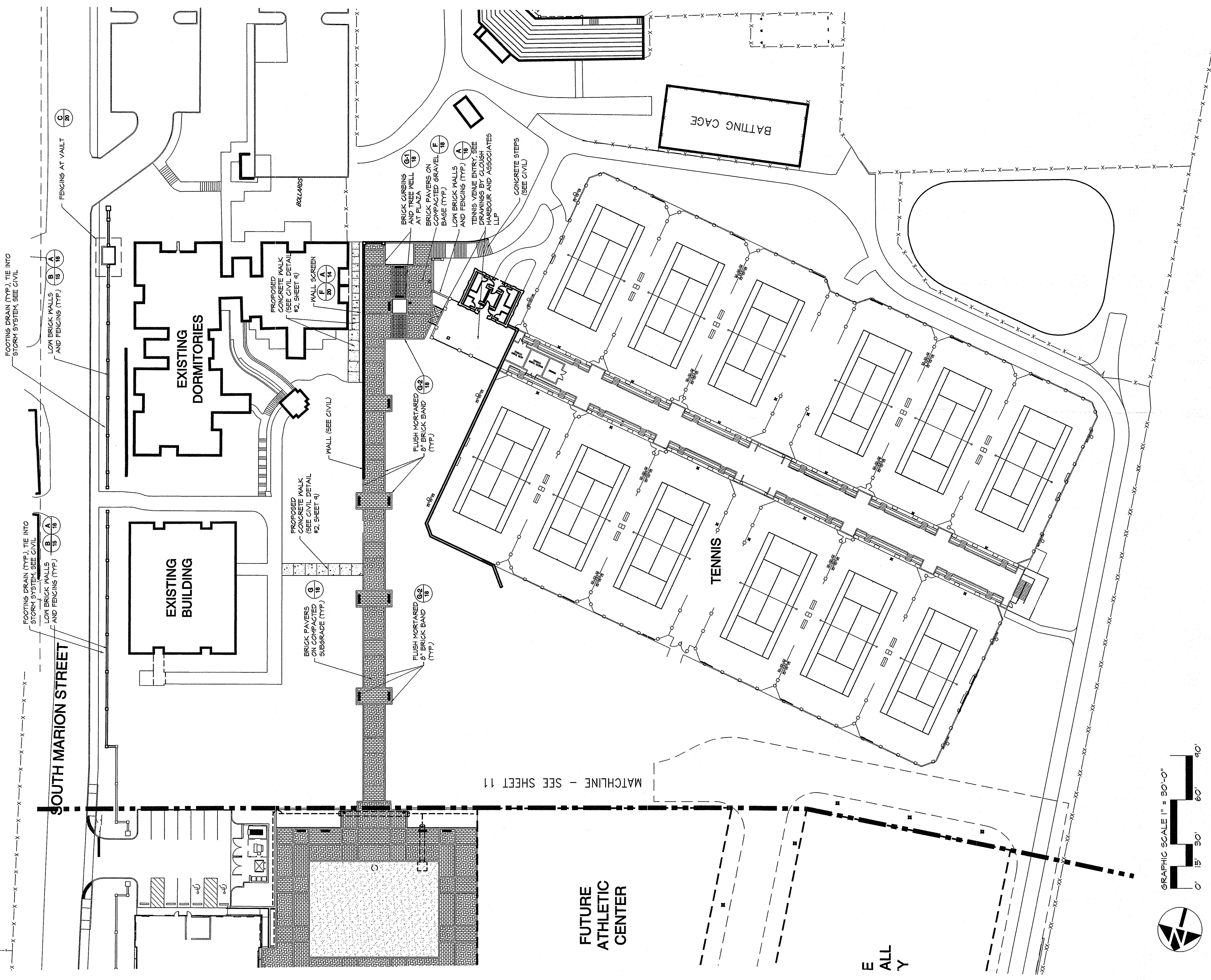
**GRIMBALL ASSOCIATES**  
 600 WEST 11TH STREET  
 COLUMBIA, SC 29205 (803)788-9252

DATE: JANUARY 5, 2012  
 SCALE:  

IN THE CITY OF COLUMBIA  
 RICHLAND COUNTY, S.C.  
**UNIVERSITY OF SOUTH CAROLINA**  
**LANDSCAPE-HARDSCAPE**  
 DEVELOPMENT CONSTRUCTION  
 ATHLETIC VILLAGE INFRASTRUCTURE

PROJECT	
DWG. NAME	
DWG. NO.	12
SHEET	27
REF. NO.	4357-B22
DATE	07/27/08
FILE NO.	35,786-B88

State Project Number:  
**H27-6056-MJ-C**

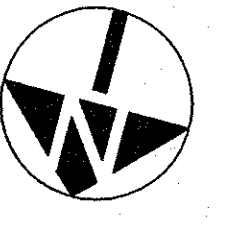
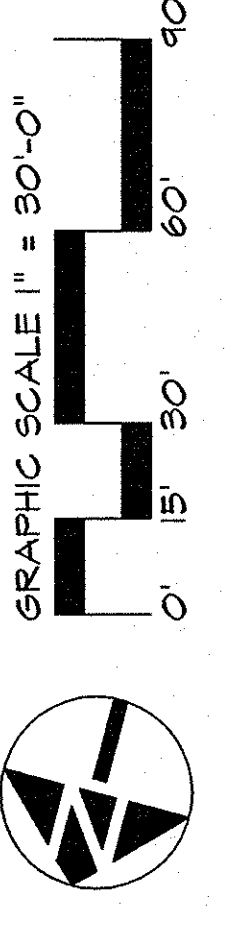


**GENERAL NOTES**

- EXISTING GEOLOGY AND UTILITIES WILL OPEN CAUSE ADJUSTMENT OF THESE PLANS TO FIT THE SITE. STAKE-OUT BY THE CONTRACTOR AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT IS ABSOLUTELY NECESSARY.
- LOCATIONS OF THOSE UTILITIES SHOWN ARE APPROXIMATE AND FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AT 1-800-525-1198 AT LEAST 12 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY LANDSCAPE ARCHITECT'S PROPOSED DESIGN IS IN CONFORMANCE WITH LANDSCAPE ARCHITECT'S PROPOSED DESIGN. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION TO ADJUST PROPOSED DESIGN OR UTILITIES AS NECESSARY TO RESOLVE CONFLICTS.
- BASE PLAN DATA DERIVED FROM SITE SURVEY PROVIDED BY B.P. BARBER.

**SITE ACCESSORIES LEGEND**

SYMBOL	MODEL AND MANUFACTURER	QUANTITY	RESPONSIBLE PARTY
■	TRADITIONAL SERIES TO BRUSH FINISH BLACK LITTER RECEPTACLES FORT ORCHARD WASHINGTON 1-800-525-1198	91	N.L.C. TO BE PROVIDED BY OWNER
○	CAROUSEL (TM) TABLE 42" DIA. WITH 4 SEATS AND 4 SEATING POSITIONS LANDSCAPE FORMS 481 LANIDALE AVE. KALAMAZOO MI 49004 1-800-521-2946	12	N.L.C. TO BE PROVIDED BY OWNER
●	THE ECONOMY SERIES BLACK LITTER RECEPTACLES BLACK VICTOR STANLY, INC. 1000 W. WASHINGTON DUNKIRK, NY 14048 1-800-566-3578	12	N.L.C. TO BE PROVIDED BY OWNER
•	B-1 REMOVABLE BOLLARD, 6" DIA. WITH COLLARS, BLACK FINISH CONTRACTOR TO FURNISH AND INSTALL FORT ORCHARD WASHINGTON 1-800-525-1198	9	CONTRACTOR TO FURNISH AND INSTALL
—	BICYCLE RACK MODEL T100, 2" SCHEDULE 40 STEEL PIPE POSITION CONFIGURATION WITH IN-GROUND ANCHORS GAMMEL/FLATCORE INC. 150 GAMMEL DRIVE, FOLSOM, CA 95630 FOLSOM, CALIFORNIA 95661 (800) 235-2440	4	CONTRACTOR TO FURNISH AND INSTALL



ALL Y

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State Project Number:  
H27-6056-MJ-C

PROJECT	ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION
UNIVERSITY OF SOUTH CAROLINA	LANDSCAPE-HARDSCAPE CONSTRUCTION
IN THE CITY OF COLUMBIA	RICHLAND COUNTY, S.C.
DATE: JANUARY 5, 2012	SCALE:
DIMENSIONING PLAN SHEET 1	

FILE NO. 35,786-B88
NO. 27
OF 13
SHEET
DATE: 1/5/12

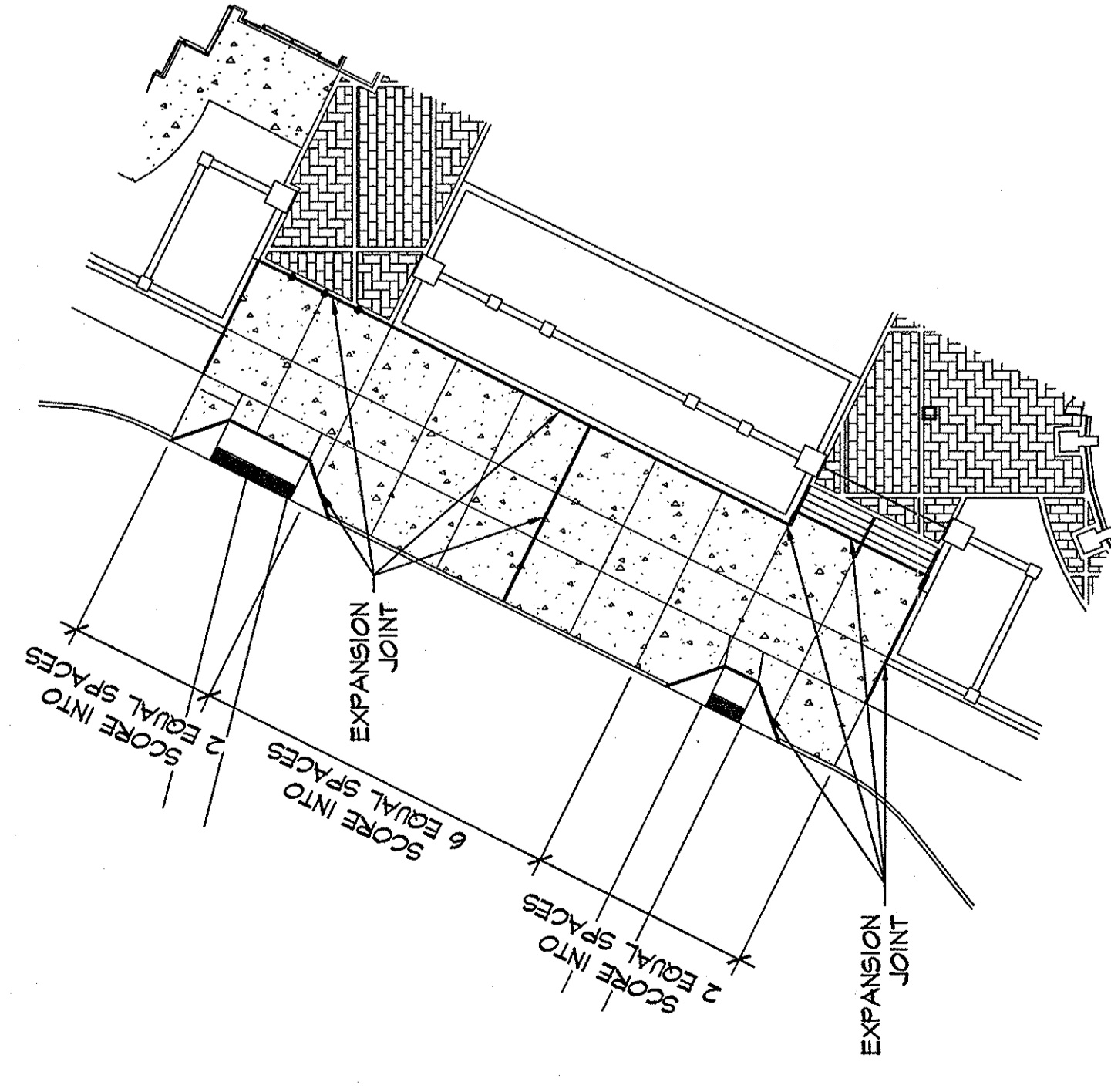
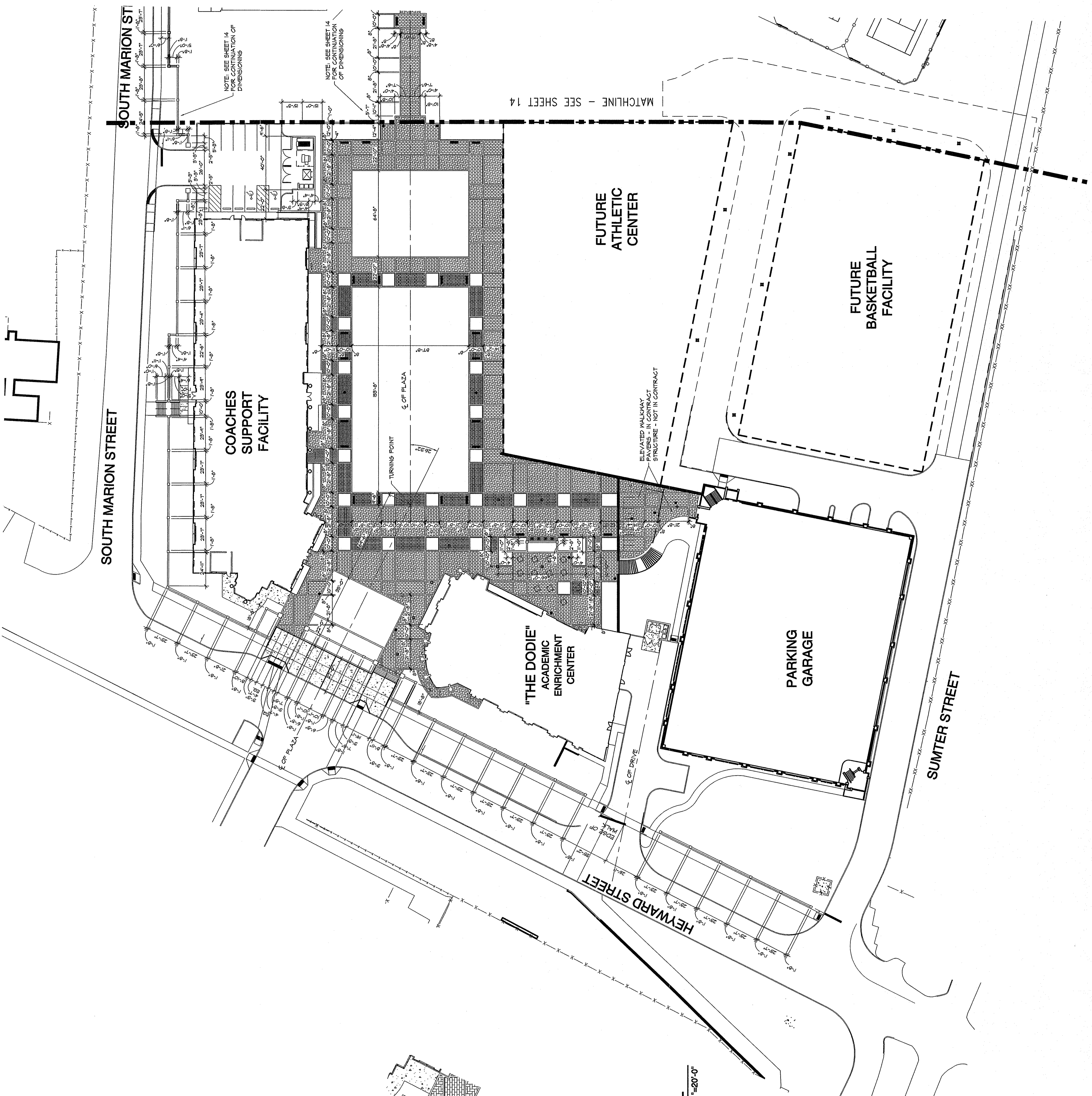
**bpb**  
Engineering - Experience - Excellence  
COLUMBIA • CHARLOTTE • CHARLESTON  
FLORENCE • GREENVILLE • SAVANNAH

**GRIMBALL ASSOCIATES**  
LANDSCAPE ARCHITECTS  
400 EASTLARK SQUARE  
COLUMBIA, SC 29205 (803)786-9525

APPROVALS	PROJECT ENGR.	DESIGNED BY:	CCS
APPROVED:	FILE	CAC	CCS
CAC	CAC	CAC	CAC

SIGNATURE	DATE
<i>[Signature]</i>	1/5/12

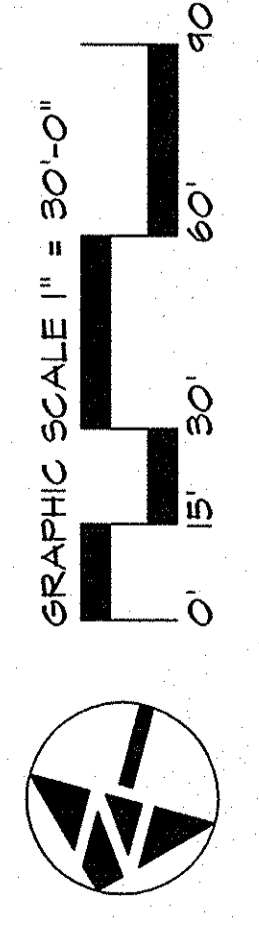
NO.	DESCRIPTION	DATE	BY



**A** CONCRETE PLAZA - SCORING DETAIL  
SCALE 1"=20'-0"  
13 PLAN

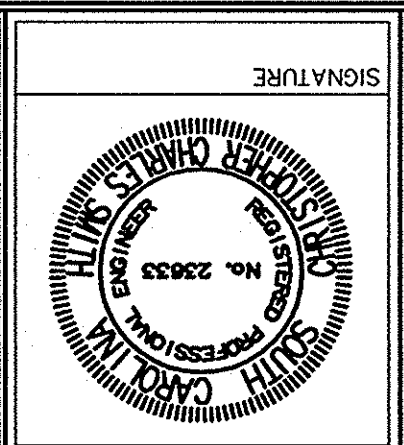
**GENERAL NOTES**

- EXISTING ECOLOGY AND AESTHETICS WILL OFTEN CAUSE ADJUSTMENT OF THESE PLANS TO FIT THE SITE. STAKE-OUT BY THE CONTRACTOR AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT IS ABSOLUTELY NECESSARY.
- LOCATIONS OF THOSE UTILITIES SHOWN ARE APPROXIMATE AND FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. CONTRACTOR SHALL CONTACT PALMETTO UTILITY PROTECTION SERVICE AT 1-888-721-1811 AT LEAST 12 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL INFORM LANDSCAPE ARCHITECT IF PROPOSED DESIGN IS IN CONFLICT WITH EXISTING OR PROPOSED UTILITIES. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION TO ADJUST PROPOSED DESIGN OR UTILITIES AS NECESSARY TO RESOLVE CONFLICTS.
- BASE PLAN DATA DERIVED FROM SITE SURVEY PROVIDED BY B.P. BARBER.



NO.	DESCRIPTION	DATE	BY

APPROVALS	DESIGNED BY: CCS
PROJECT ENG:	DRAWN BY: CAC
CHECKED BY:	FILED
APPROVED:	CAC
DATE:	



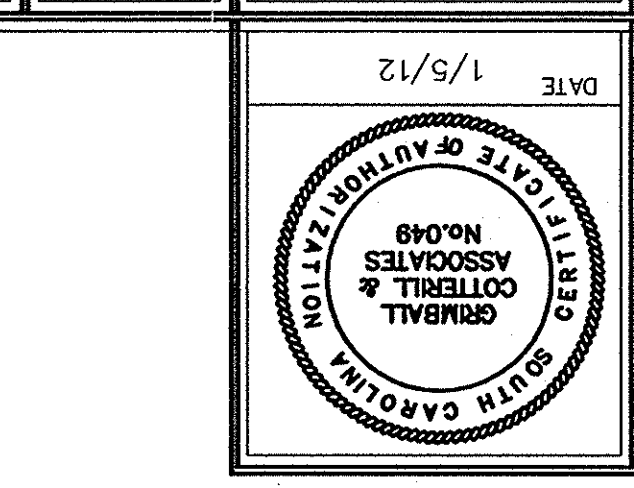
**bpb**  
 Engineering - Experience - Excellence  
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DATE: JANUARY 5, 2012  
 SCALE:  

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION  
 FOR  
**LANDSCAPE-HARDSCAPE CONSTRUCTION**  
 UNIVERSITY OF SOUTH CAROLINA  
 IN THE CITY OF COLUMBIA  
 RICHLAND COUNTY, S.C.

PROJECT	DATE	SHEET
ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION	JANUARY 5, 2012	14
UNIVERSITY OF SOUTH CAROLINA		OF 27

APPROVALS	DESIGNED BY: CCS
PROJECT ENG:	DRAWN BY: CAC
CHECKED BY:	FILED
APPROVED:	CAC
DATE:	



**GRIMBALL ASSOCIATES**  
 LANDSCAPE ARCHITECTS & PLANNERS  
 400 EASTING HOUSE DRIVE  
 COLUMBIA, SC 29205 803-738-9525

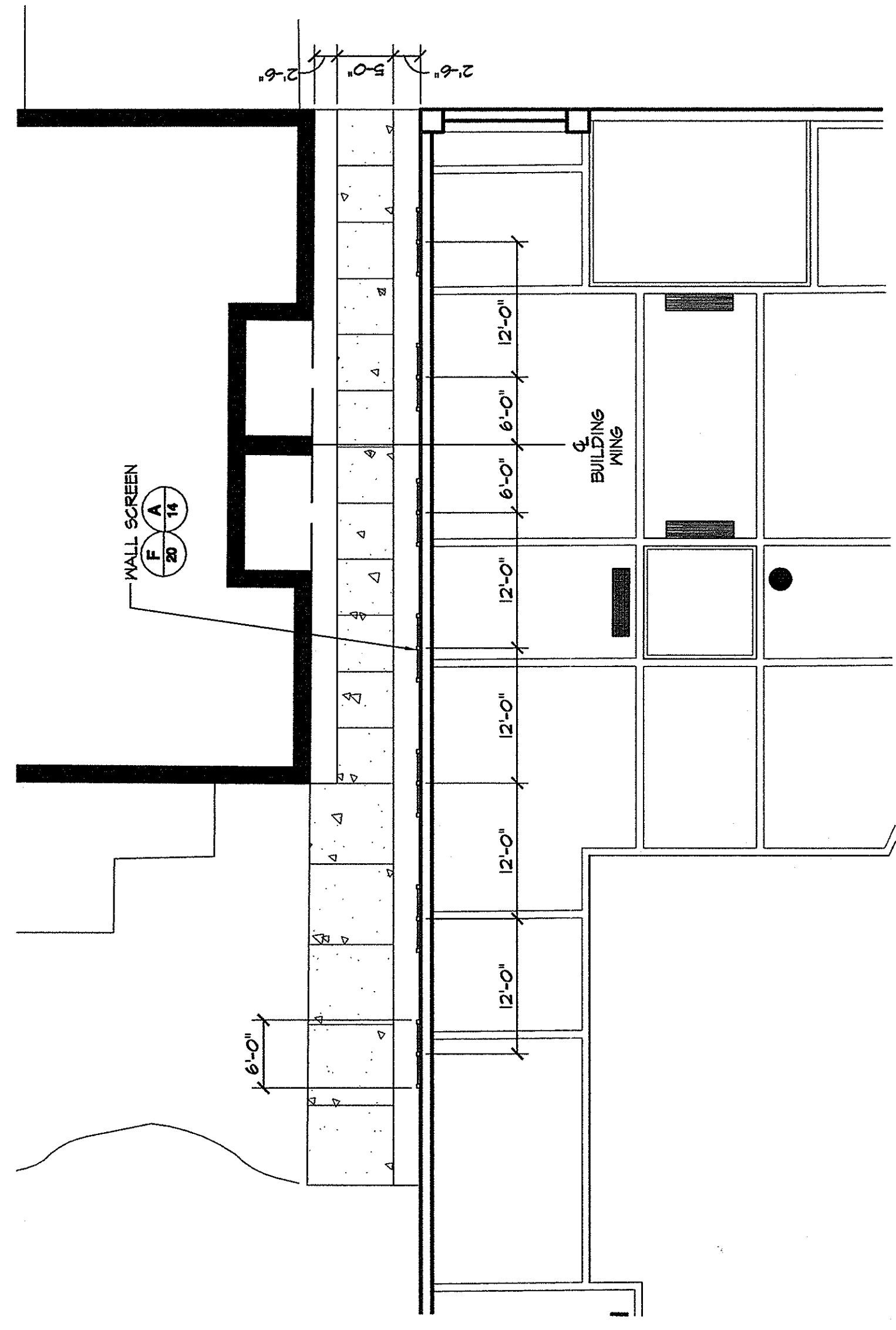
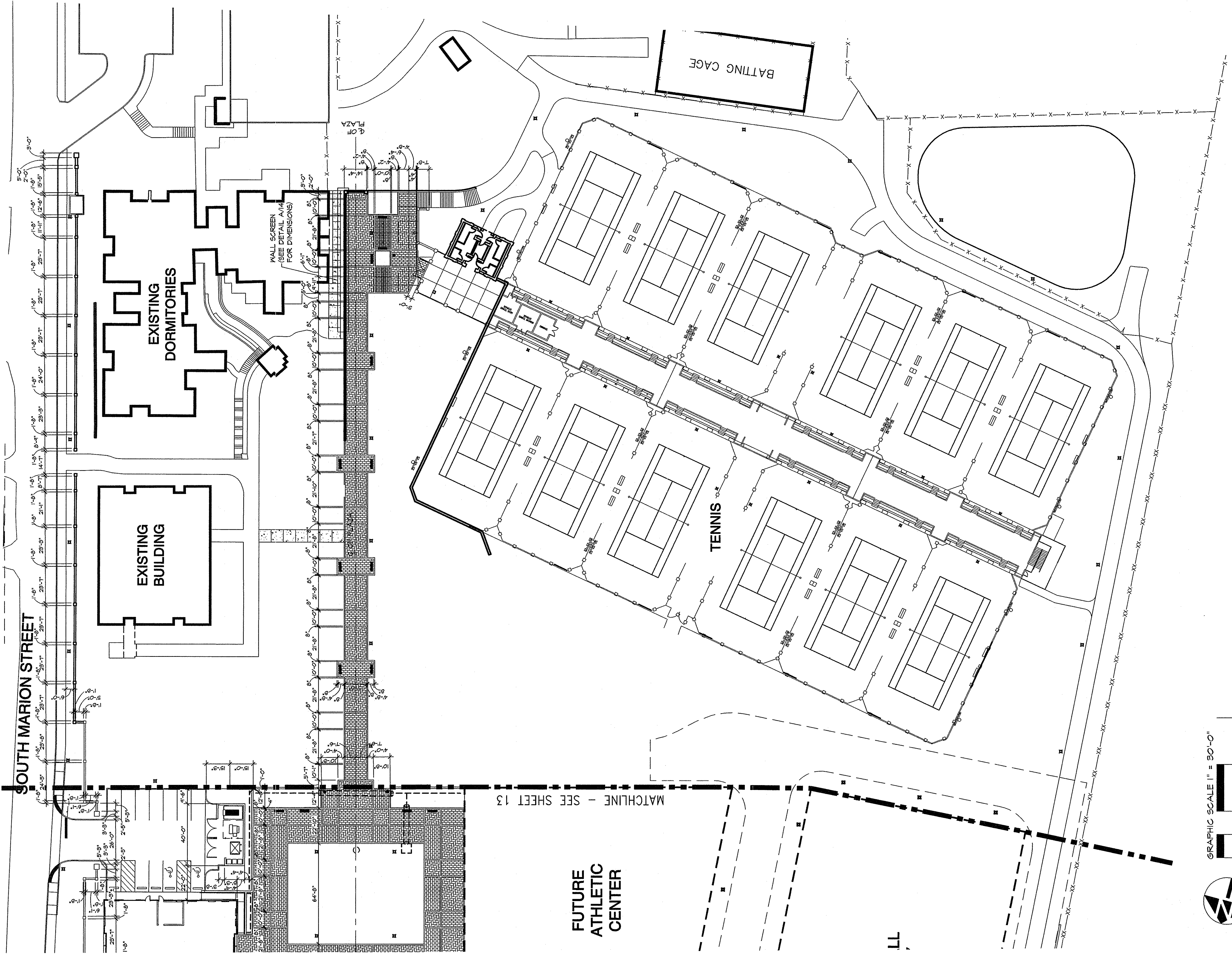
DATE: 1/5/12  
 SCALE:  

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION  
 FOR  
**LANDSCAPE-HARDSCAPE CONSTRUCTION**  
 UNIVERSITY OF SOUTH CAROLINA  
 IN THE CITY OF COLUMBIA  
 RICHLAND COUNTY, S.C.

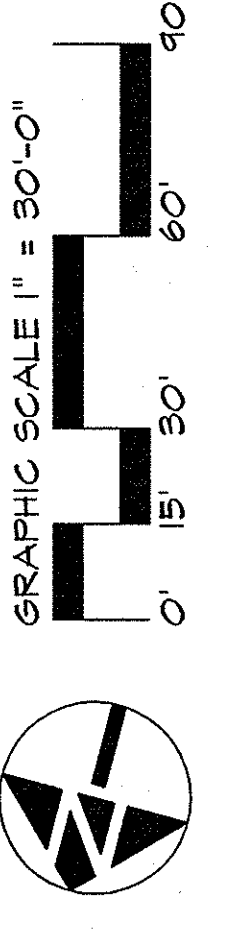
PROJECT	DATE	SHEET
ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION	1/5/12	14
UNIVERSITY OF SOUTH CAROLINA		OF 27

**GENERAL NOTES**

- EXISTING ECOLOGY AND AESTHETICS WILL OBTAIN CAUSE ADJUSTMENT OF THESE PLANS TO FIT THE SITE. STAKE-OUT BY THE CONTRACTOR AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT IS ABSOLUTELY NECESSARY.
- LOCATIONS OF THOSE UTILITIES SHOWN ARE APPROXIMATE AND FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES FROM THE BUREAU OF PUBLIC UTILITIES (BPU) PRIOR TO CONSTRUCTION. SERVICE AT 1-888-721-1877 AT LEAST 12 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY LANDSCAPE ARCHITECT'S PROPOSED DESIGN IS IN CONFLICT WITH EXISTING OR PROPOSED UTILITIES. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION TO ADJUST PROPOSED DESIGN OR UTILITIES AS NECESSARY TO RESOLVE CONFLICTS.
- BASE PLAN DATA DERIVED FROM SITE SURVEY PROVIDED BY B.P. BARBER.



**A WALL SCREEN DETAIL**  
 14 PLAN  
 SCALE 1"=10'-0"



State Project Number:  
**H27-6056-MJ-C**

NO.	DESCRIPTION	DATE

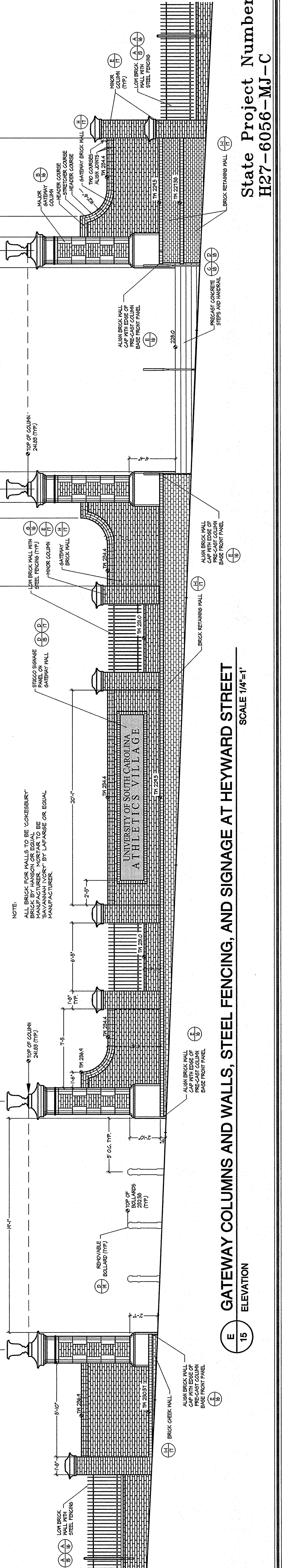
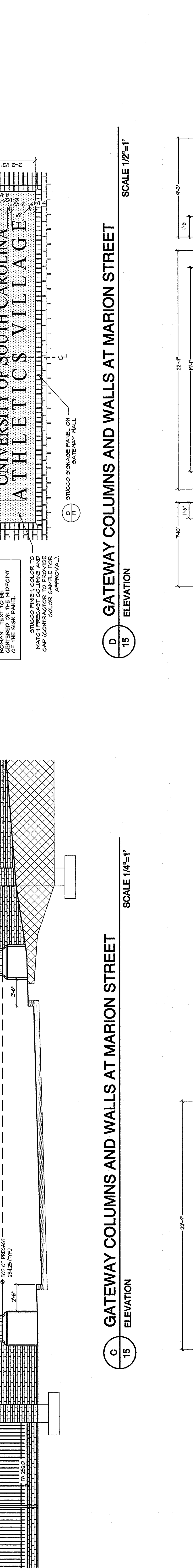
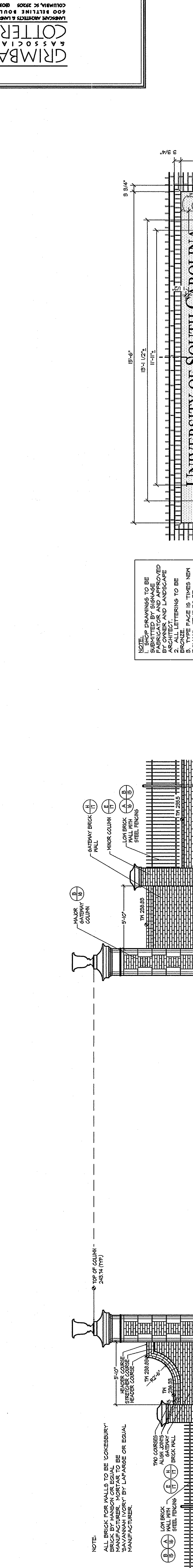
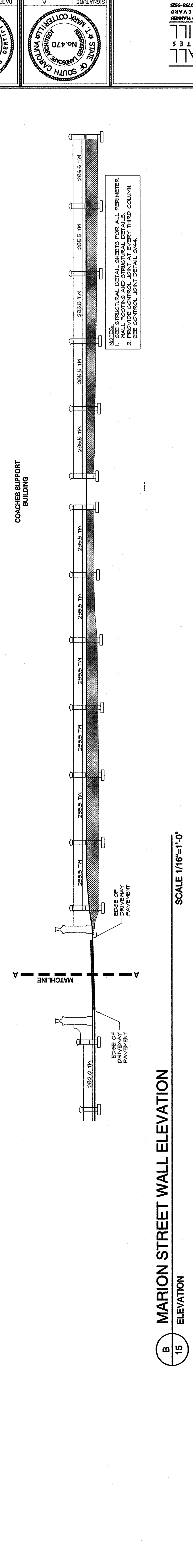
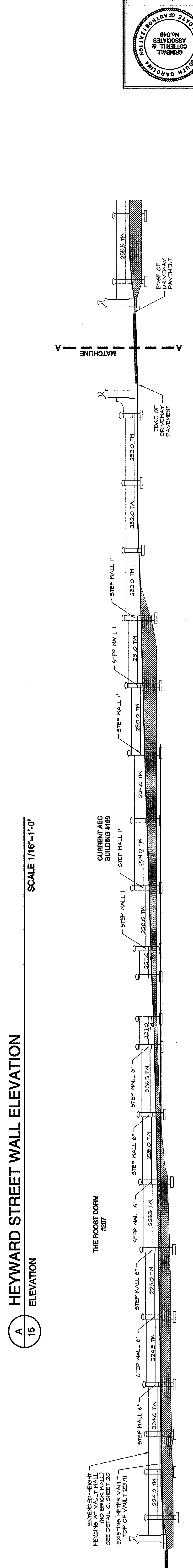
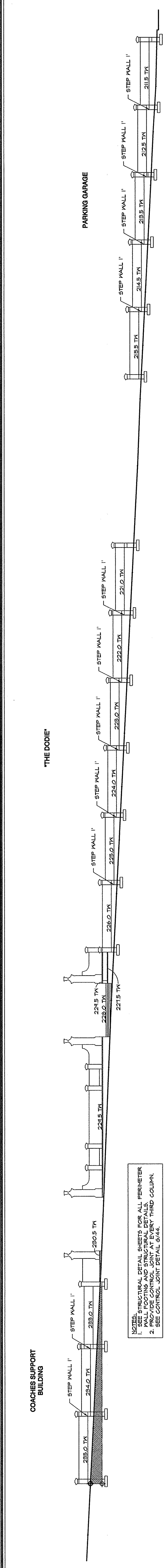
APPROVALS	PROJECT ENG. CCS	DESIGNED BY: BRAMM BT	CHECKED BY: WEL	DATE: 1/5/12

**CRIMBALL ASSOCIATES**  
 LANDSCAPE ARCHITECTS & LAND PLANNERS  
 COLUMBIA, SC 29205 (803)778-9955

**BP Barber**  
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 FLORENCE • CHARLOTTE • SAVANNAH

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE  
 DEVELOPMENT CONSTRUCTION  
**CONSTRUCTION**  
**LANDSCAPE-HARDSCAPE**  
 FOR  
**UNIVERSITY OF SOUTH CAROLINA**  
 RICHLAND COUNTY, S.C.  
 DATE: JANUARY 5, 2012  
 SCALE: WALL ELEVATIONS DETAILS

DWG NAME	SHEET
FILE NO. 35-786-B68	15
DATE	OF
2103, 2013	27
REF. NO.	
34,357-B62	
DATE	
07/27/10	



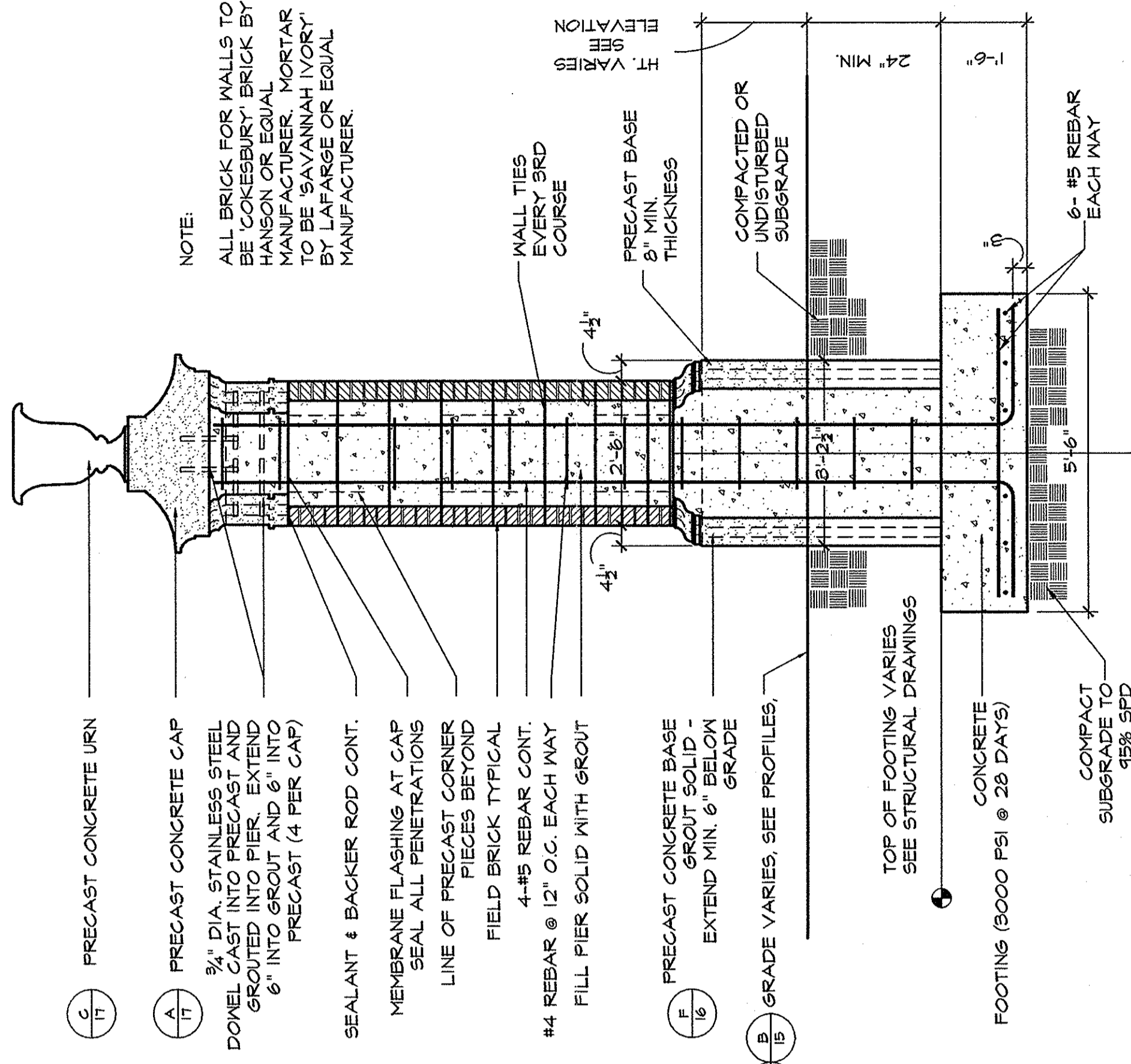
State Project Number: H27-6056-MJ-C

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**NOTES FOR BRICK SITE WALLS & COLUMNS:**

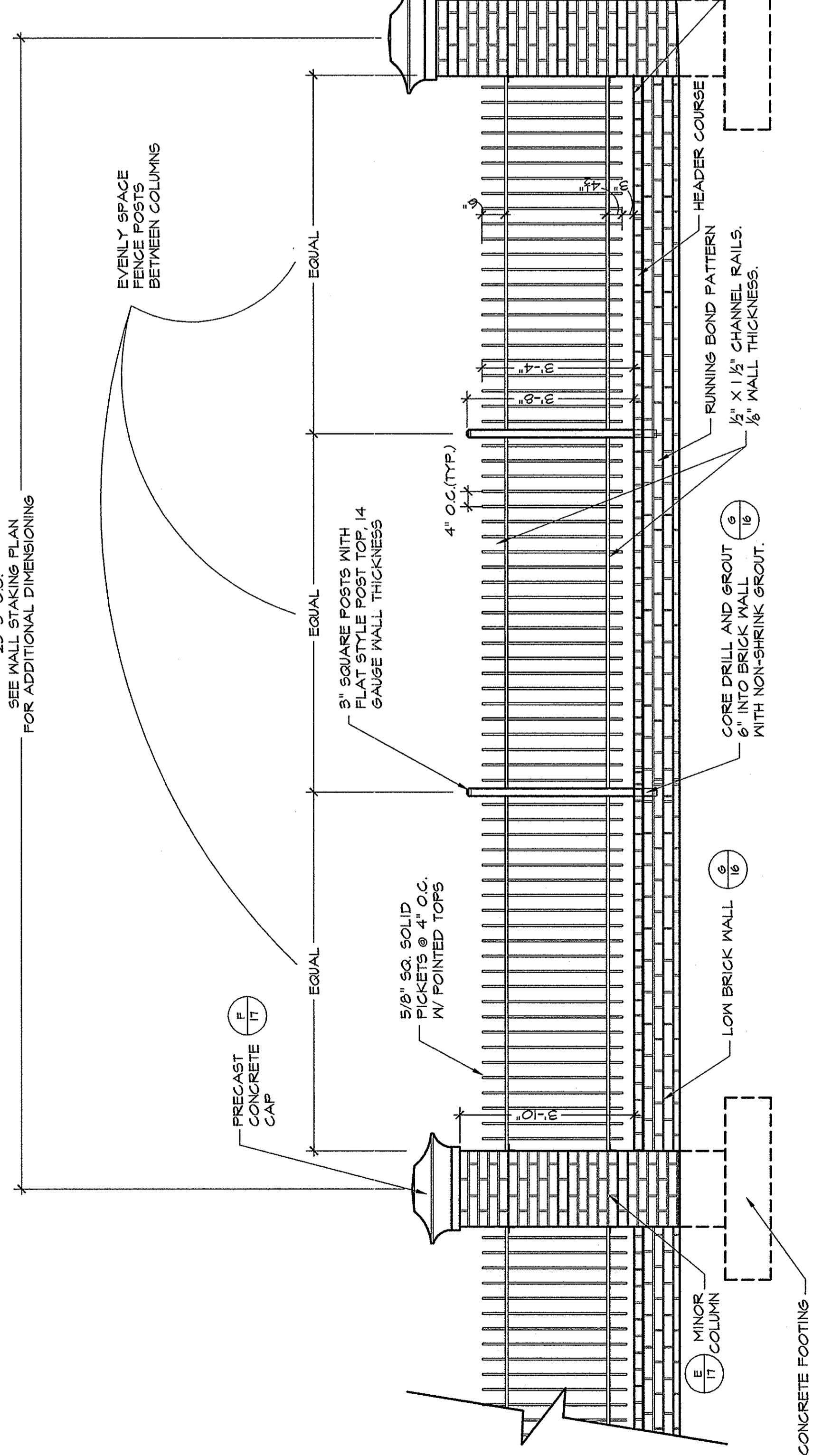
1. PROVIDE SHOP DRAWINGS OF FENCE CONSTRUCTION AND ALL PRE-CAST COMPONENTS FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. ALL FENCE COMPONENTS SHALL BE MADE OF HOT ROLLED STRUCTURAL STEEL AND SHALL BE FINISHED WITH BLACK POWDER COATING.
3. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF FENCE AND PRE-CAST CONCRETE COMPONENTS TO LANDSCAPE ARCHITECT FOR APPROVAL. ALL PRE-CAST CONCRETE ELEMENTS SHALL MATCH EXISTING DETAILING AT THE GREEN VILLAGE.
4. ALL SITE WALL BRICK (EXCLUDING DUMPSTER ENCLOSURES) SHALL BE COKEBURY BY HANSON OR EQUAL MANUFACTURER. BRICK PATTERN SHOWN SHALL BE USED ON BOTH SIDES OF WALL.
5. ALL CONNECTIONS FROM RAILS TO POSTS SHALL BE FIELD WELDED. GRIND ALL WELDS SMOOTH, PRIME AND PAINT WITH TWO COATS BLACK ALYD enamel TO MATCH FENCE PANELS.
6. ALL POSTS AND PICKETS SHALL STAND PLUMB. ALL RAILS SHALL BE LEVEL.
7. SEE WALL PROFILES A15 AND B15 FOR TOP OF WALL ELEVATIONS. CONTRACTOR TO FIELD VERIFY EXISTING GRADES AND WALL HEIGHTS PRIOR TO CONSTRUCTION. CONTACT LANDSCAPE ARCHITECT AFTER STAKING FOR APPROVAL OF TOP OF WALL ELEVATIONS.
8. REFER TO 6/16 AND 8/17 FOR WALL AND COLUMN STRUCTURAL FOOTING DETAILS.
9. ALL MORTAR TO BE SAVANNAH IVORY BY LAFARGE OR EQUAL MANUFACTURER. CONTRACTOR TO PROVIDE SAMPLES OF MORTAR AND BRICK TO BE APPROVED BY THE LANDSCAPE ARCHITECT.



**16 TYPICAL LOW BRICK WALL WITH STEEL FENCING**  
SCALE 1/2"=1'

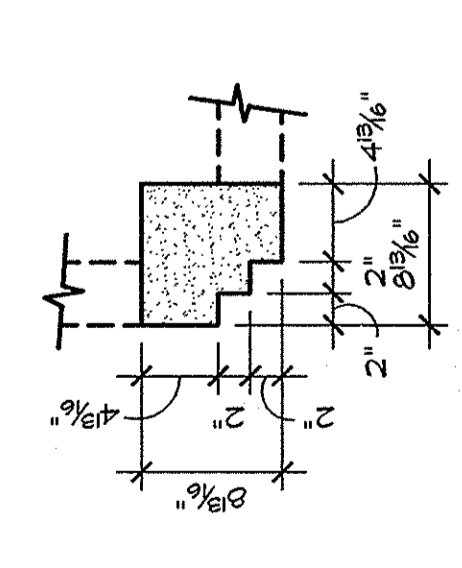
**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

20'-0" O.C.  
SEE WALL STAKING PLAN  
FOR ADDITIONAL DIMENSIONS



**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

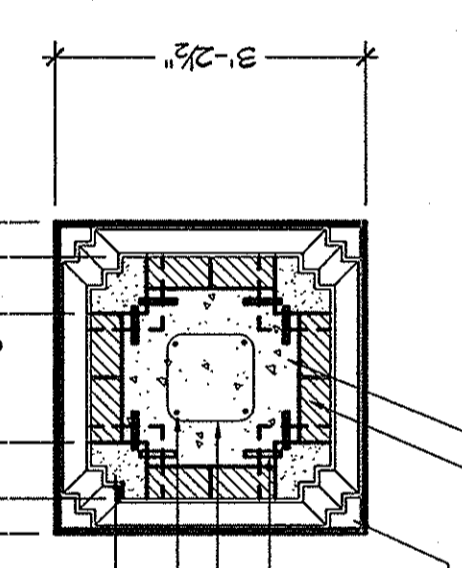
**16 PRECAST CONCRETE BASE**  
MAJOR GATEWAY COLUMN - PLAN SECTION  
SCALE: 1"=1'-0"



**16 PRECAST CONCRETE CORNER**  
MAJOR GATEWAY COLUMN - PLAN  
SCALE 1"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT SMALL PRECAST CORNER  
SCALE 1/2"=1'-0"

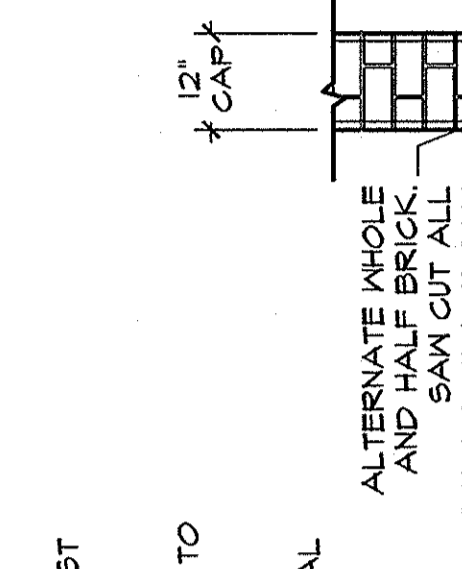
**16 PRECAST CONCRETE CORNER**  
MAJOR GATEWAY COLUMN - PLAN SECTION  
SCALE: 1"=1'-0"



**16 PRECAST CONCRETE BASE**  
MAJOR GATEWAY COLUMN - PLAN SECTION  
SCALE: 1"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT SMALL PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

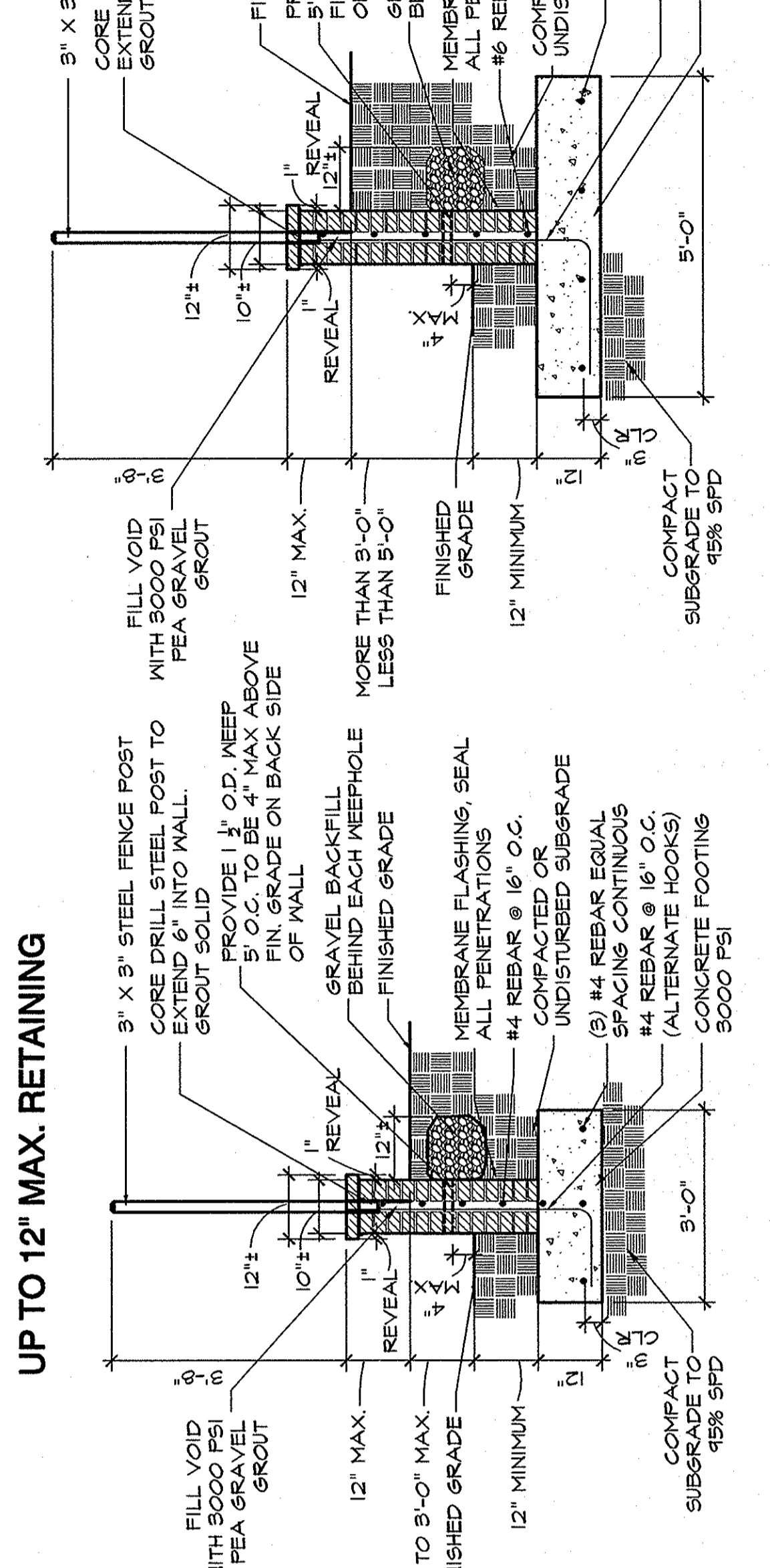


**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT SMALL PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"



**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

**16 MAJOR GATEWAY COLUMN**  
PLAN VIEW SECTION AT LARGE PRECAST CORNER  
SCALE 1/2"=1'-0"

**APPROVALS:**  
 PROJECT ENG: [Signature] DATE: 1/5/12  
 DESIGNER: [Signature] DATE: 1/5/12  
 CHECKED BY: [Signature]  
 APPROPRIATE: [Signature]

**SIGNATURE:** [Signature] DATE: 1/5/12  
**STATE OF SOUTH CAROLINA:** [Seal] No. 470  
**STATE OF SOUTH CAROLINA:** [Seal] No. 2233

**ENGINEERING:** [Signature] DATE: 1/5/12  
**ARCHITECT:** [Signature] DATE: 1/5/12

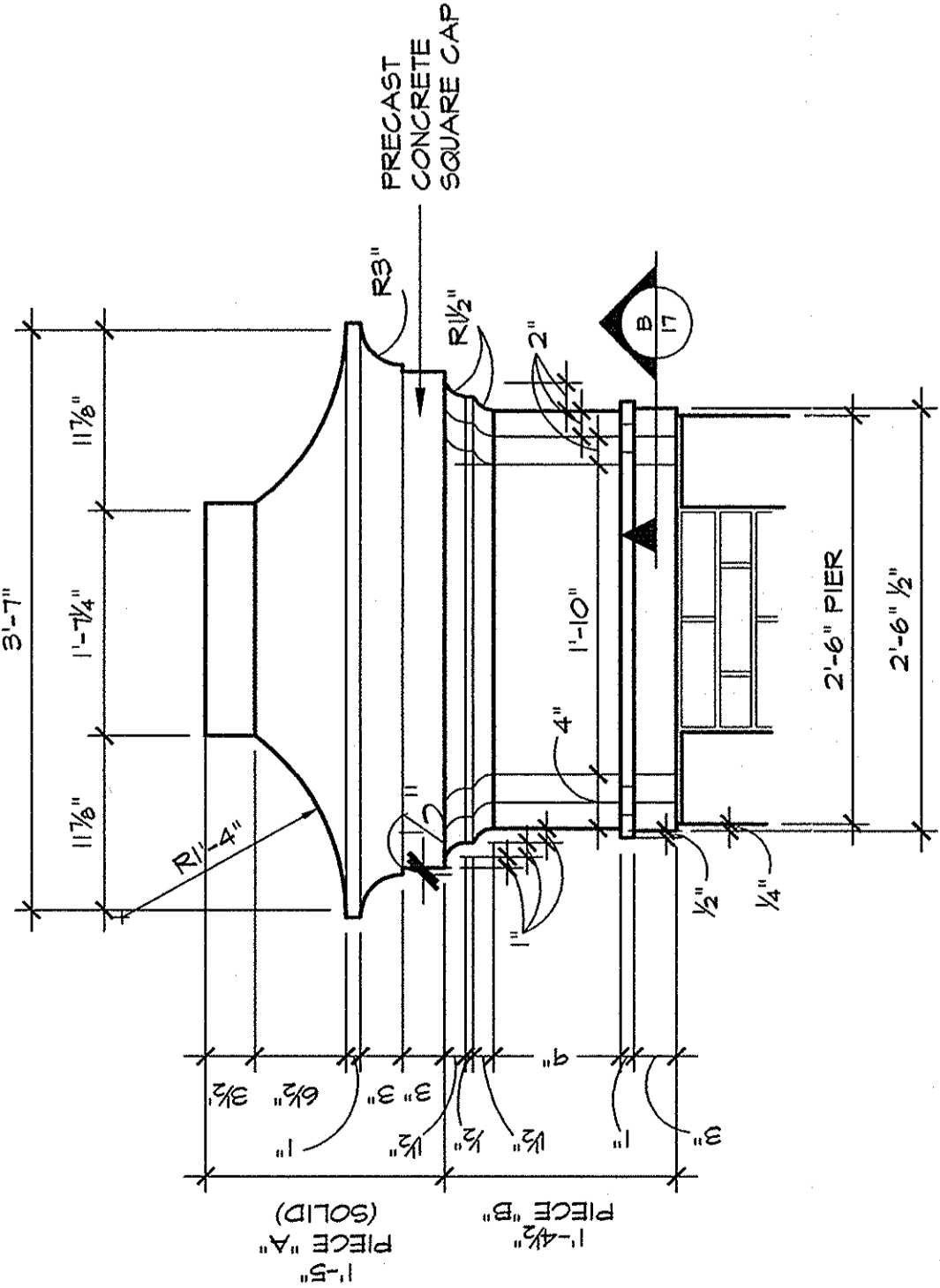
**ENGINEERING:** Excellence • Experience • Innovation  
**ARCHITECT:** Excellence • Experience • Innovation

**BP Barber**  
 ENGINEERING • ARCHITECTURE • INTERIOR DESIGN  
 COLUMBIA • GREENVILLE • CHARLOTTE • SAVANNAH

**GRIMBALL ASSOCIATES**  
 LANDSCAPE ARCHITECTS & URBAN PLANNERS  
 600 BETTINGER BOULEVARD  
 COLUMBIA, SC 29209 (803) 739-7833

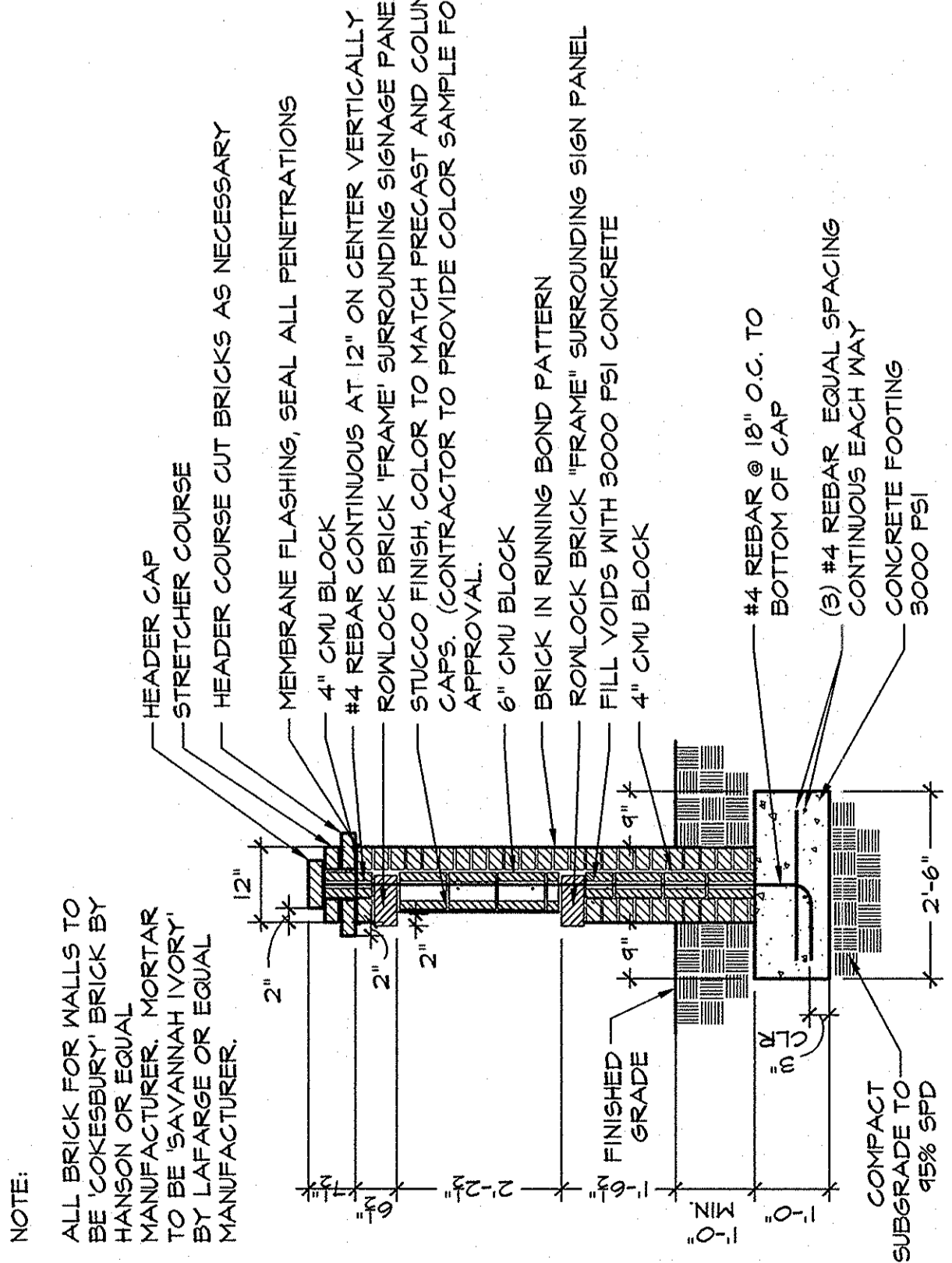
REVISIONS:

NO.	DESCRIPTION	DATE	BY



**A PRECAST CONCRETE CAP**  
17 MAJOR GATEWAY COLUMN - ELEVATION

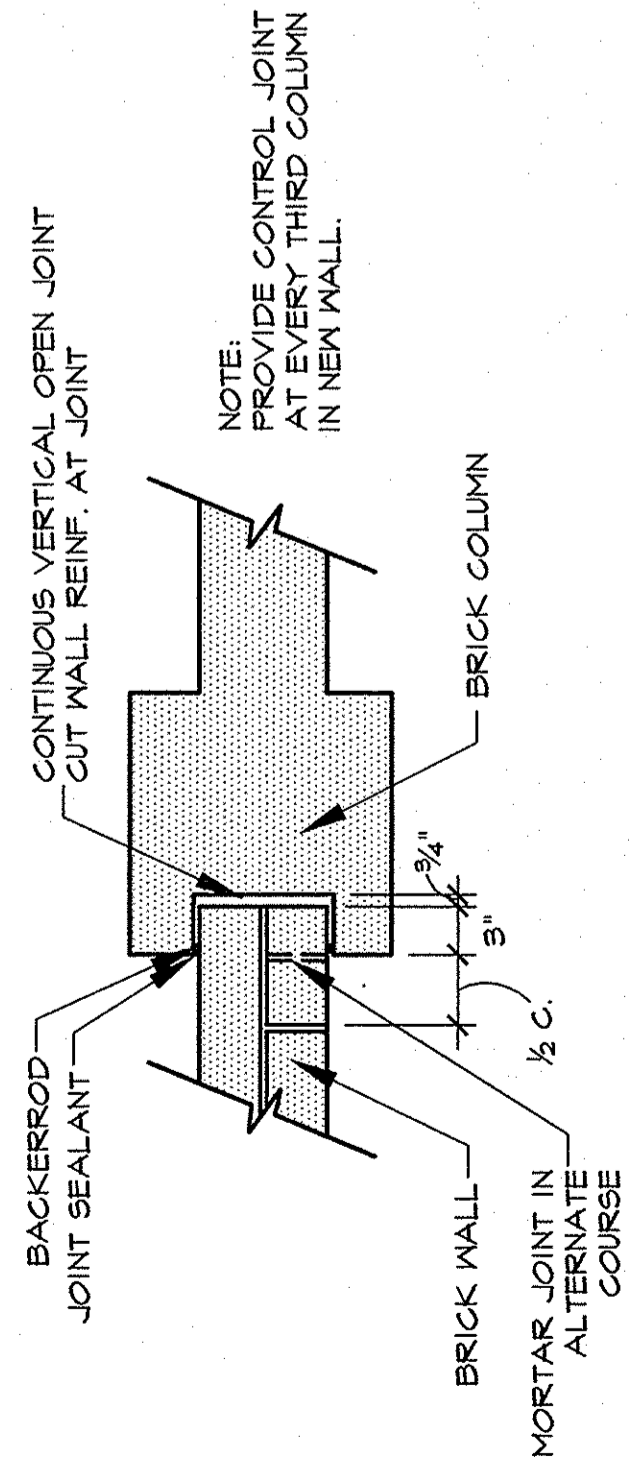
SCALE: 1"=1'-0"



NOTE:  
SEE DETAIL D/15 FOR DETAILS ON LETTERING ON SIGNAGE WALL.

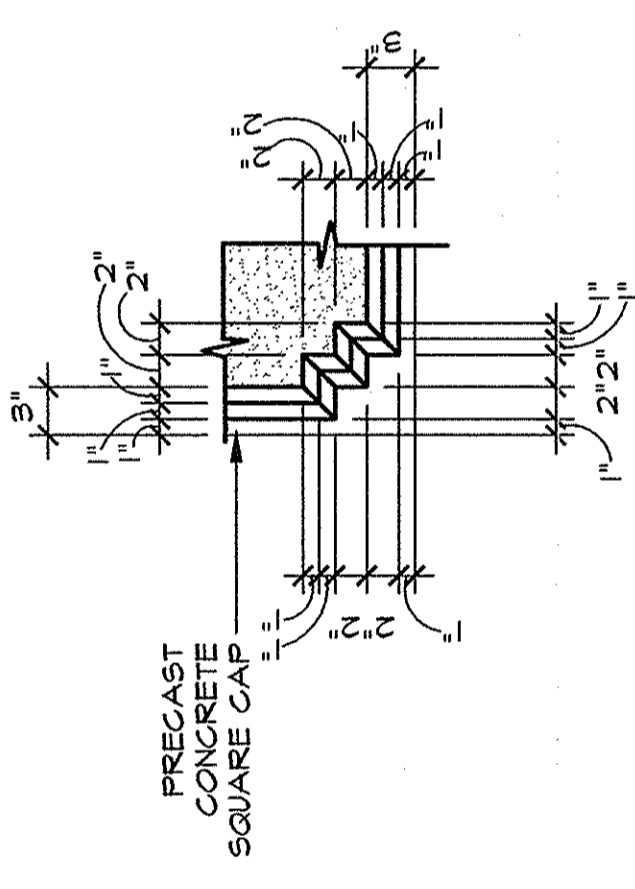
**D STUCCO SIGNAGE PANEL ON GATEWAY WALL**  
17 SECTION

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



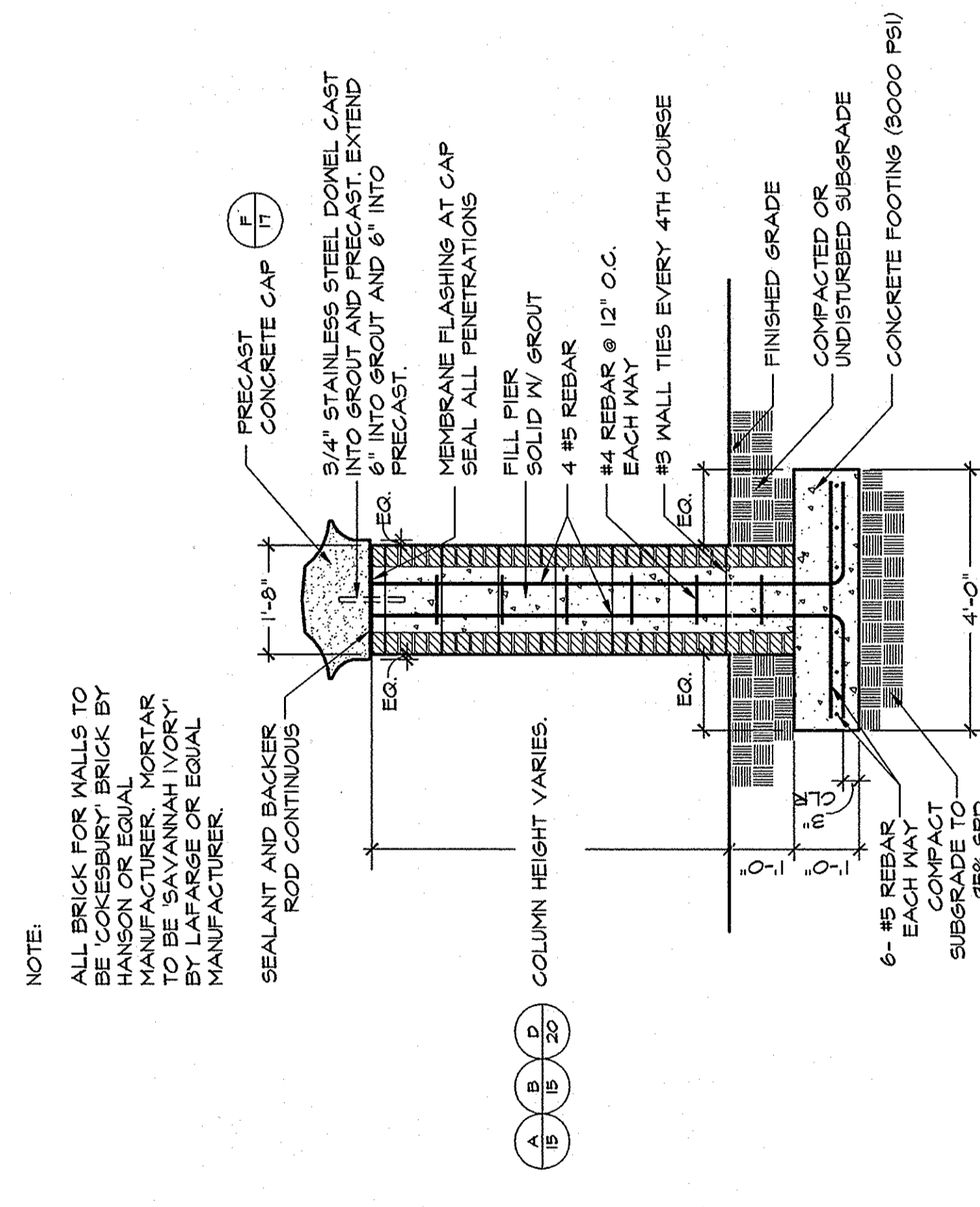
**G CONTROL JOINT AT BRICK WALL**  
17 SECTION

SCALE: 1"=1'-0"



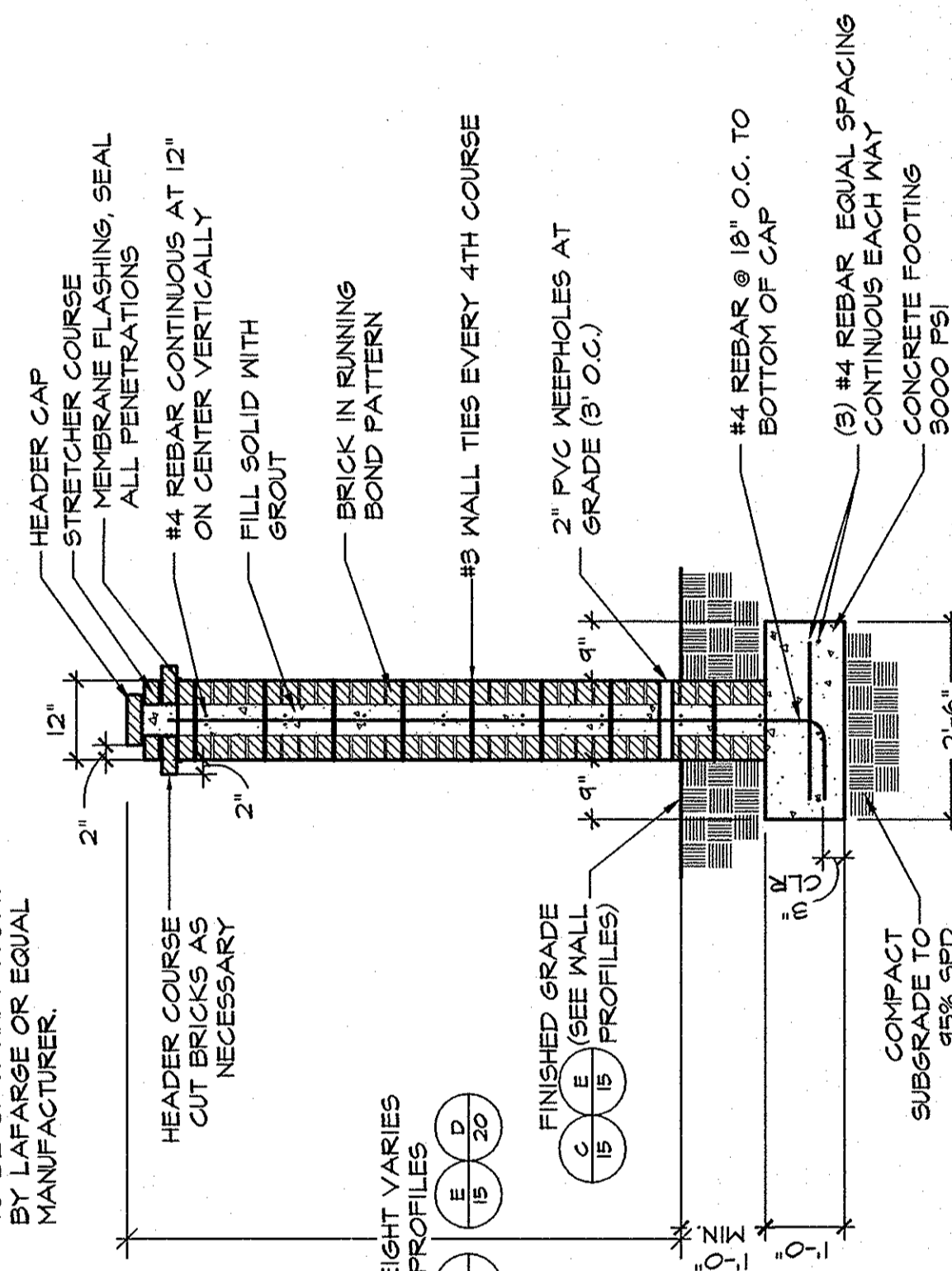
**B CORNER OF PRECAST CONCRETE CAP**  
17 MAJOR GATEWAY COLUMN - SECTION

SCALE: 1"=1'-0"



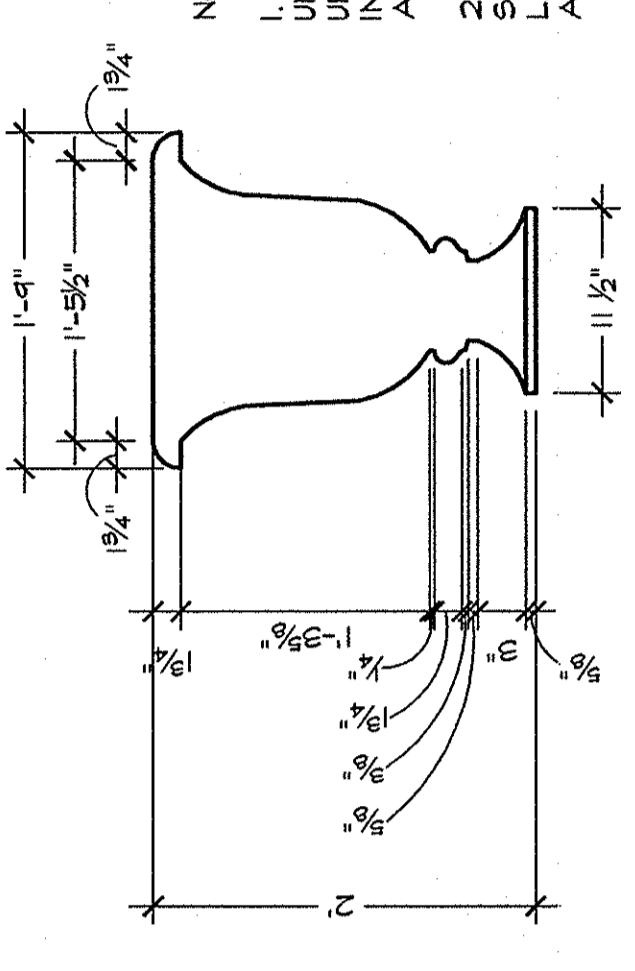
**E MINOR COLUMN**  
17 SECTION

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



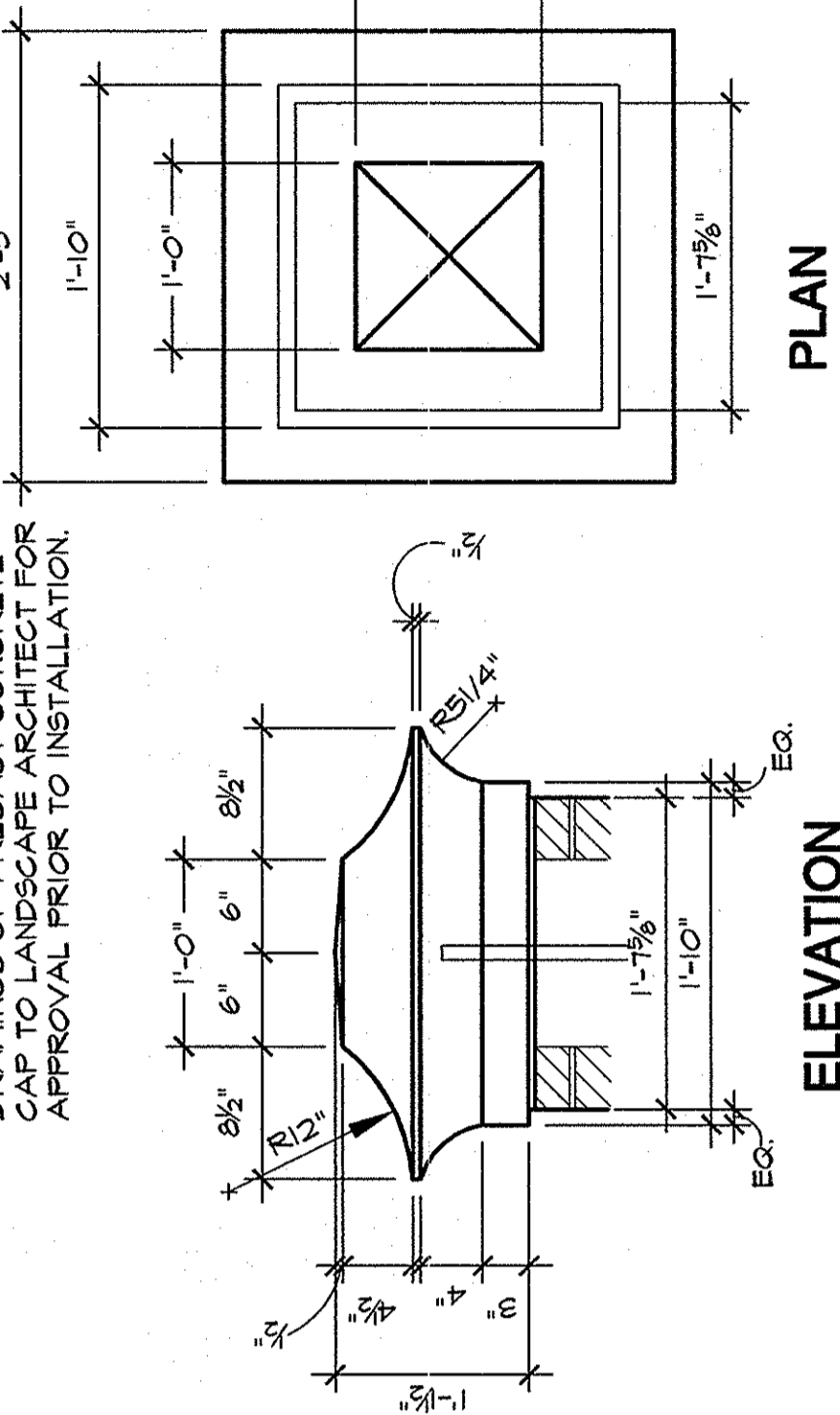
**H GATEWAY BRICK WALL**  
17 SECTION

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



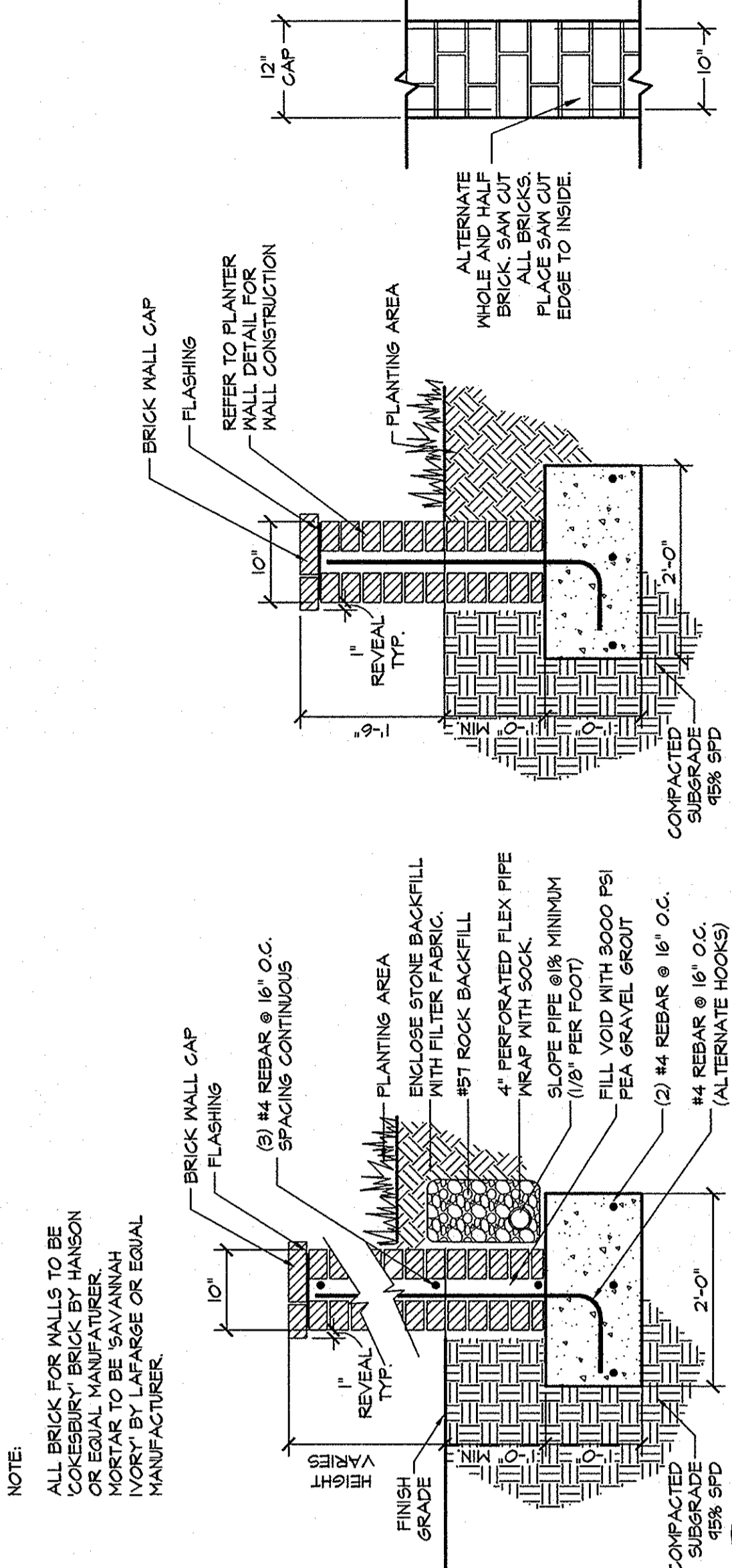
**C PRECAST CONCRETE URN**  
17 SECTION

SCALE: 1"=1'-0"



**F PRECAST CONCRETE CAP**  
17 MINOR COLUMN

SCALE: 1"=1'-0"



**I BRICK RETAINING/SEATING WALL**  
17 SECTION

SCALE: 1"=1'-0"

State Project Number:  
H27-6056-MJ-C

<b>UNIVERSITY OF SOUTH CAROLINA</b> LANDSCAPE-HARDSCAPE DEVELOPMENT CONSTRUCTION ATHLETIC VILLAGE INFRASTRUCTURE		PROJECT NO. 34,357-B82 SHEET NO. 07578
IN THE CITY OF COLUMBIA RICHLAND COUNTY, S.C.		FILE NO. 35,786-B88
DATE: JANUARY 5, 2012 SCALE:		DWG NAME SHEET 17 OF 27
<b>WALL DETAILS</b>		PROJECT NO. 34,357-B82 SHEET NO. 07578
<b>GRIMAL &amp; ASSOCIATES</b> LANDSCAPE ARCHITECTS & LAND PLANNERS COLUMBIA, SC 29205 803-739-9525		PROJECT NO. 34,357-B82 SHEET NO. 07578
<b>BP Barber</b> ENGINEERING • EXPERIENCE • EXCELLENCE COLUMBIA • GREENVILLE • CHARLESTON FLORENCE • CHARLOTTE • SAVANNAH		PROJECT NO. 34,357-B82 SHEET NO. 07578
<b>STATE OF SOUTH CAROLINA</b> PROFESSIONAL SEAL No. 470 DATE: 1/5/12		PROJECT NO. 34,357-B82 SHEET NO. 07578
<b>STATE OF SOUTH CAROLINA</b> PROFESSIONAL SEAL No. 0098 DATE: 1/5/12		PROJECT NO. 34,357-B82 SHEET NO. 07578
<b>REVISIONS</b> NO. DESCRIPTION DATE BY		PROJECT NO. 34,357-B82 SHEET NO. 07578

NO.	DESCRIPTION	DATE

DATE	1/5/12
SIGNATURE	[Signature]
PROJECT	ATLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT
CLIENT	THE CITY OF COLUMBIA
PROJECT NO.	34,357-882
DRAWING NO.	07578
SHEET	18
OF	27
FILE NO.	35,786-889

**UNIVERSITY OF SOUTH CAROLINA**  
CONSTRUCTION

**LANDSCAPE-HARDSCAPE**

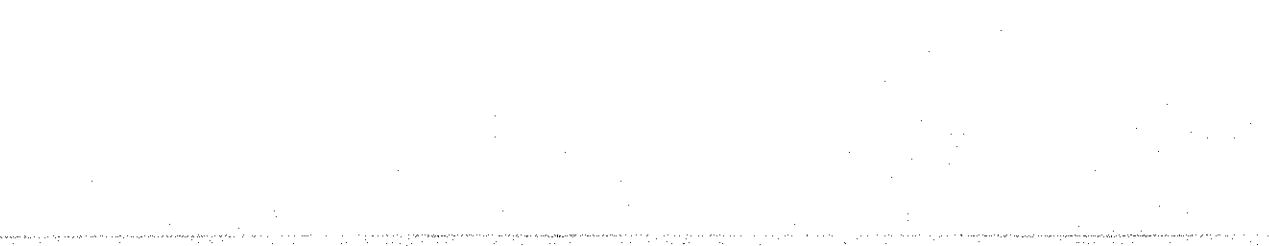
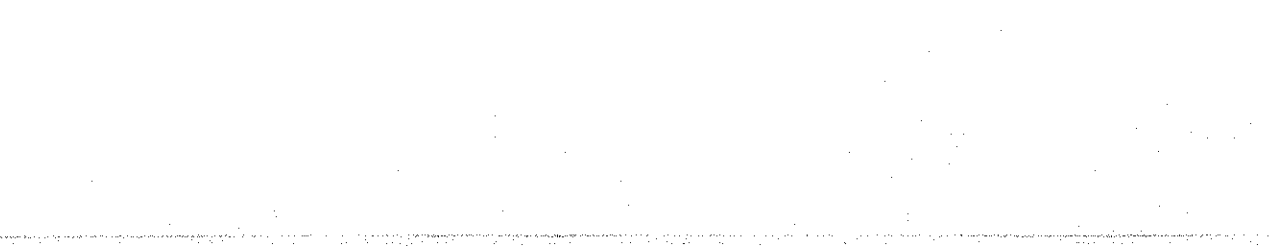
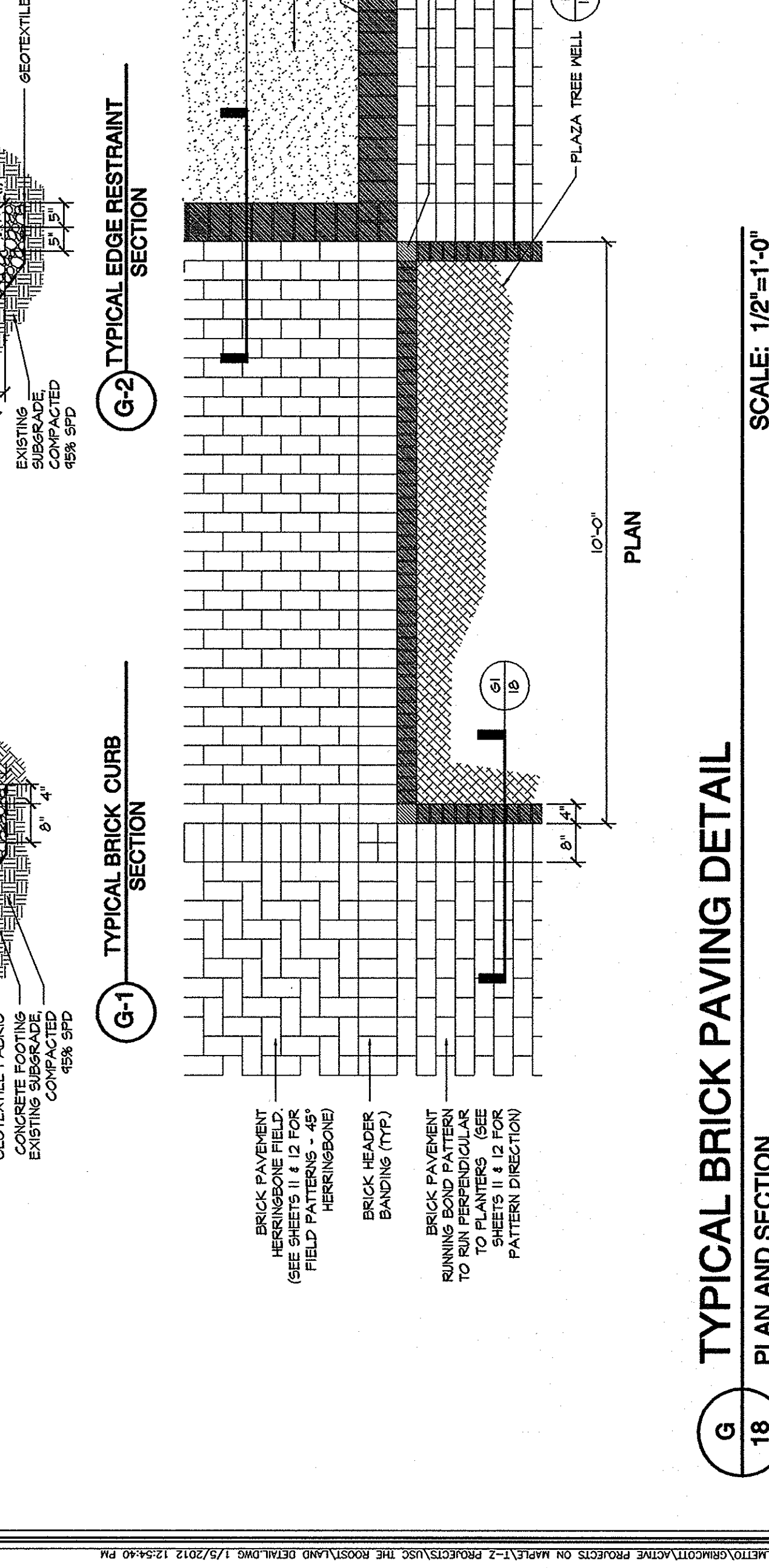
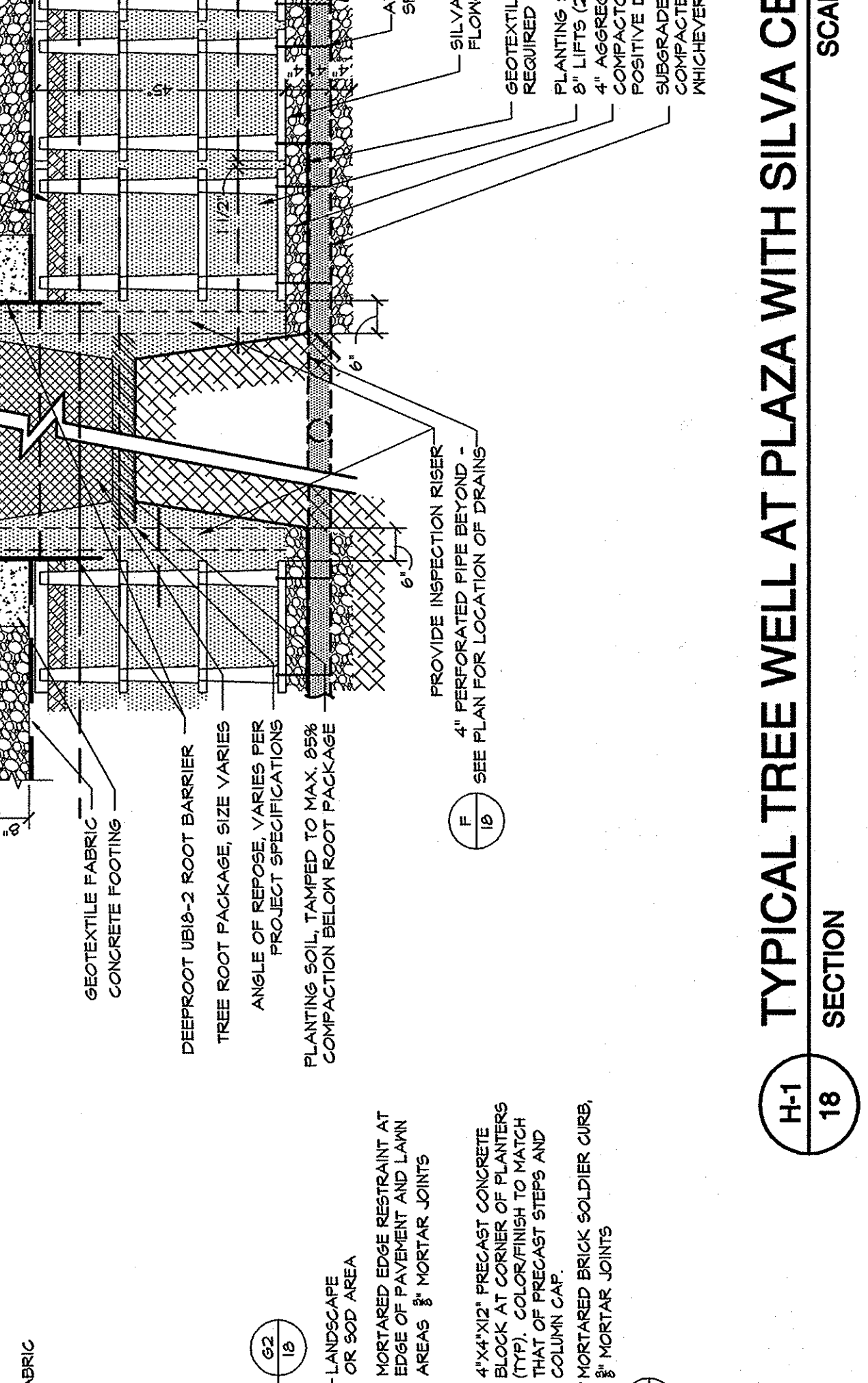
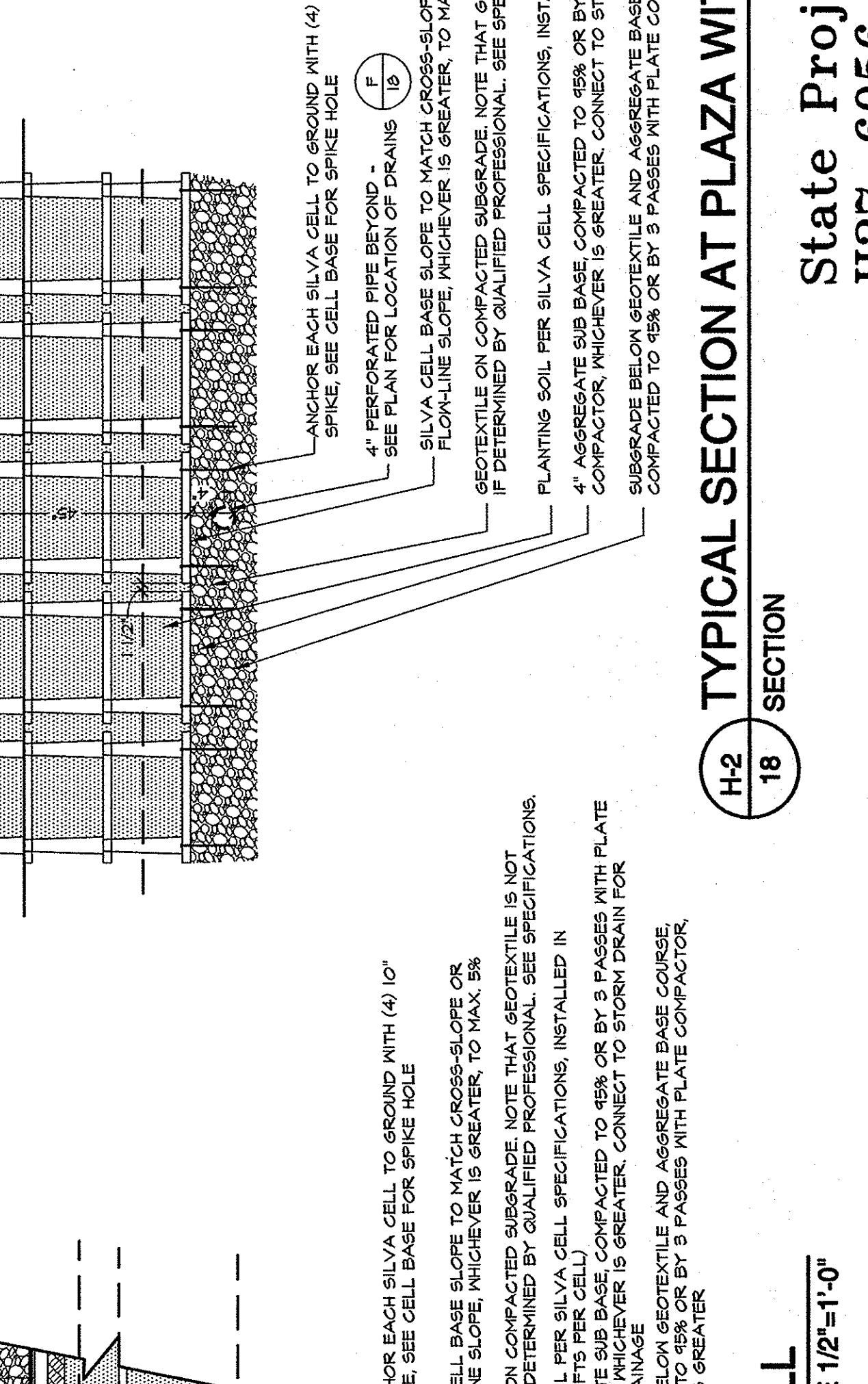
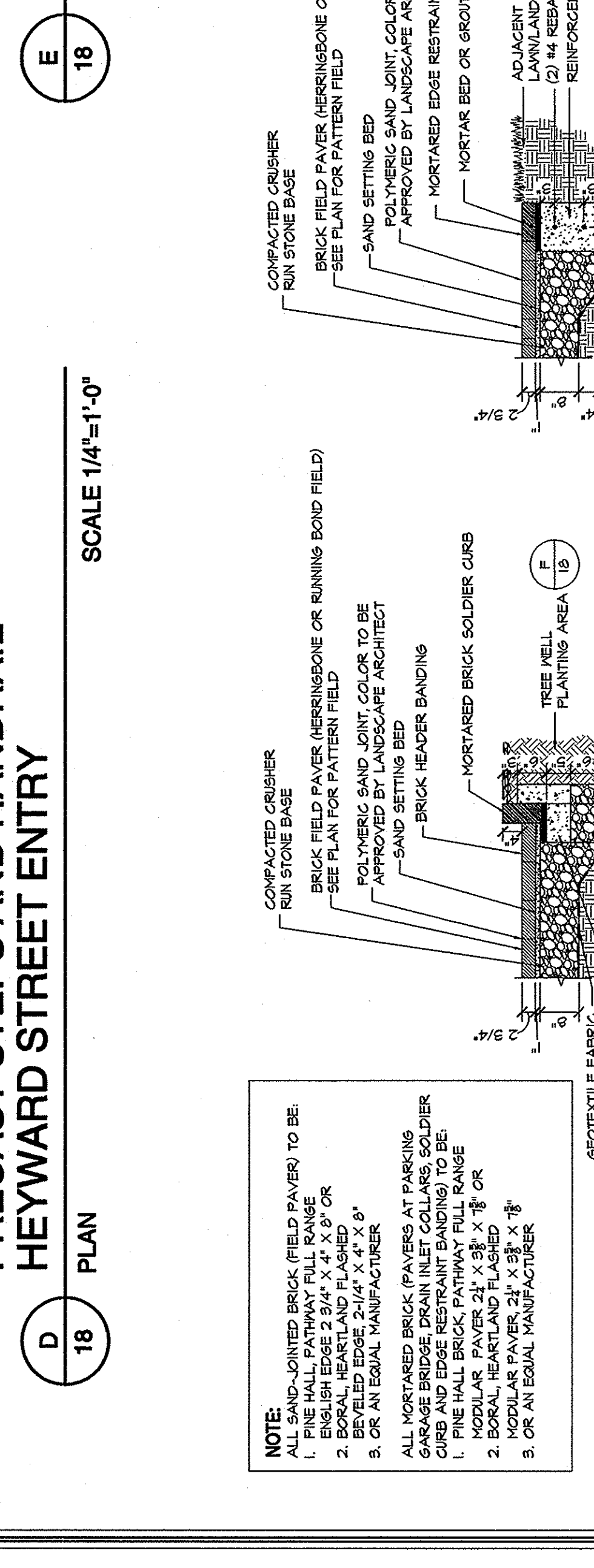
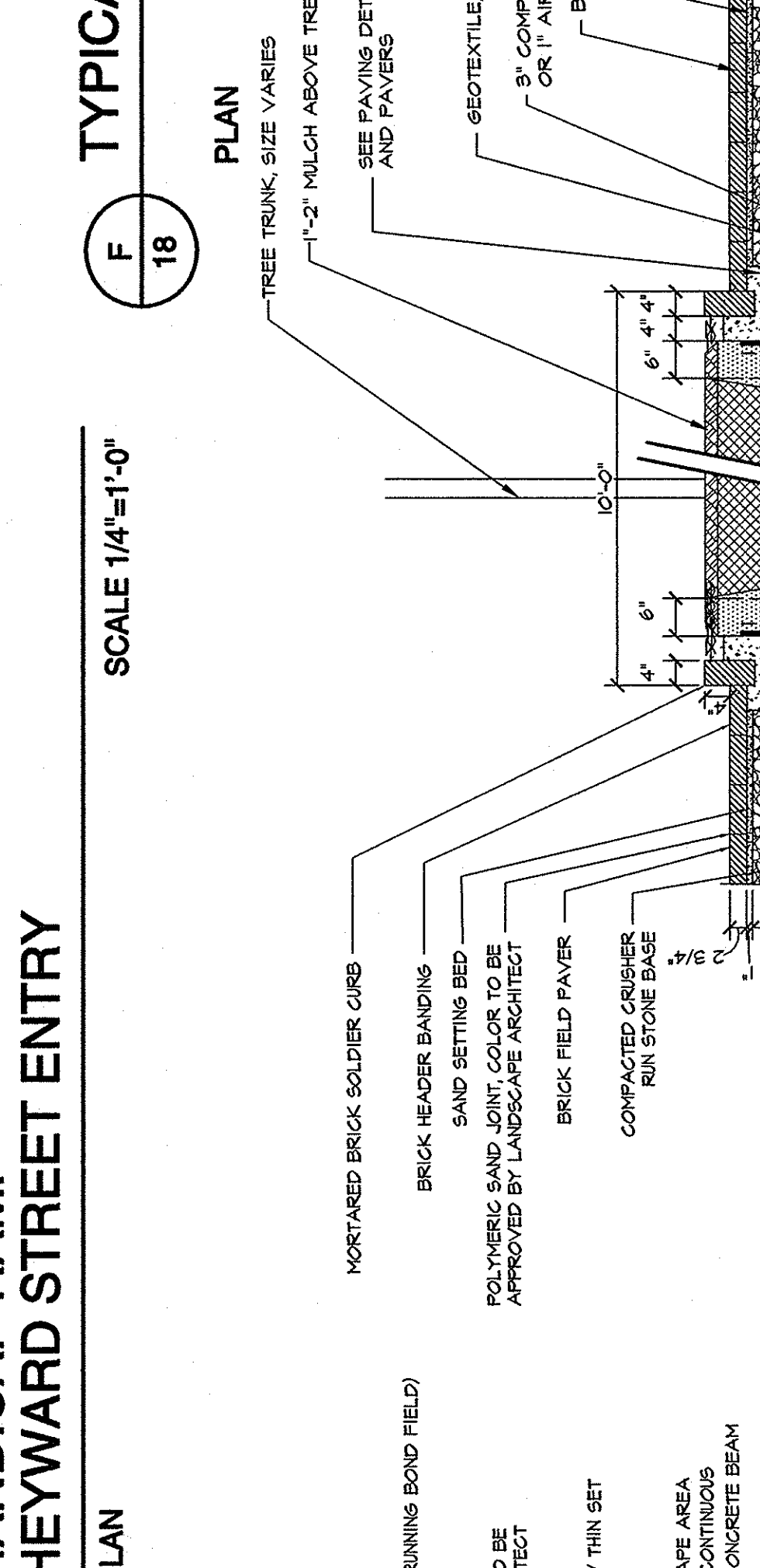
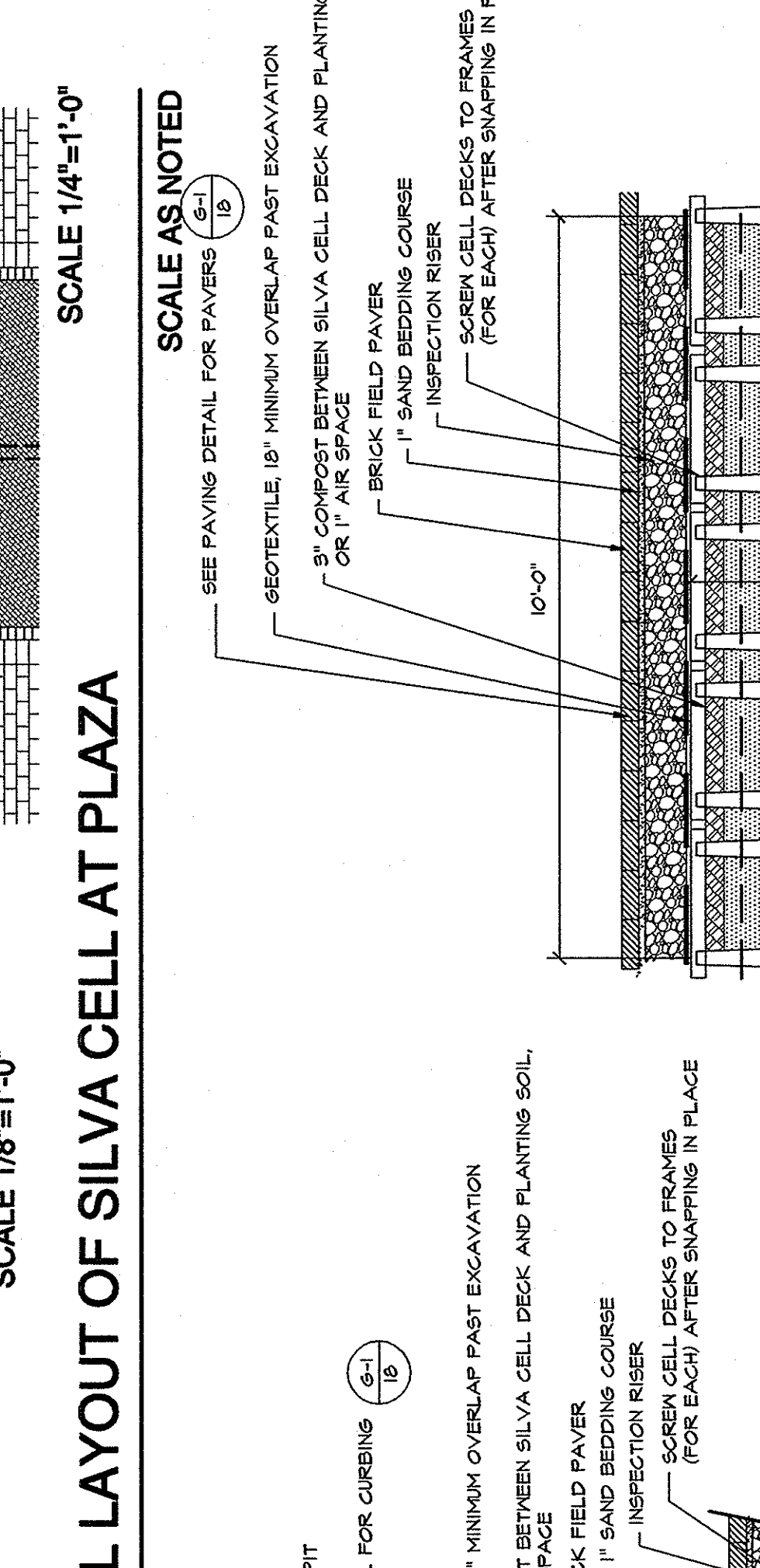
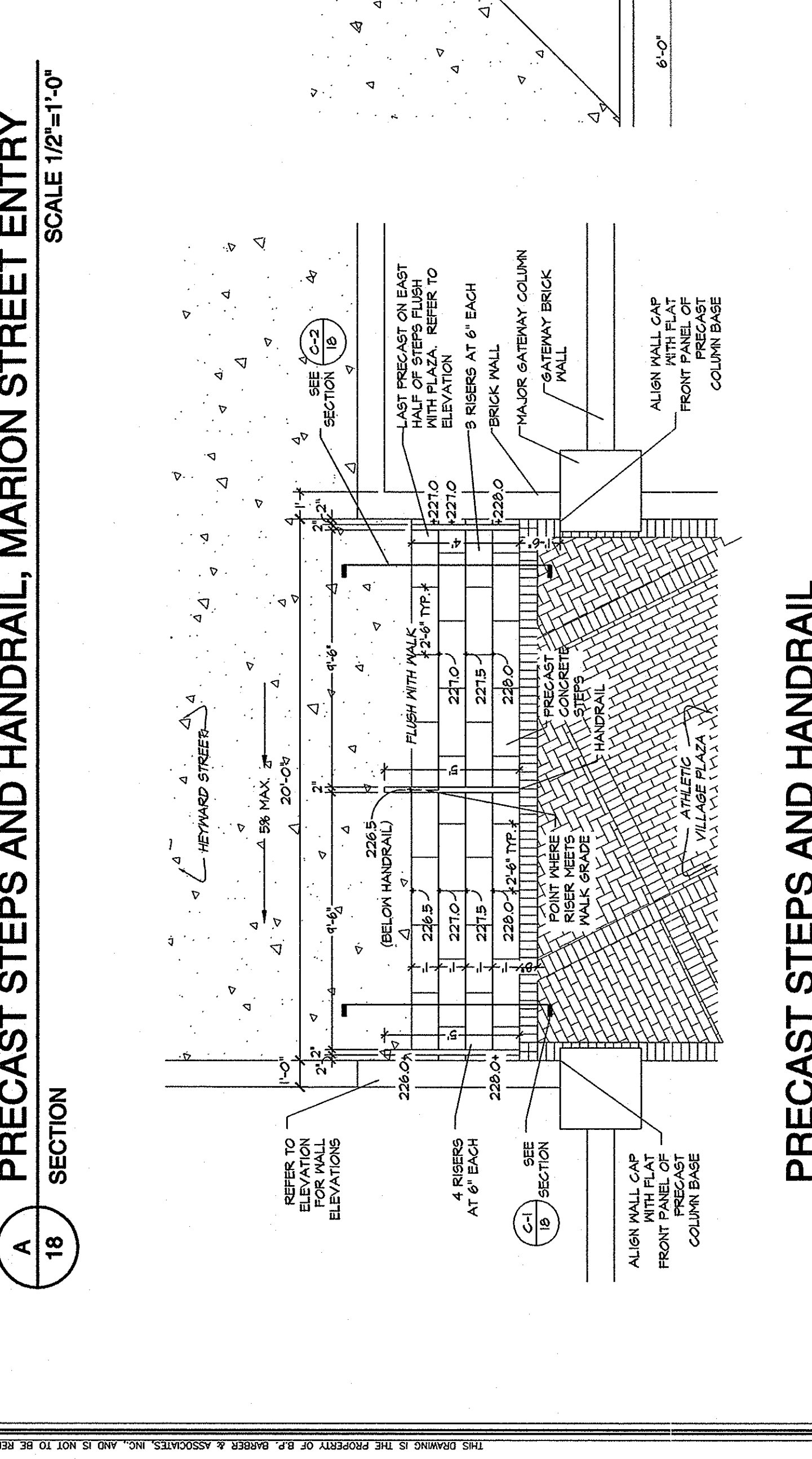
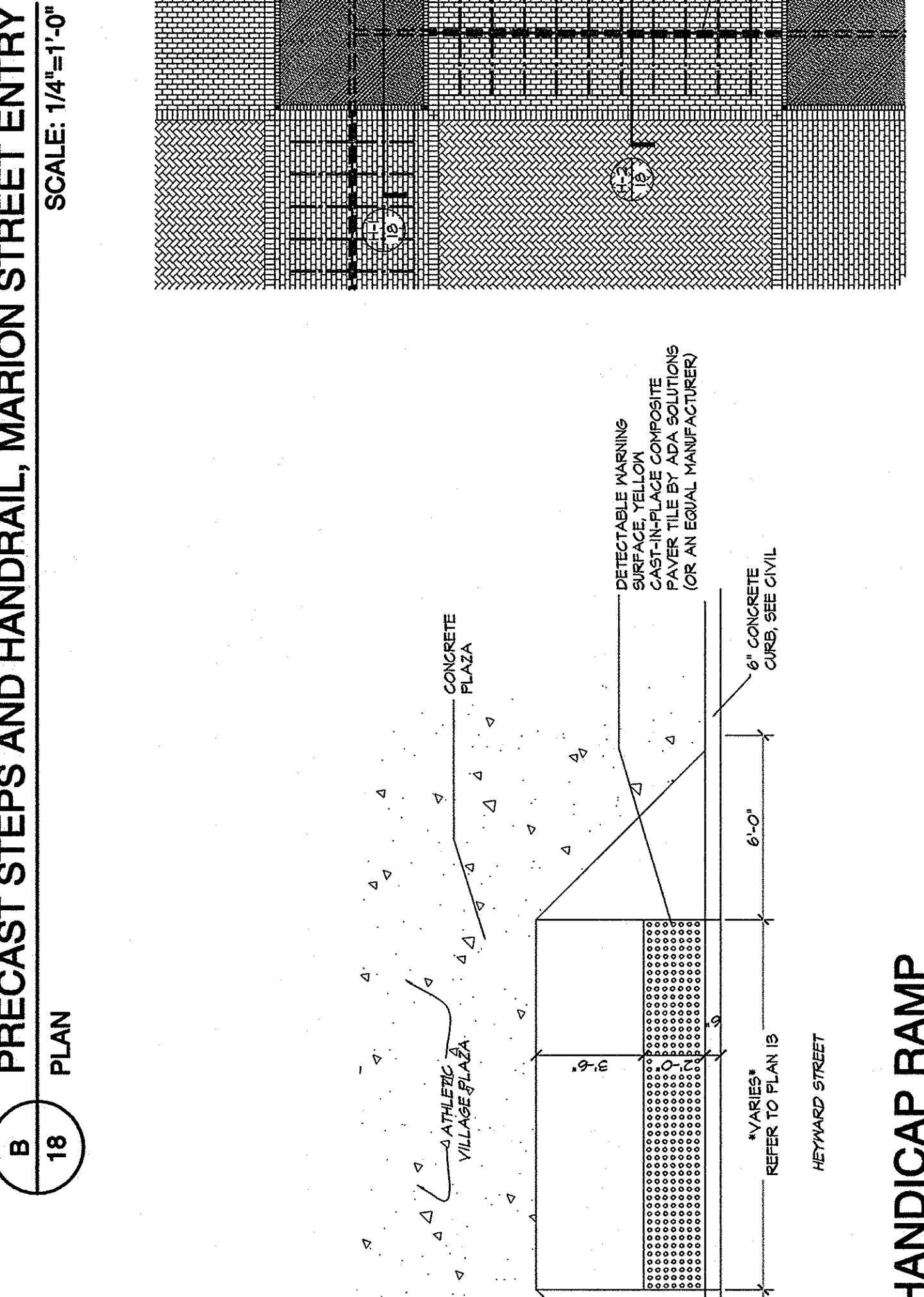
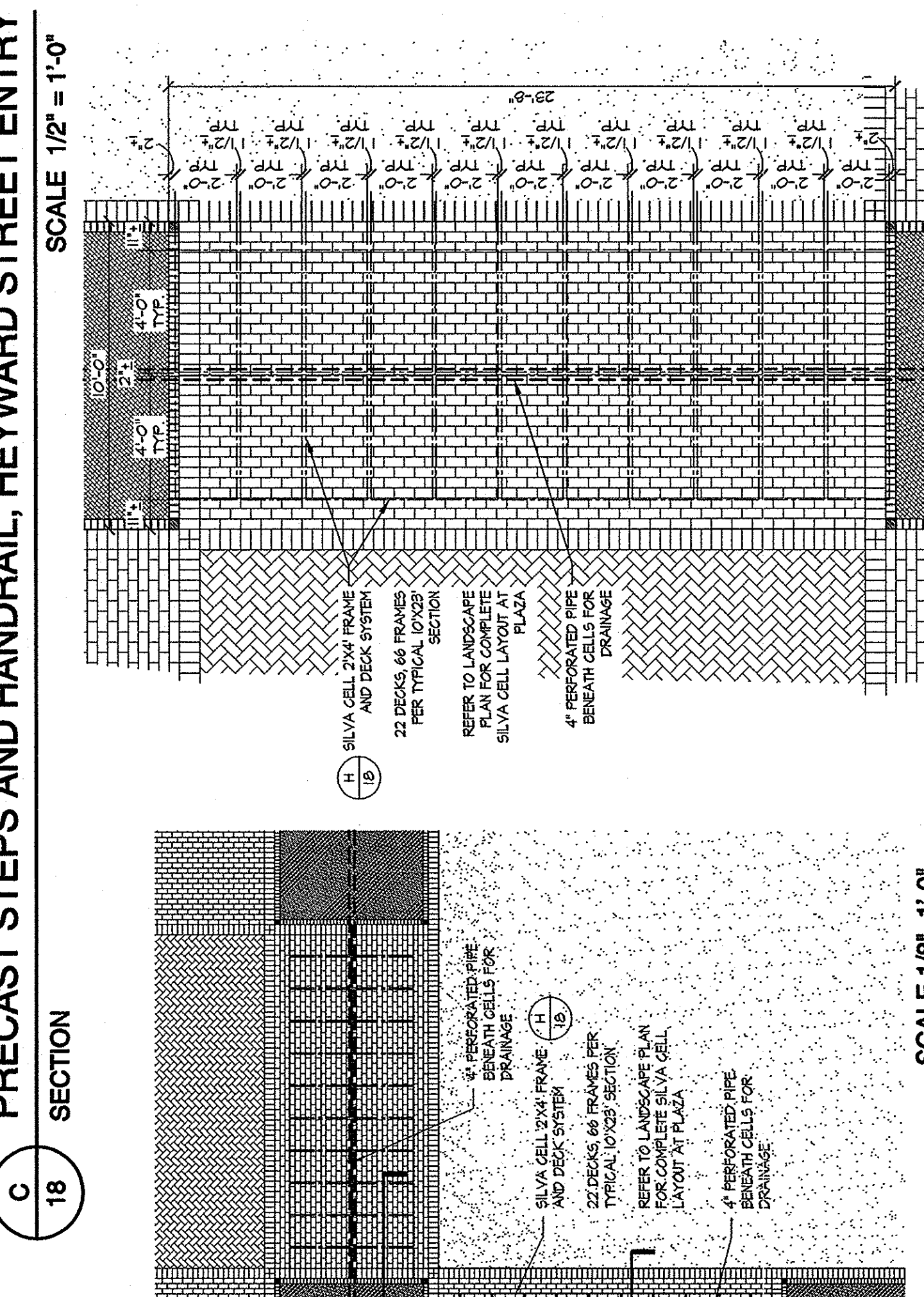
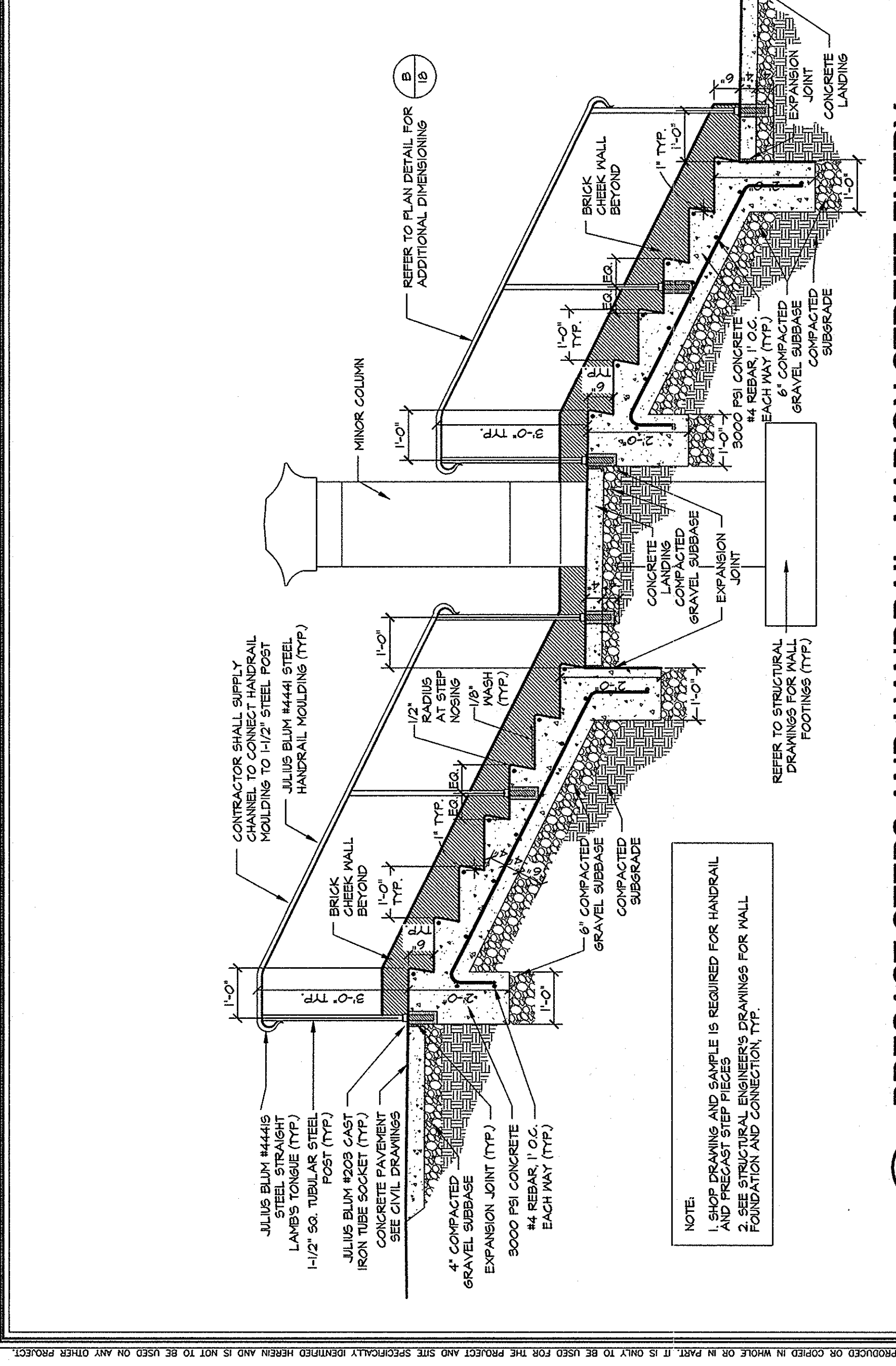
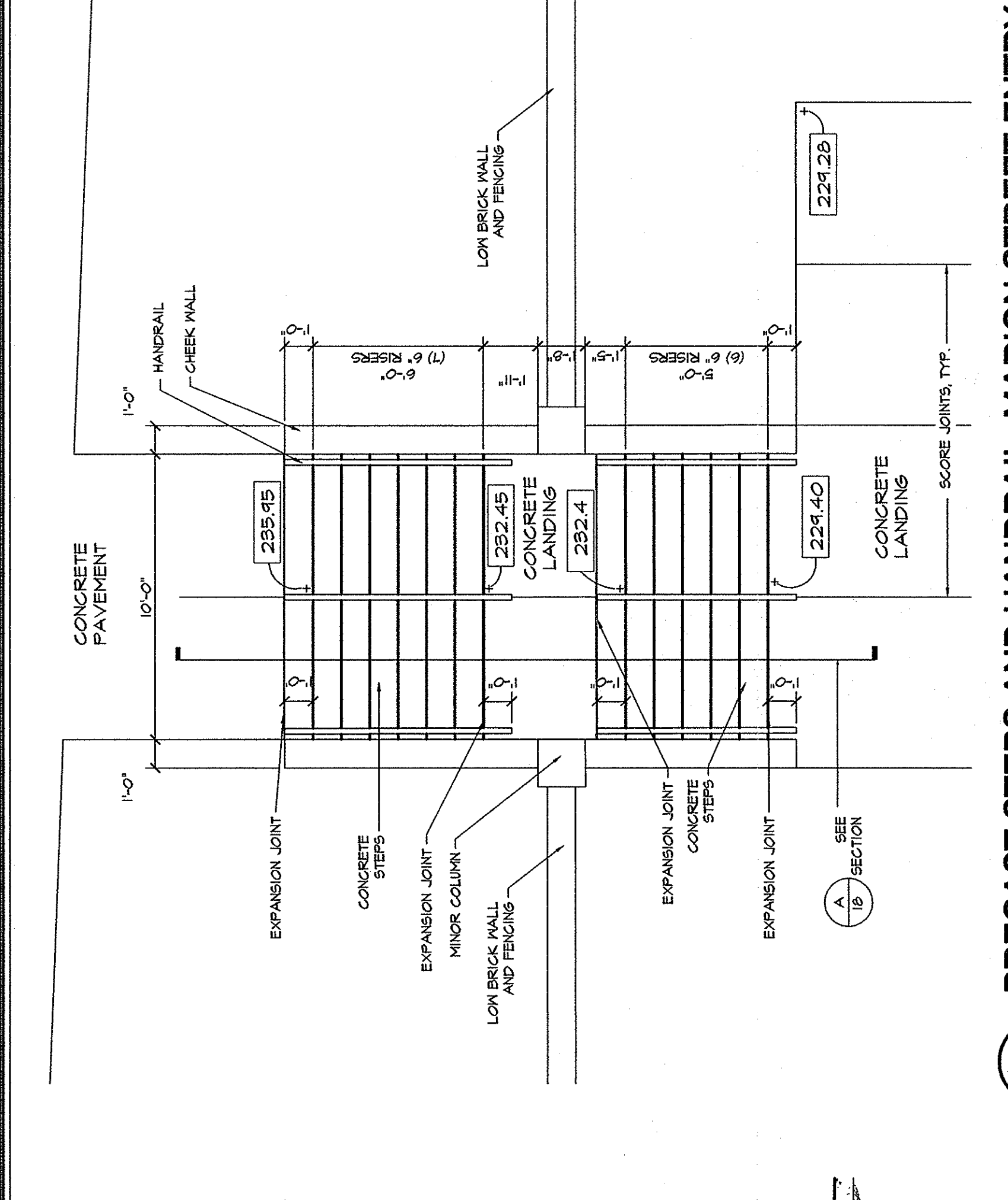
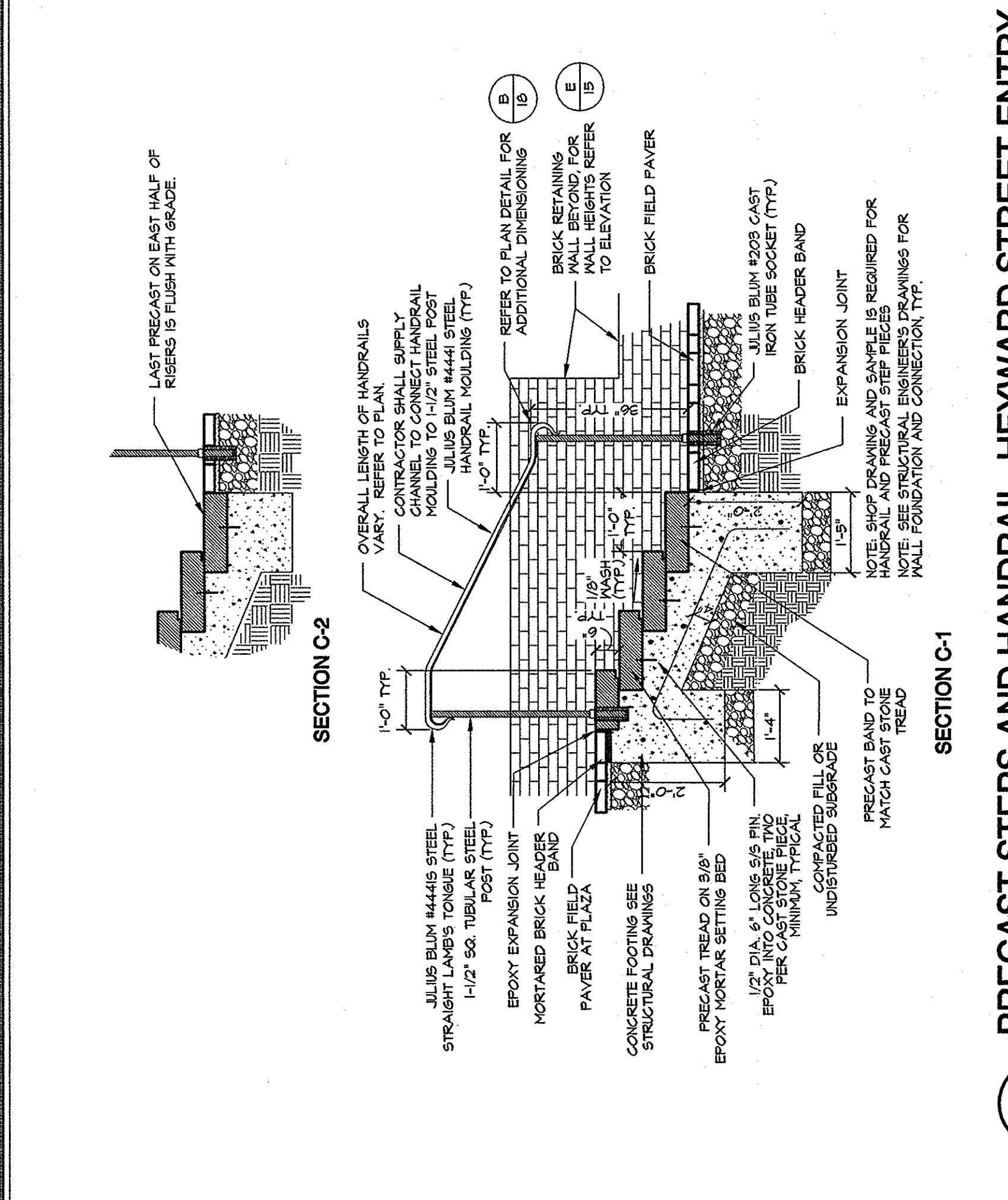
DATE: JANUARY 5, 2012

SCALE:

**STEPS AND PAVEMENT DETAILS**

**BP Barber**  
Engineering • Excellence  
COLUMBIA • GREENVILLE • CHARLESTON  
FLORENCE • CHARLOTTE • SAVANNAH

**GRIMBALL ASSOCIATES**  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
COLUMBIA, SC 29208 803.784.9922



NO.	DESCRIPTION	DATE

DATE	1/5/12
SIGNATURE	[Signature]
PROJECT	ATLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT
CLIENT	THE CITY OF COLUMBIA
PROJECT NO.	34,357-882
DRAWING NO.	07578
SHEET	18
OF	27
FILE NO.	35,786-889

**UNIVERSITY OF SOUTH CAROLINA**  
CONSTRUCTION

**LANDSCAPE-HARDSCAPE**

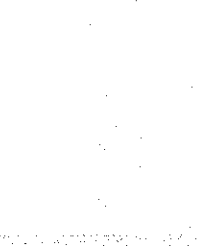
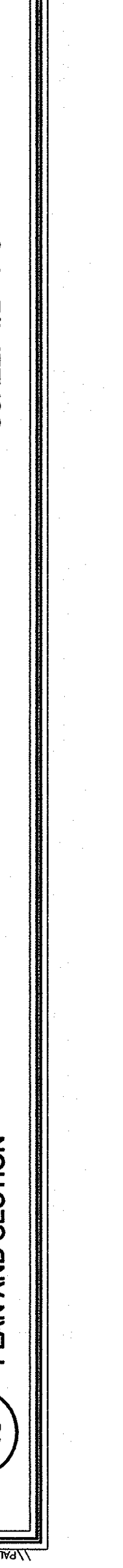
DATE: JANUARY 5, 2012

SCALE:

**STEPS AND PAVEMENT DETAILS**

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LANDSCAPE ARCHITECTS & LAND PLANNERS  
COLUMBIA, SC 29208 803.784.9922



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**UNIVERSITY OF SOUTH CAROLINA**  
CONSTRUCTION

**LANDSCAPE-HARDSCAPE**

DATE: JANUARY 5, 2012

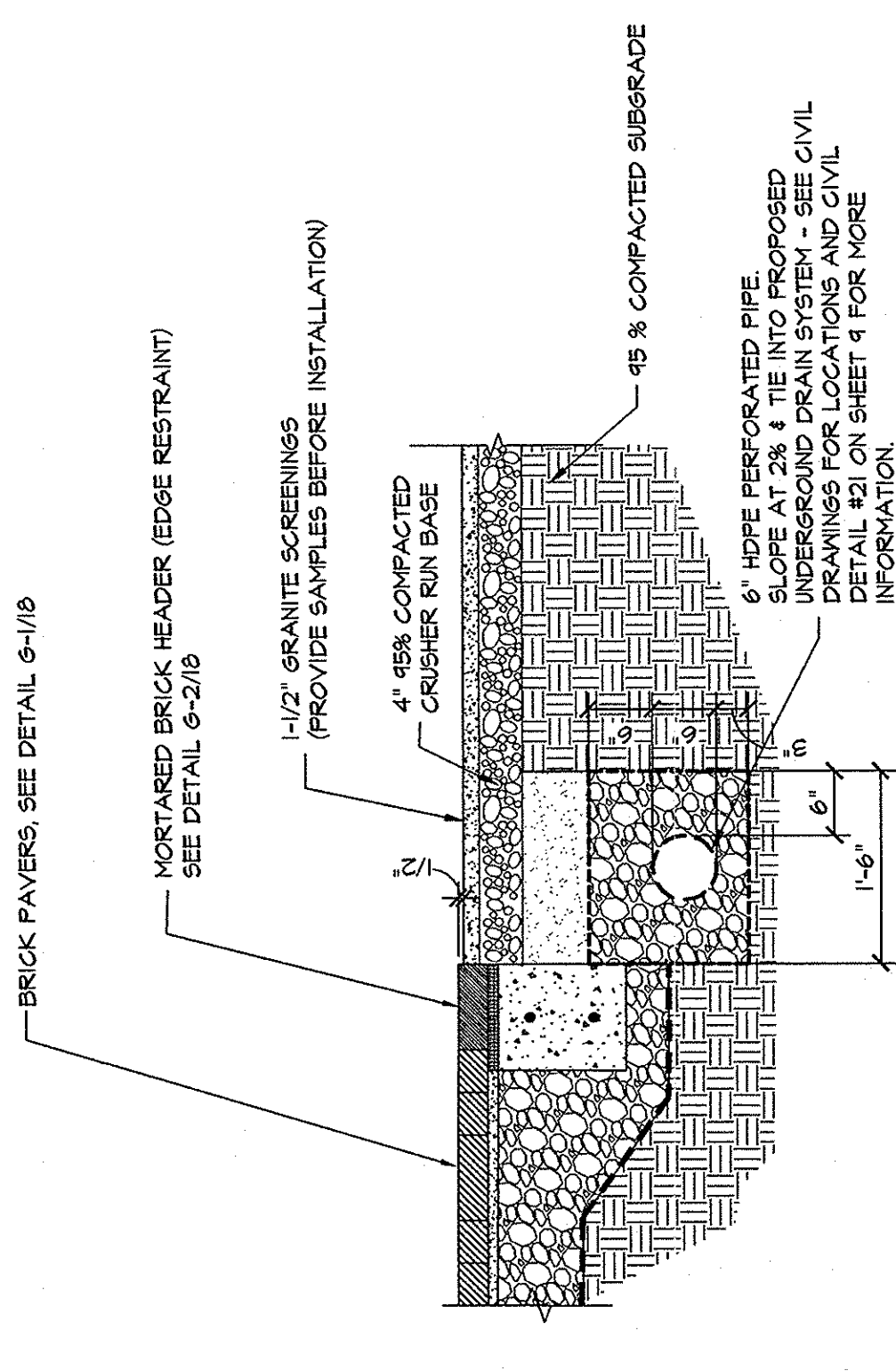
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**STEPS AND PAVEMENT DETAILS**

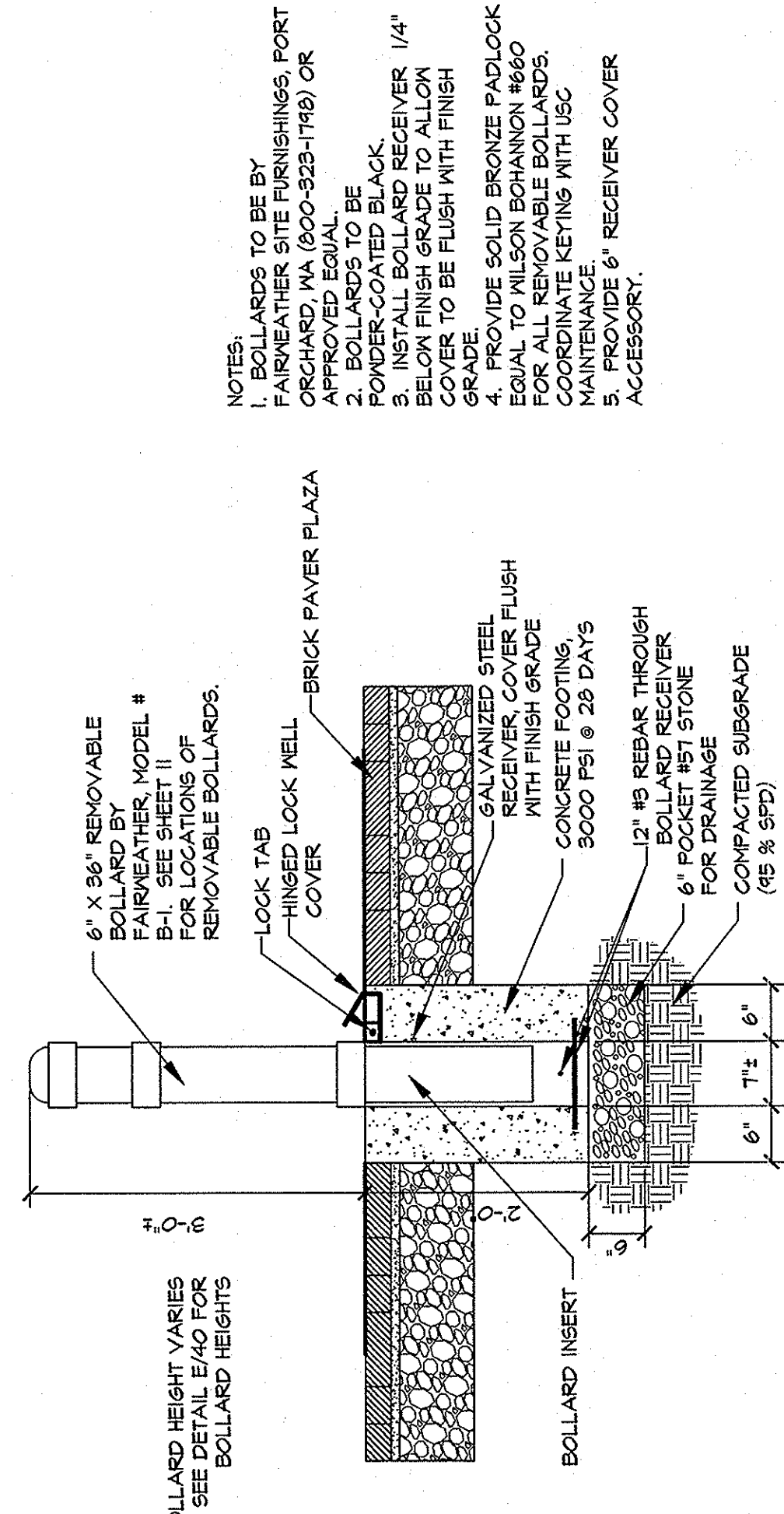
**BP Barber**  
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**GRIMBALL ASSOCIATES**  
LANDSCAPE ARCHITECTS & LAND PLANNERS  
COLUMBIA, SC 29208 803.784.9922

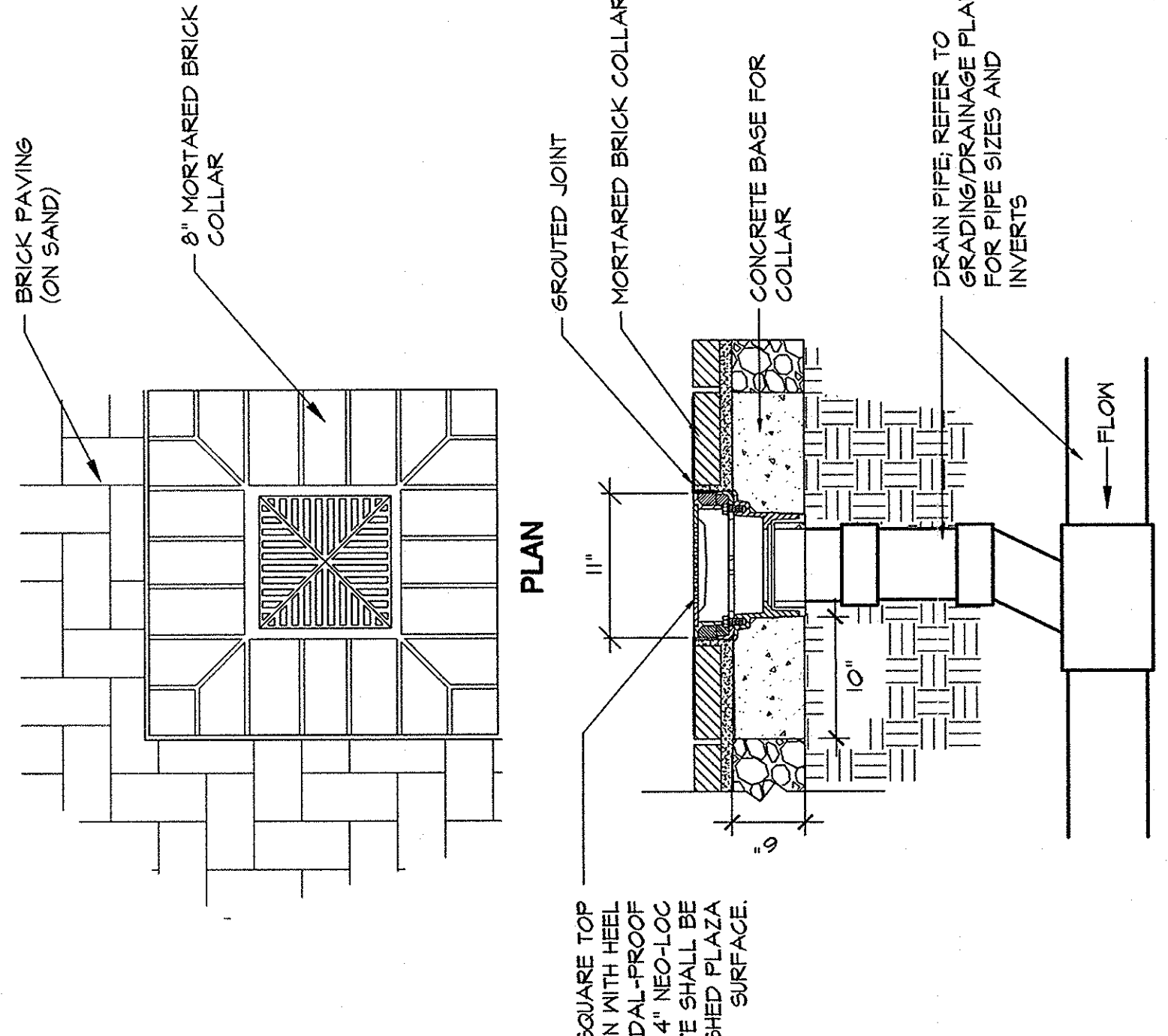




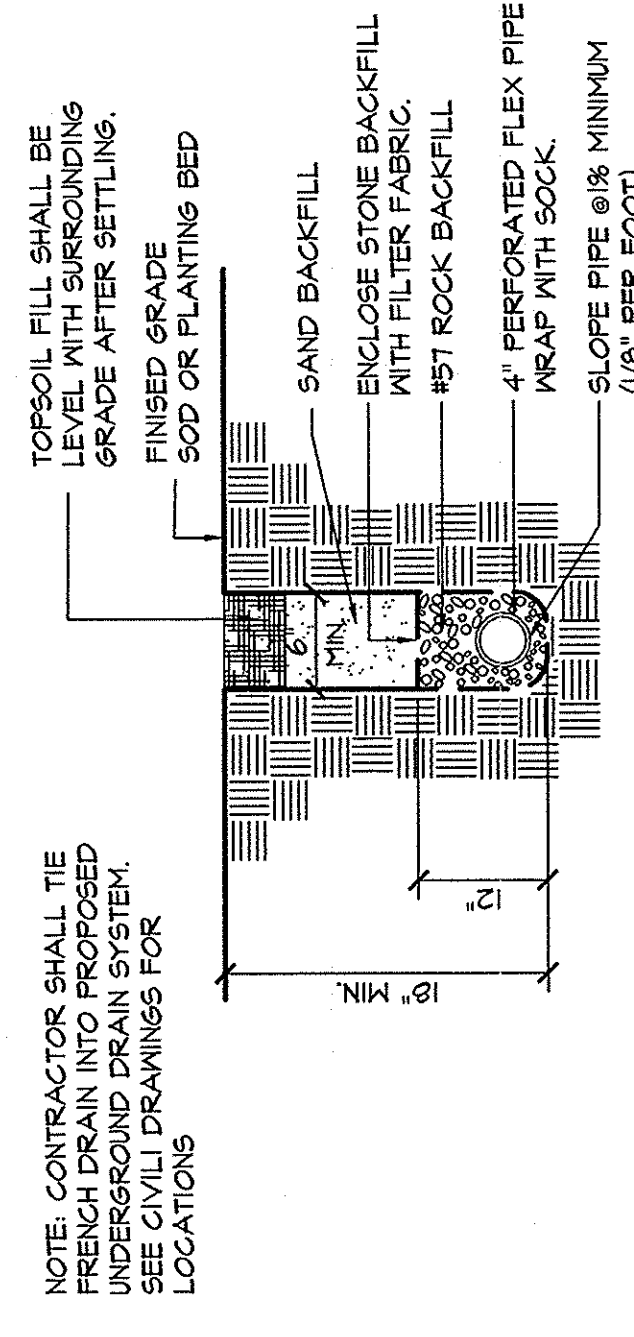
**A** CRUSHED STONE WALK ON COMPACTED SUBGRADE  
SCALE: 3/4\"/>



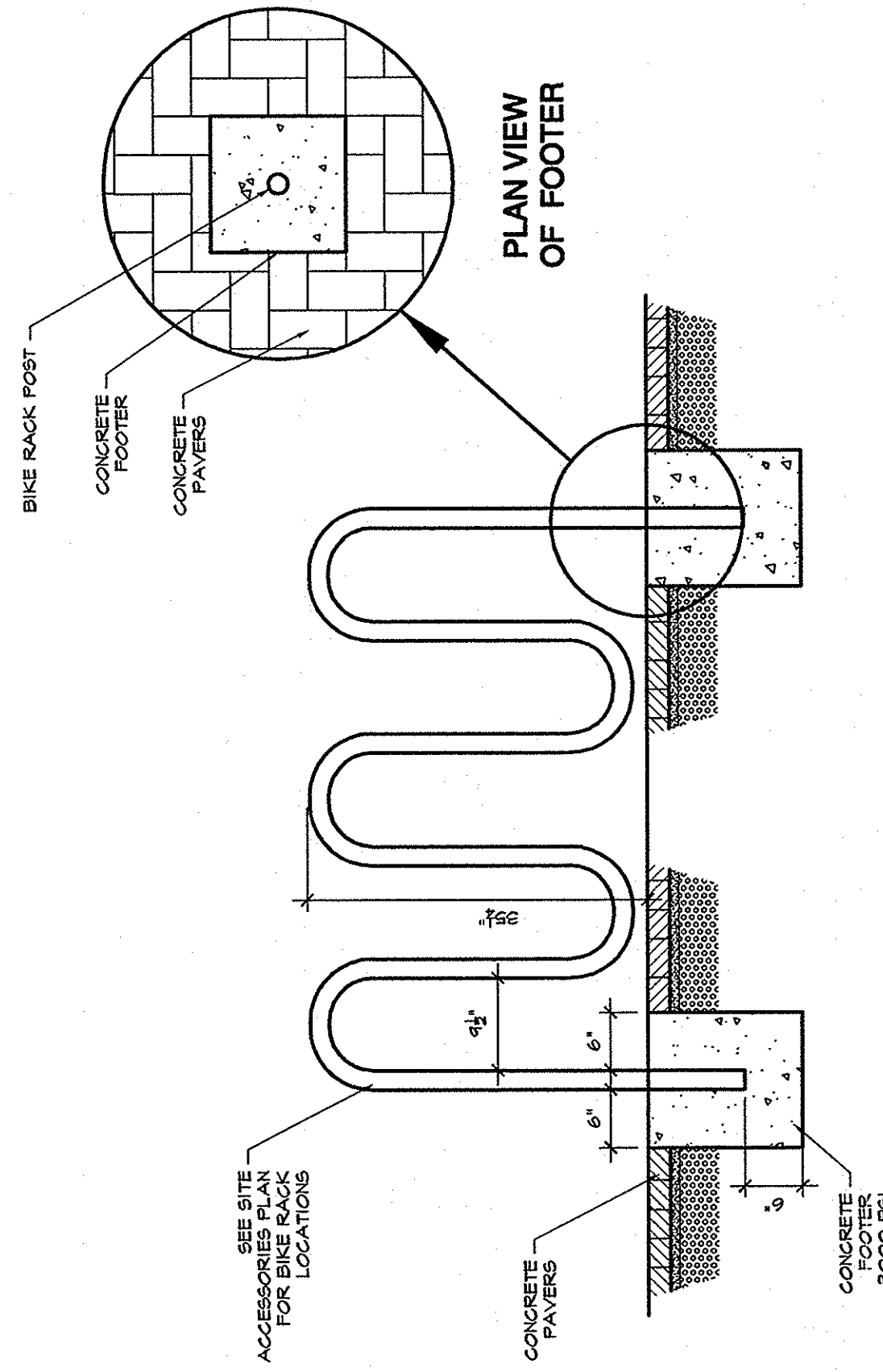
**D** REMOVEABLE BOLLARD  
SCALE: 3/4\"/>



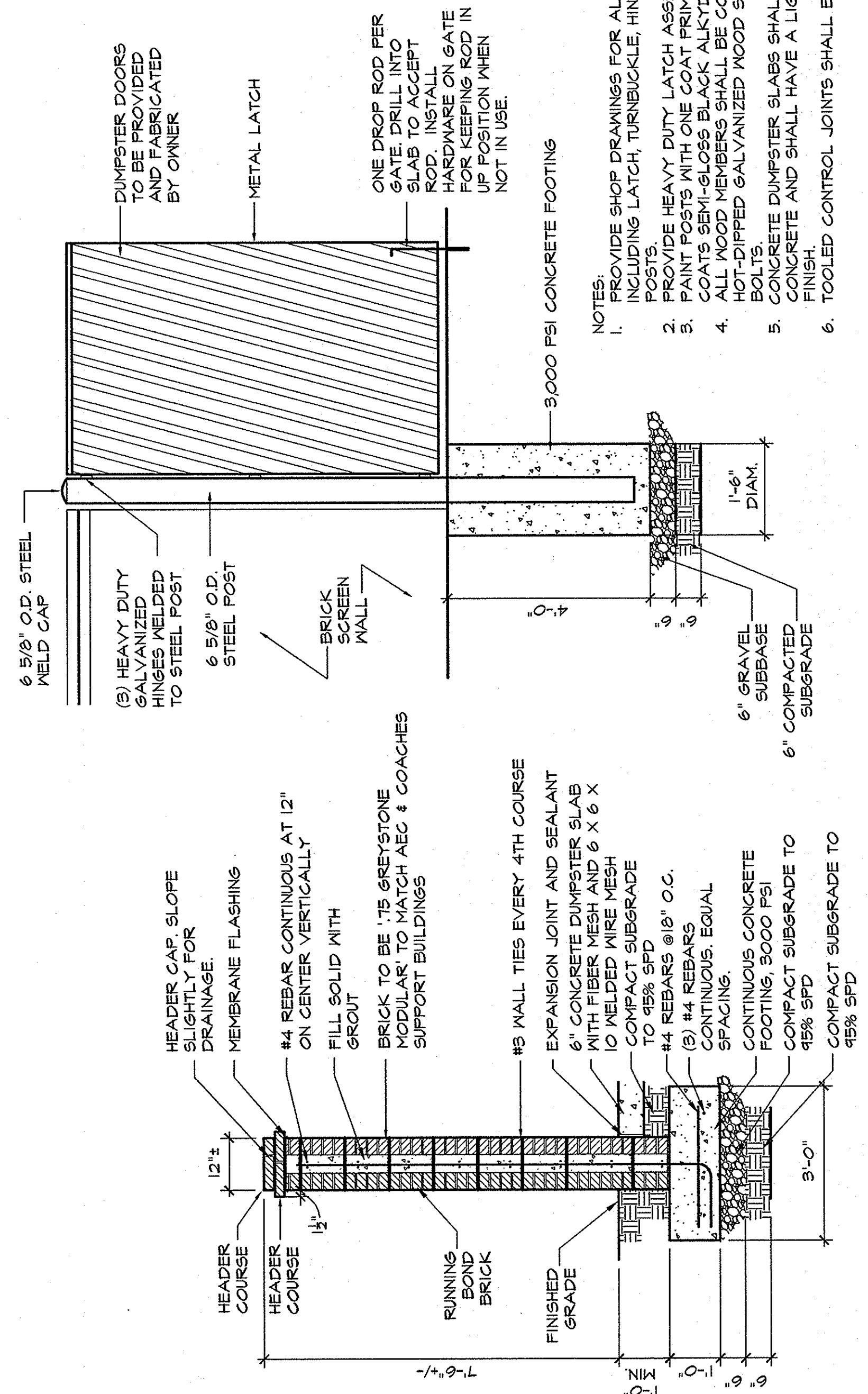
**B** INLET IN PLAZA  
SCALE: 1\"/>



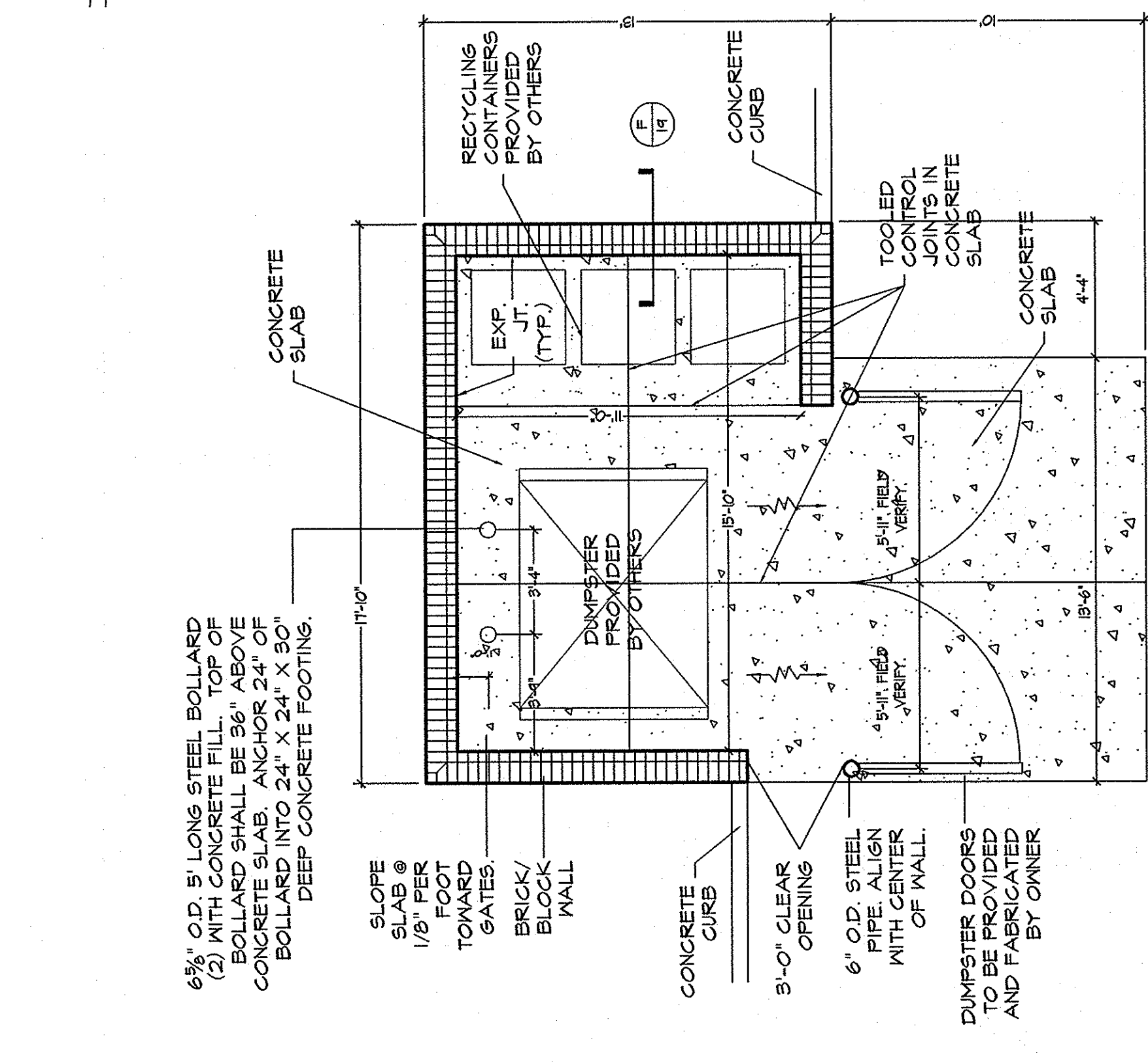
**C** FRENCH DRAIN (AT PLANTERS)  
SCALE: 1\"/>



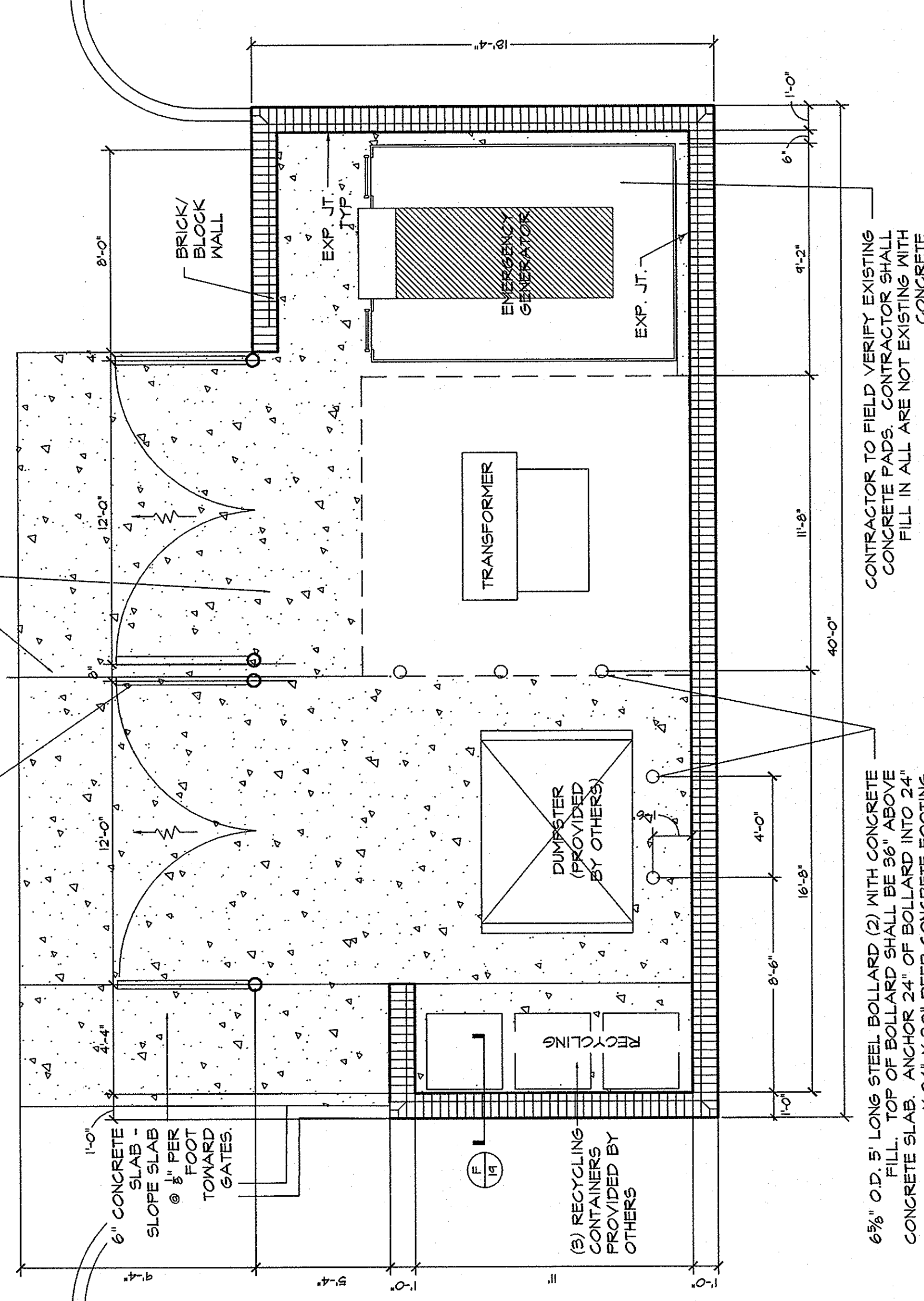
**E** BIKE RACK  
SCALE: 3/4\"/>



**F** TYPICAL DUMPSTER ENCLOSURE  
SCALE: 1/2\"/>



**G** DUMPSTER ENCLOSURE - TYPE A  
SCALE: 1/4\"/>



**H** DUMPSTER ENCLOSURE - TYPE B  
SCALE: 1/4\"/>

NO.	DESCRIPTION	DATE	BY

APPROVALS	PROJECT MGR.	DESIGNED BY	CHECKED BY	APPROVED:	DATE

**CRIMBALL & ASSOCIATES**  
No. 470  
SOUTH CAROLINA  
1000 MARKET STREET, SUITE 100  
COLUMBIA, SC 29201 (803)736-9555

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FLORENCE • CHAHLLOTTE • SPYANNAKH

**UNIVERSITY OF SOUTH CAROLINA**  
DEPARTMENT OF CONSTRUCTION  
LANDSCAPE-HARDSCAPE  
FOR  
ATHLETIC VILLAGE INFRASTRUCTURE  
DEVELOPMENT  
RICHLAND COUNTY, S.C.  
DATE: JANUARY 5, 2012  
SCALE:  

**ACCESSORIES AND DUMPSTER DETAILS**

SHEET TITLE

SHEET NO. 19 OF 27

FILE NO. 35-786-B88

State Project Number:  
H27-6056-MJ-C

PLAN VIEW  
SCALE: 1/4\"/>

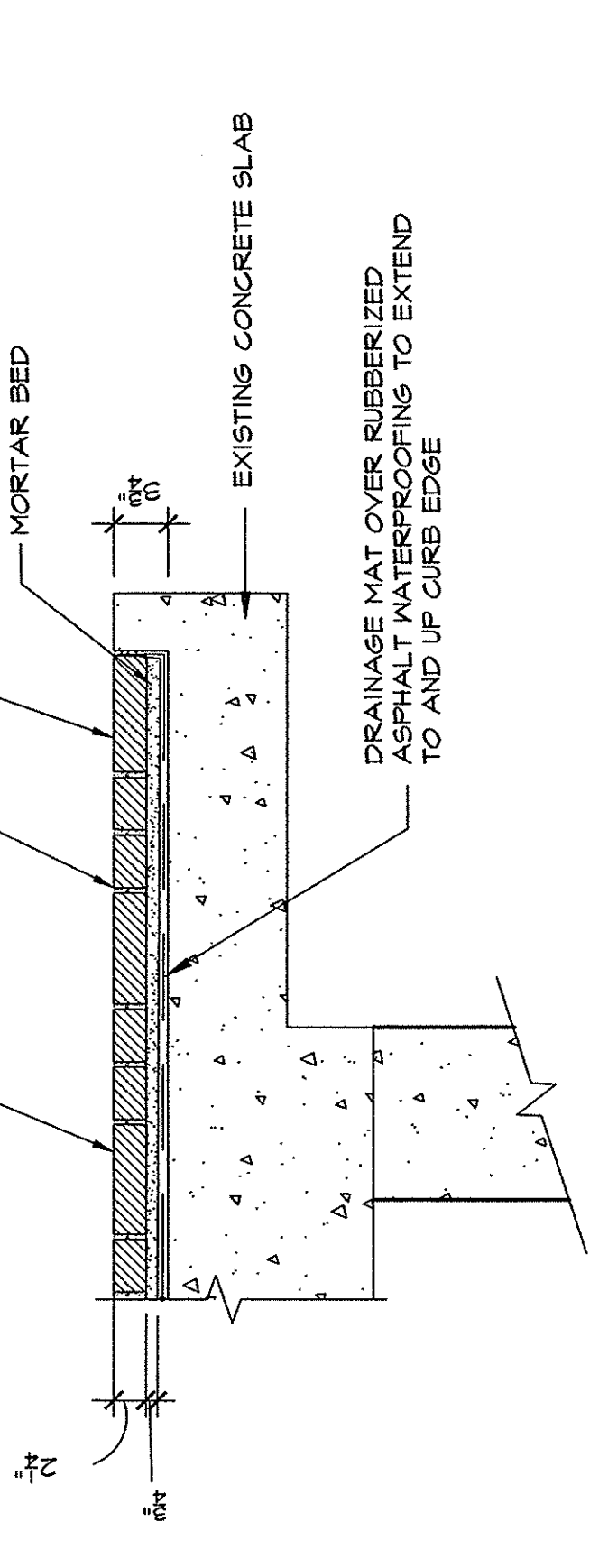
PLAN VIEW  
SCALE: 1/4\"/>

SCALE: 1/2\"/>

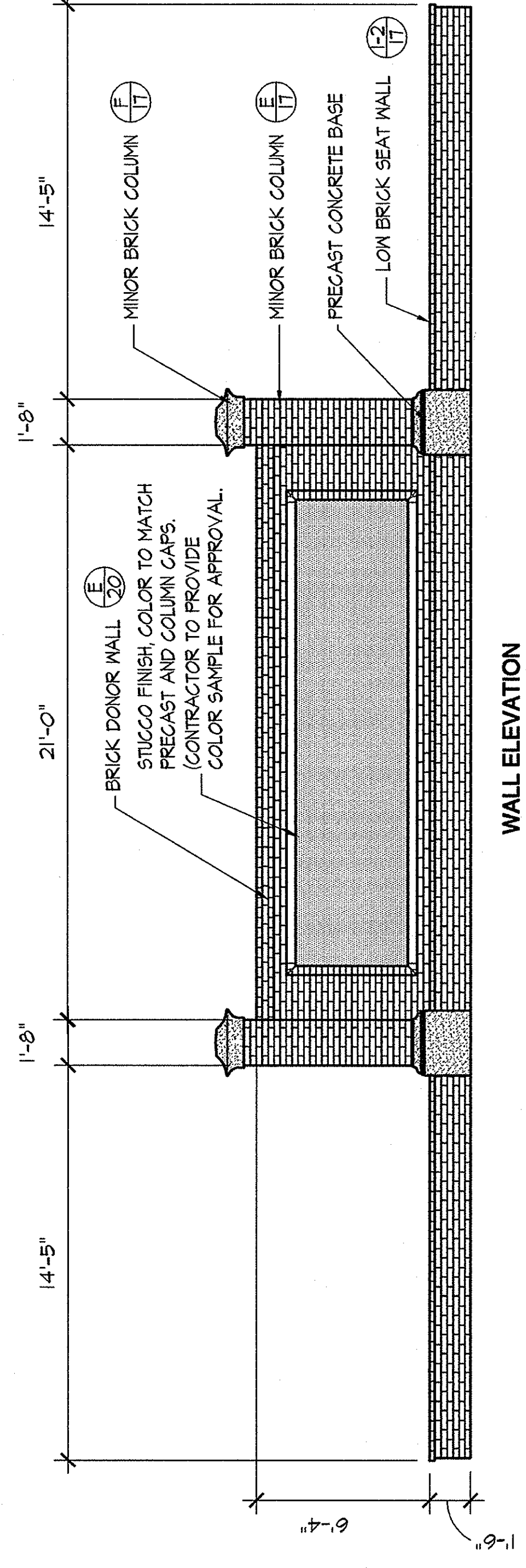
SCALE: 1/2\"/>

THIS DRAWING IS THE PROPERTY OF B.P. BARBER & ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS ONLY TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN AND IS NOT TO BE USED ON ANY OTHER PROJECT.

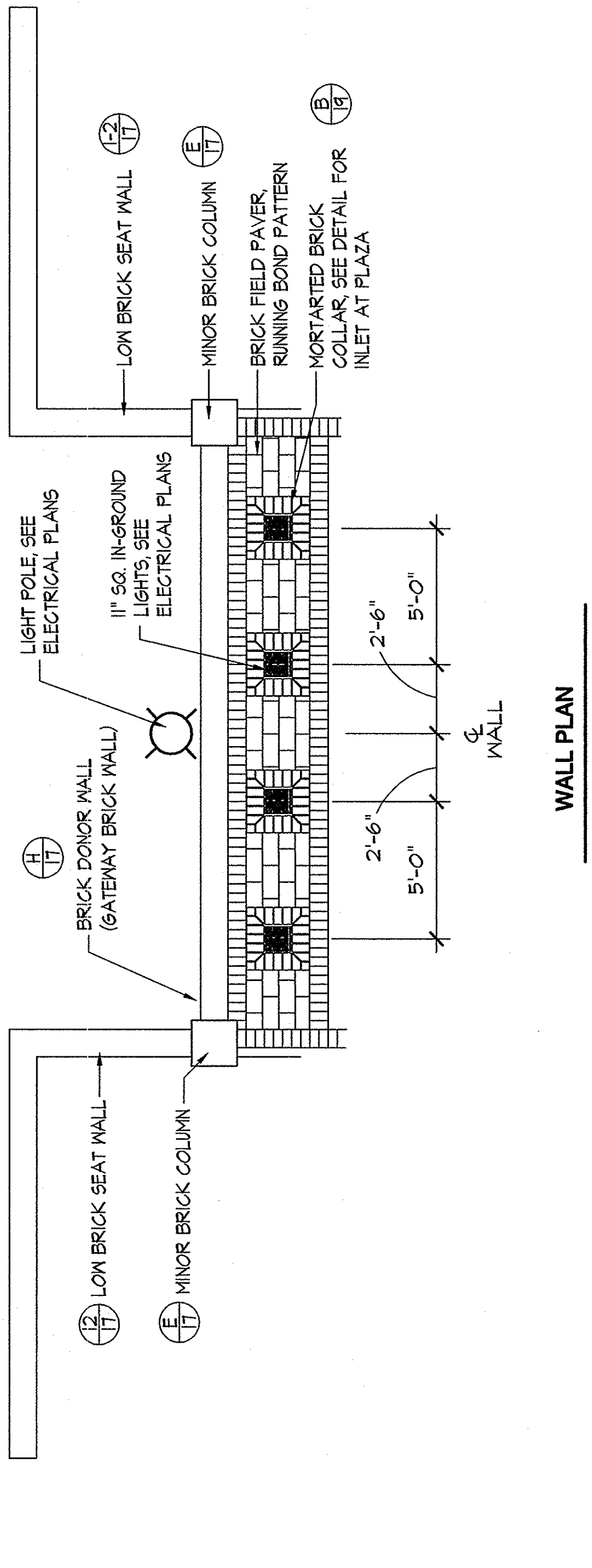
**NOTE:**  
 ALL MORTARED BRICK AT ELEVATED WALK TO BE:  
 1. FINE HALL BRICK, PATHWAY FULL RANGE  
 2. MODULAR PAVER 24" X 36" X 1 1/2" OR  
 3. MODULAR PAVER 24" X 36" X 1 1/2" OR AN EQUAL MANUFACTURER.



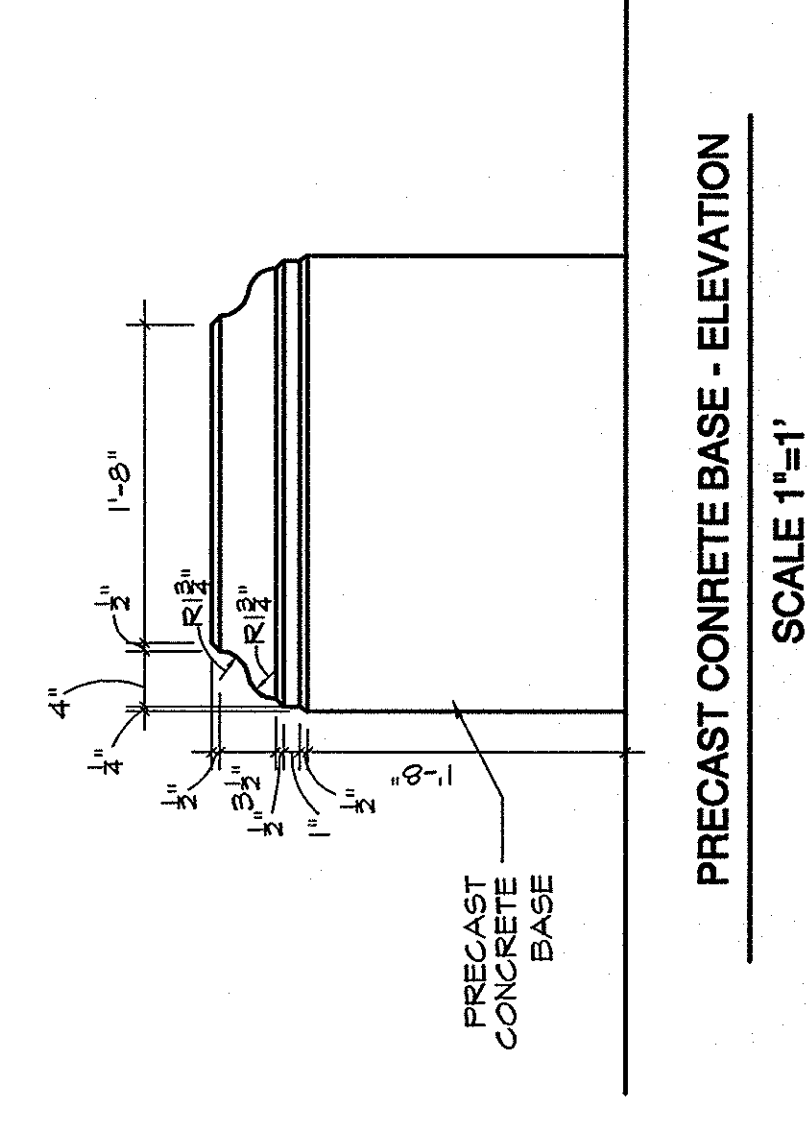
**A BRICK PAVER ON ELEVATED WALK**  
 SCALE 1"=1'-0"



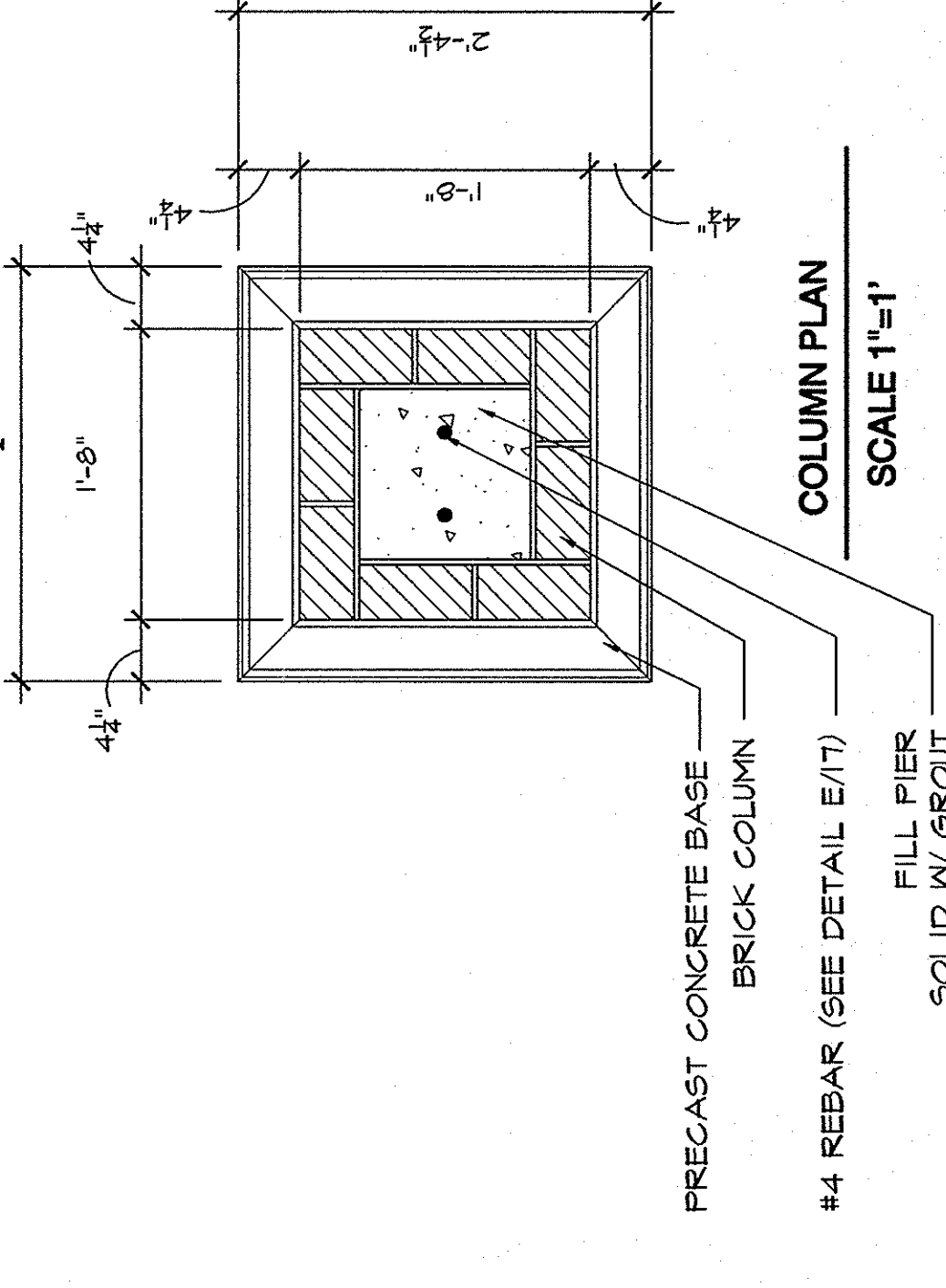
**WALL ELEVATION**  
 SCALE 1/4"=1'



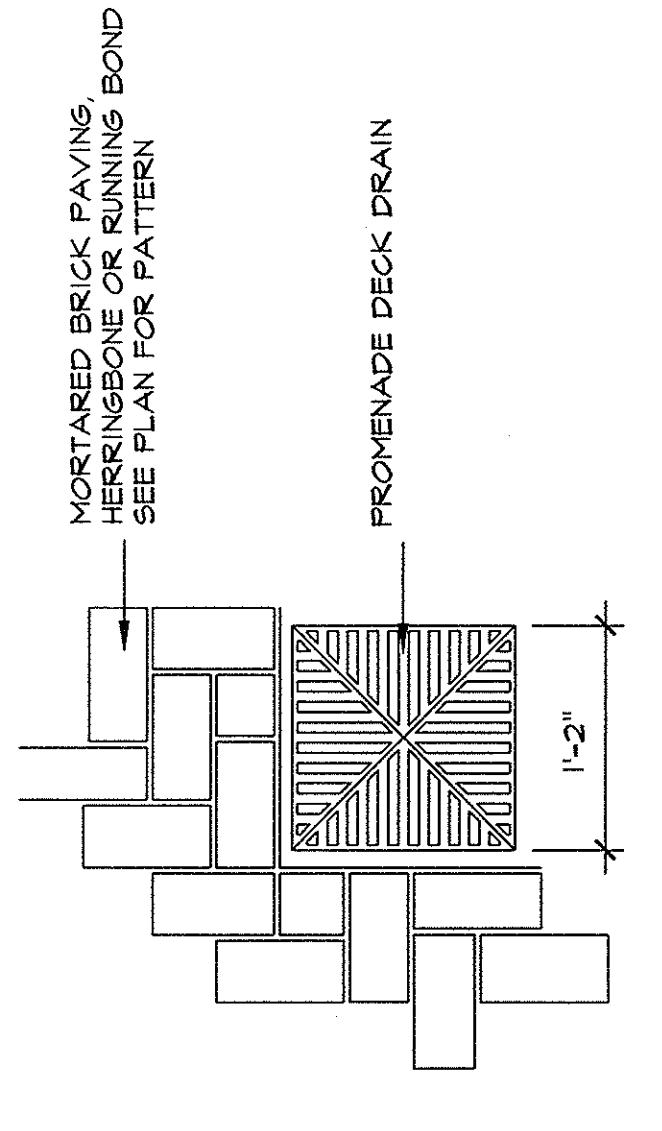
**WALL PLAN**  
 SCALE 1/4"=1'



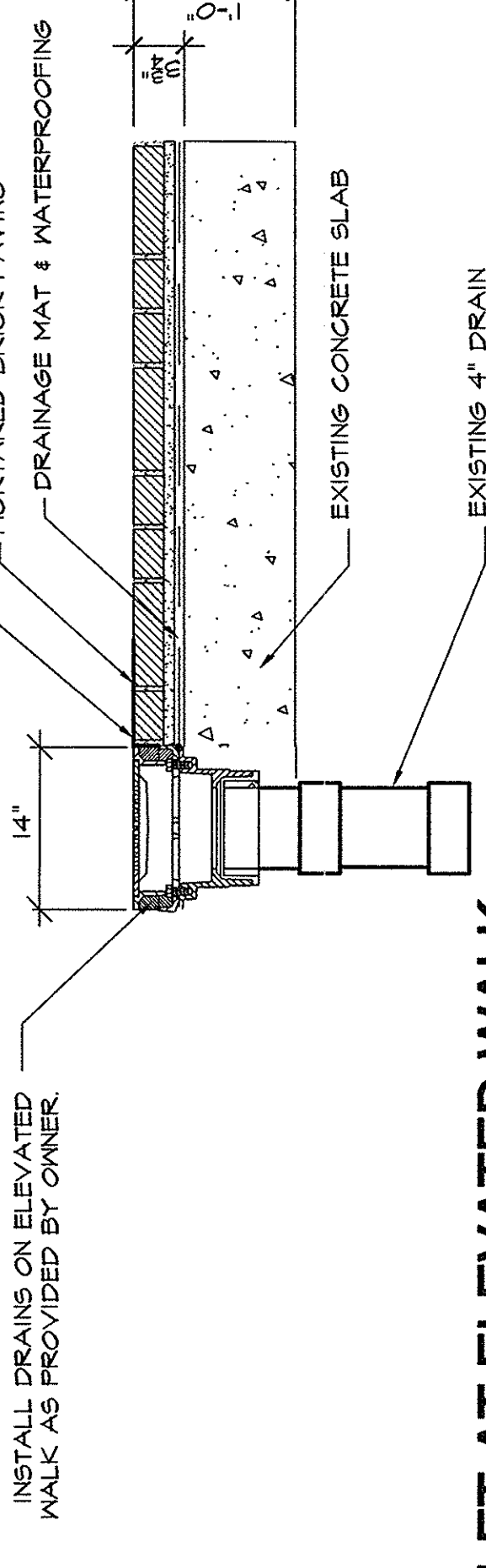
**PRECAST CONCRETE BASE - ELEVATION**  
 SCALE 1"=1'



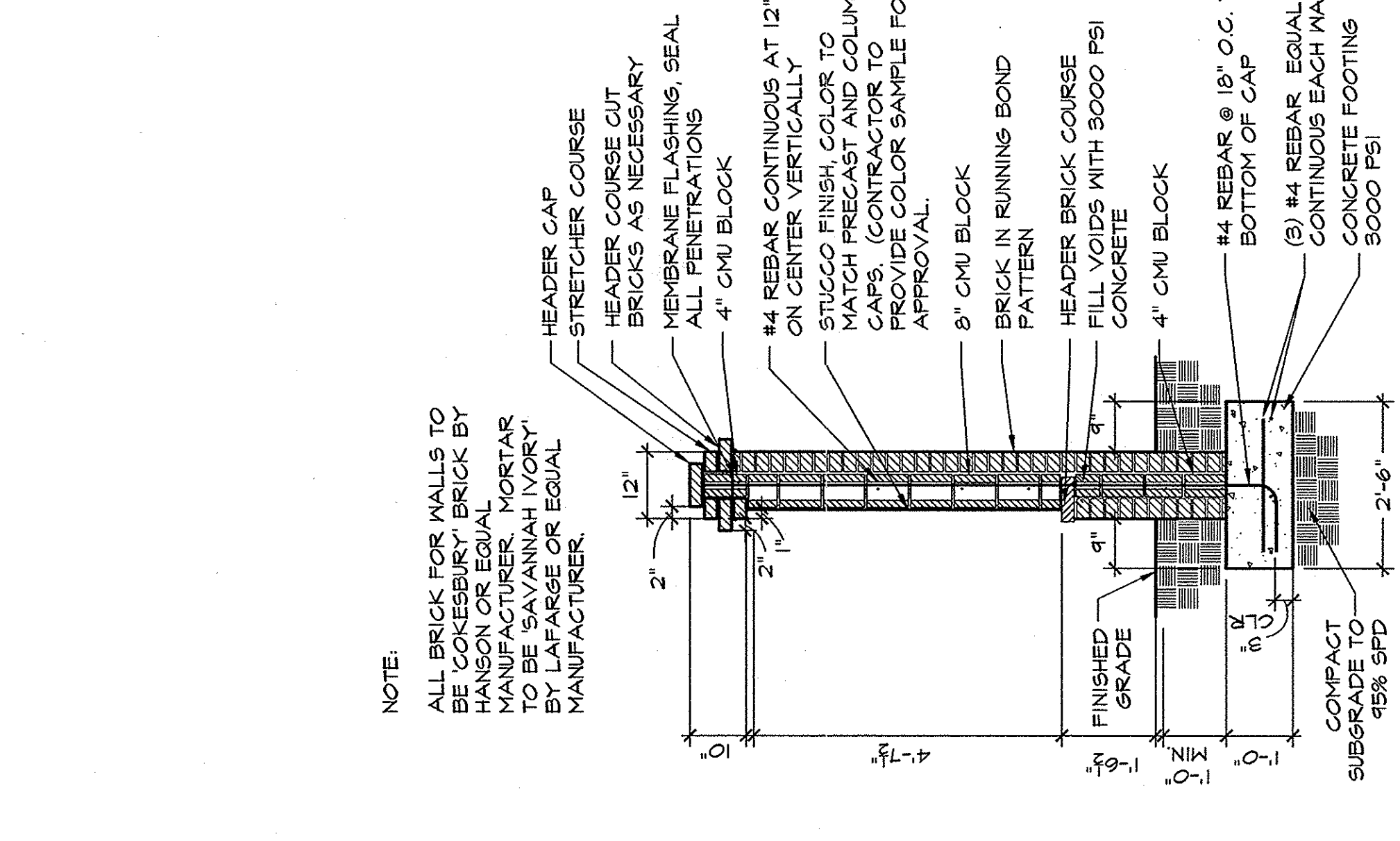
**COLUMN PLAN**  
 SCALE 1"=1'



**PLAN**

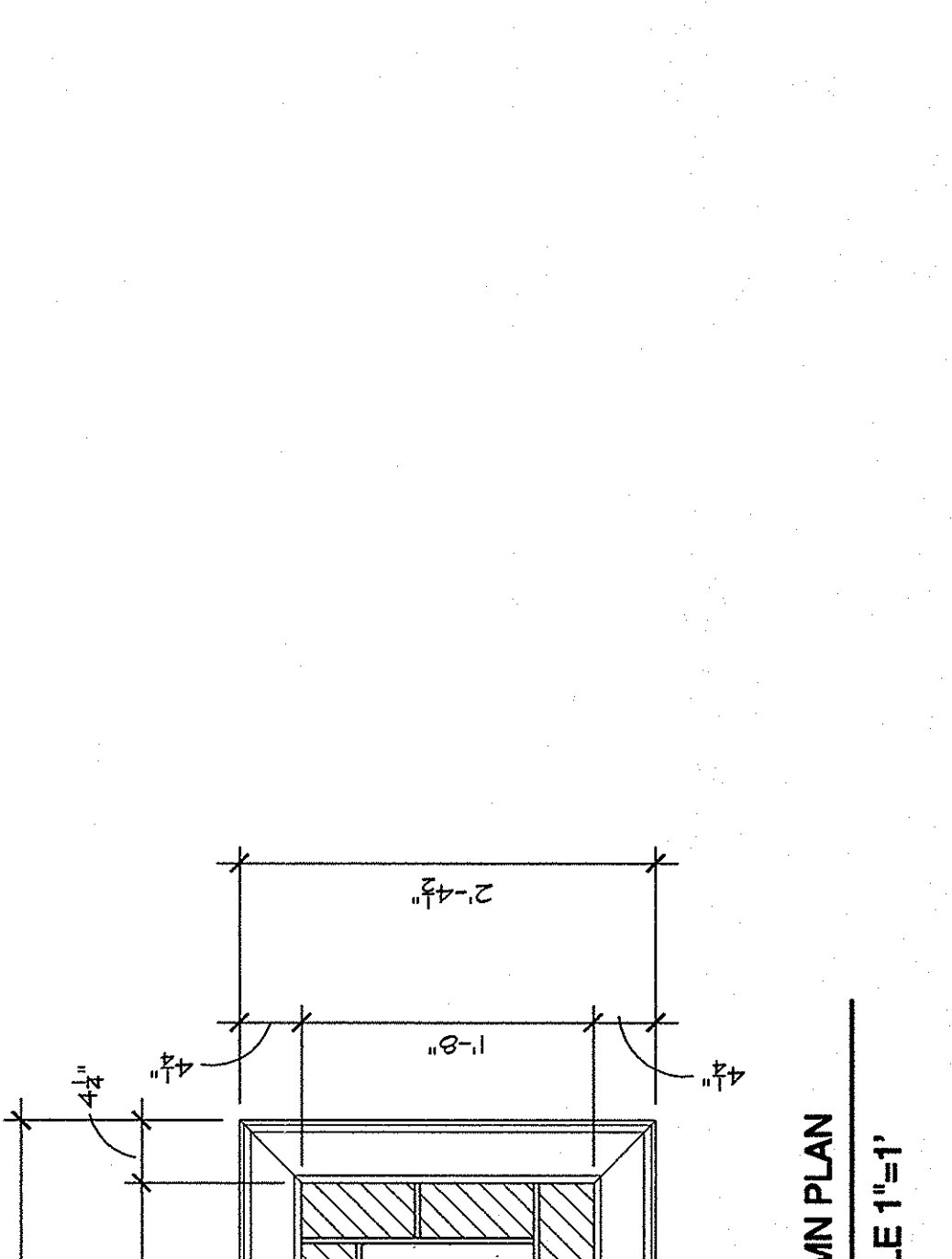


**B INLET AT ELEVATED WALK**  
 SCALE 1"=1'-0"

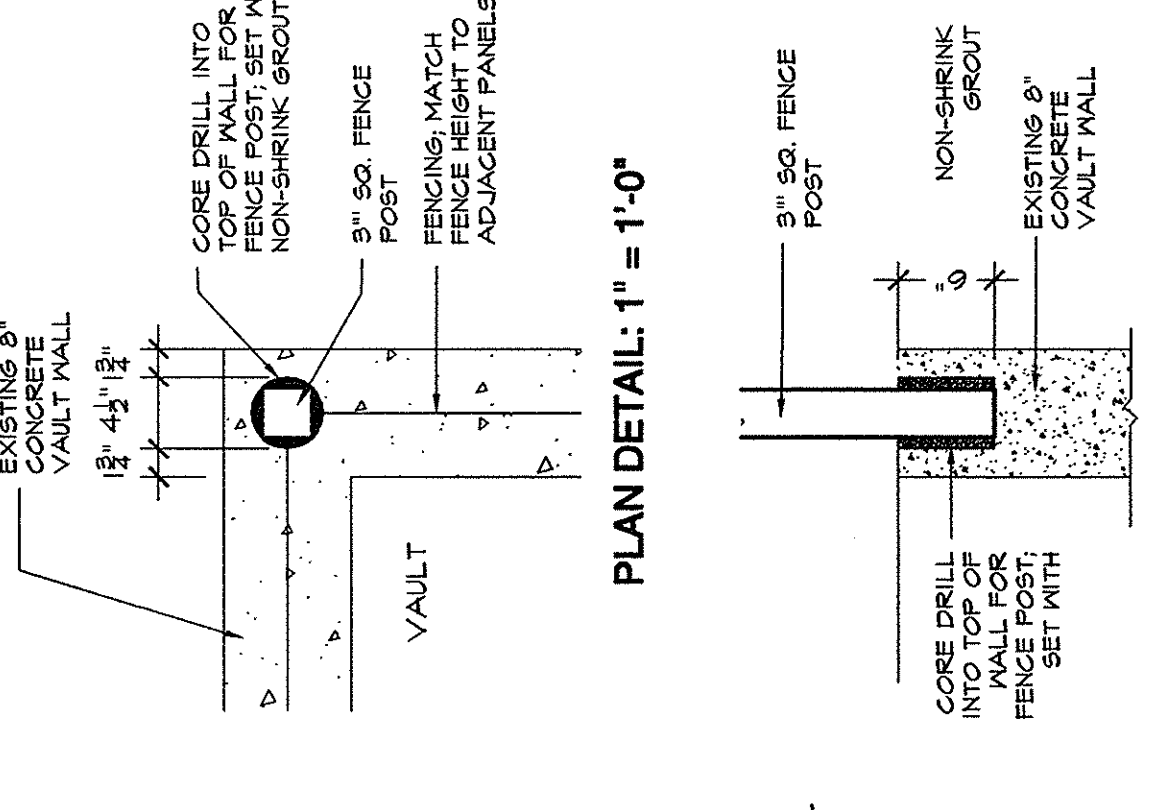


**NOTE:**  
 ALL BRICK FOR WALLS TO BE MORTARED BRICK BY HANSON OR EQUAL MANUFACTURER. MORTAR TO BE SAVANNAH IVORY OR EQUAL MANUFACTURER.

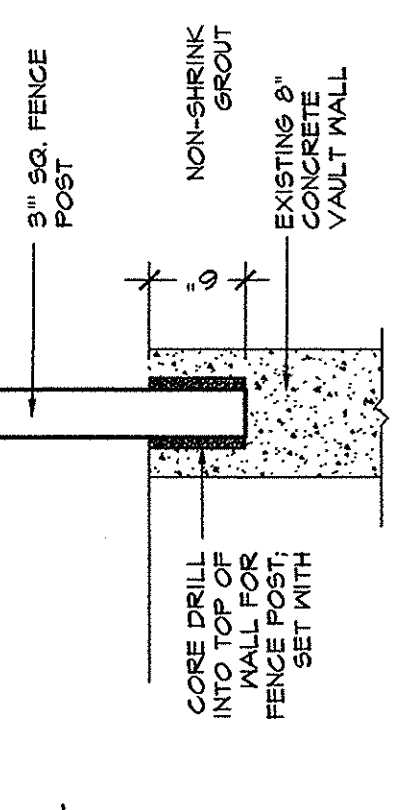
**E STUCCO PANEL ON DONOR WALL**  
 SCALE: 1/2"=1'-0"



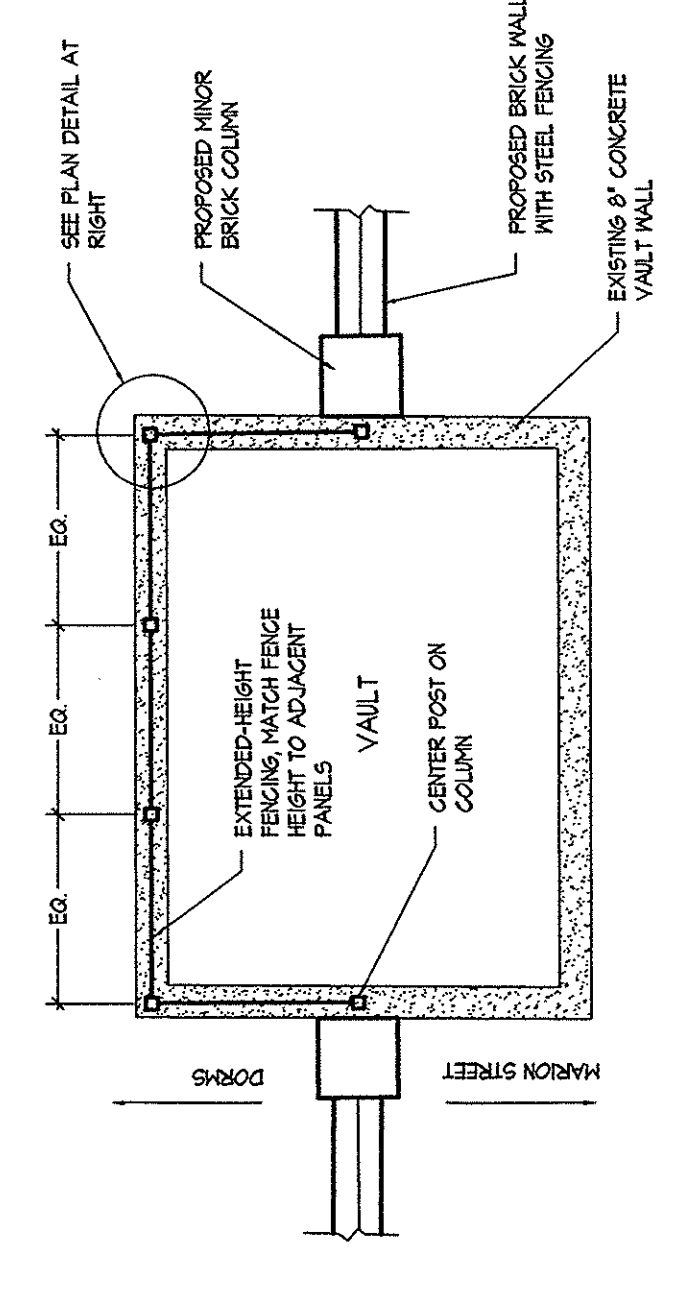
**SECTION**  
 SCALE: 1/2"=1'-0"



**PLAN DETAIL: 1"=1'-0"**



**SECTION: 1"=1'-0"**

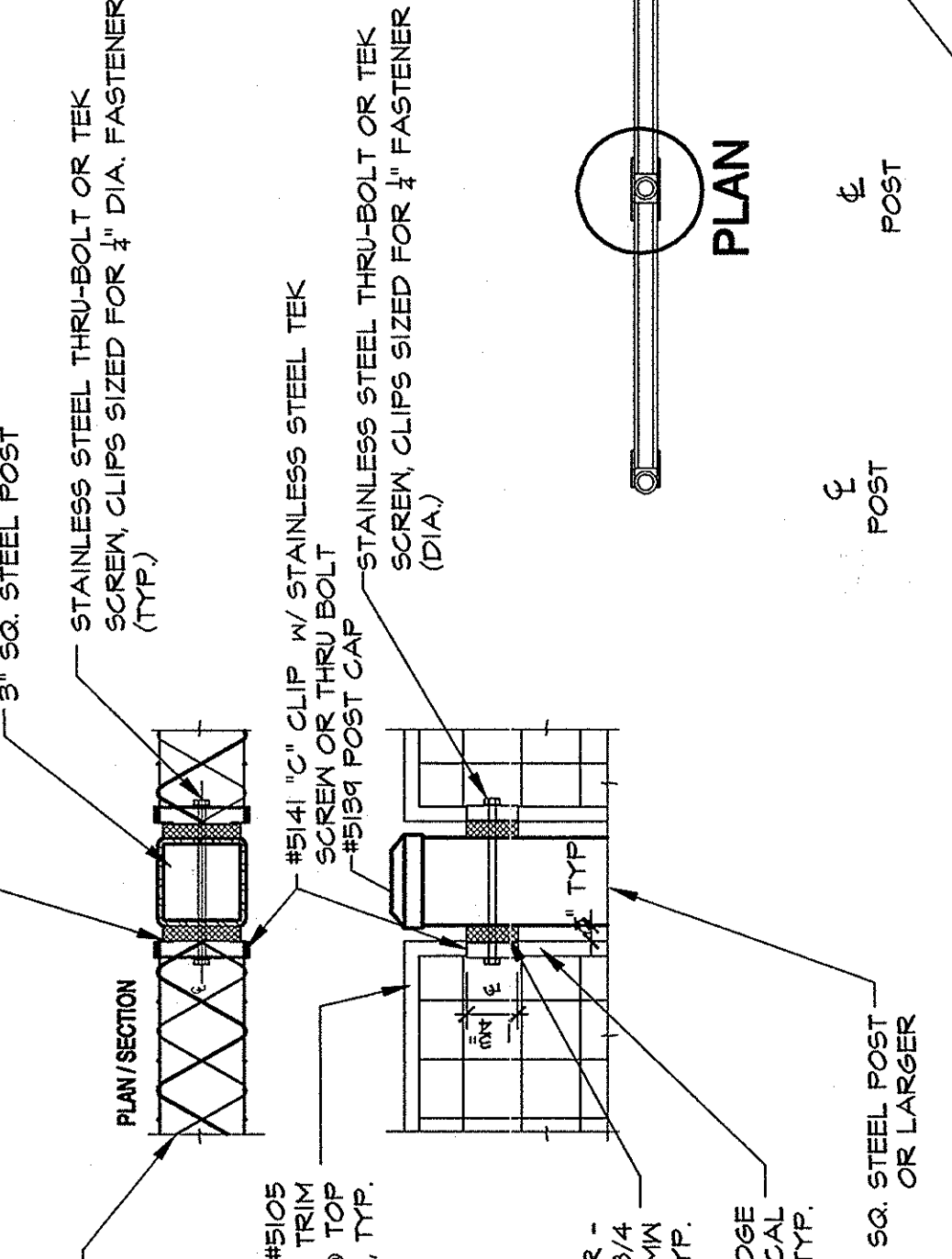


**PLAN: 1/4"=1'-0"**

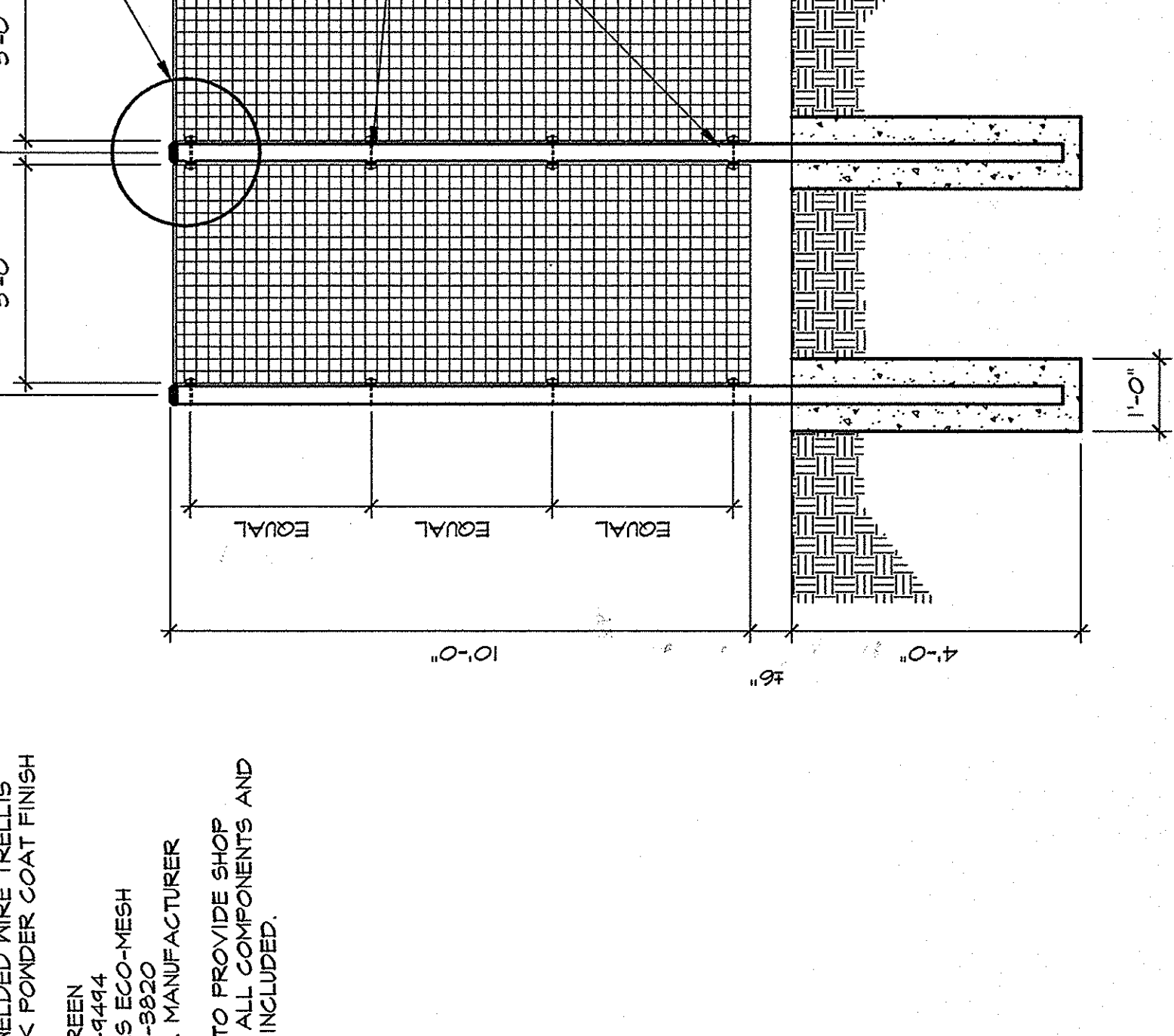
**FENCING AT VAULT**  
 SCALE 1"=1'-0"



**PLAN/SECTION**  
 SCALE: 1"=1'-0"



**SECTION**  
 SCALE: 1"=1'-0"



**PLAN**  
 SCALE: 1"=1'-0"

**F WALL SCREEN**  
 SCALE 1/4"=1'-0"

NO.	DESCRIPTION	DATE

APPROVALS	PROJECT ENG.	DESIGNED BY	CAAC	DRWN BY	CHKD BY	DATE

STATE OF SOUTH CAROLINA  
 REGISTERED PROFESSIONAL ENGINEER  
 NO. 470  
 DATE: 1/5/12

STATE OF SOUTH CAROLINA  
 REGISTERED PROFESSIONAL ARCHITECT  
 NO. 2232  
 DATE: 1/5/12

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 FLORENCE • CHARLOTTE • SAVANNAH

**GRIMBALL ASSOCIATES**  
 LANDSCAPE ARCHITECTS & LAND PLANNERS  
 600 SHELBY BLVD. SUITE 200  
 COLUMBIA, SC 29202

**LANDSCAPE-HARDSCAPE**  
 DEVELOPMENT CONSTRUCTION  
 FOR  
**UNIVERSITY OF SOUTH CAROLINA**  
 ATHLETIC VILLAGE INFRASTRUCTURE  
 IN THE CITY OF COLUMBIA, S.C.  
 RICHLAND COUNTY, S.C.  
 DATE: JANUARY 5, 2012  
 SCALE:  

SHEET	NO.	OF
	20	27

State Project Number:  
**H27-6056-MJ-C**

**F WALL SCREEN**  
 SCALE 1/4"=1'-0"

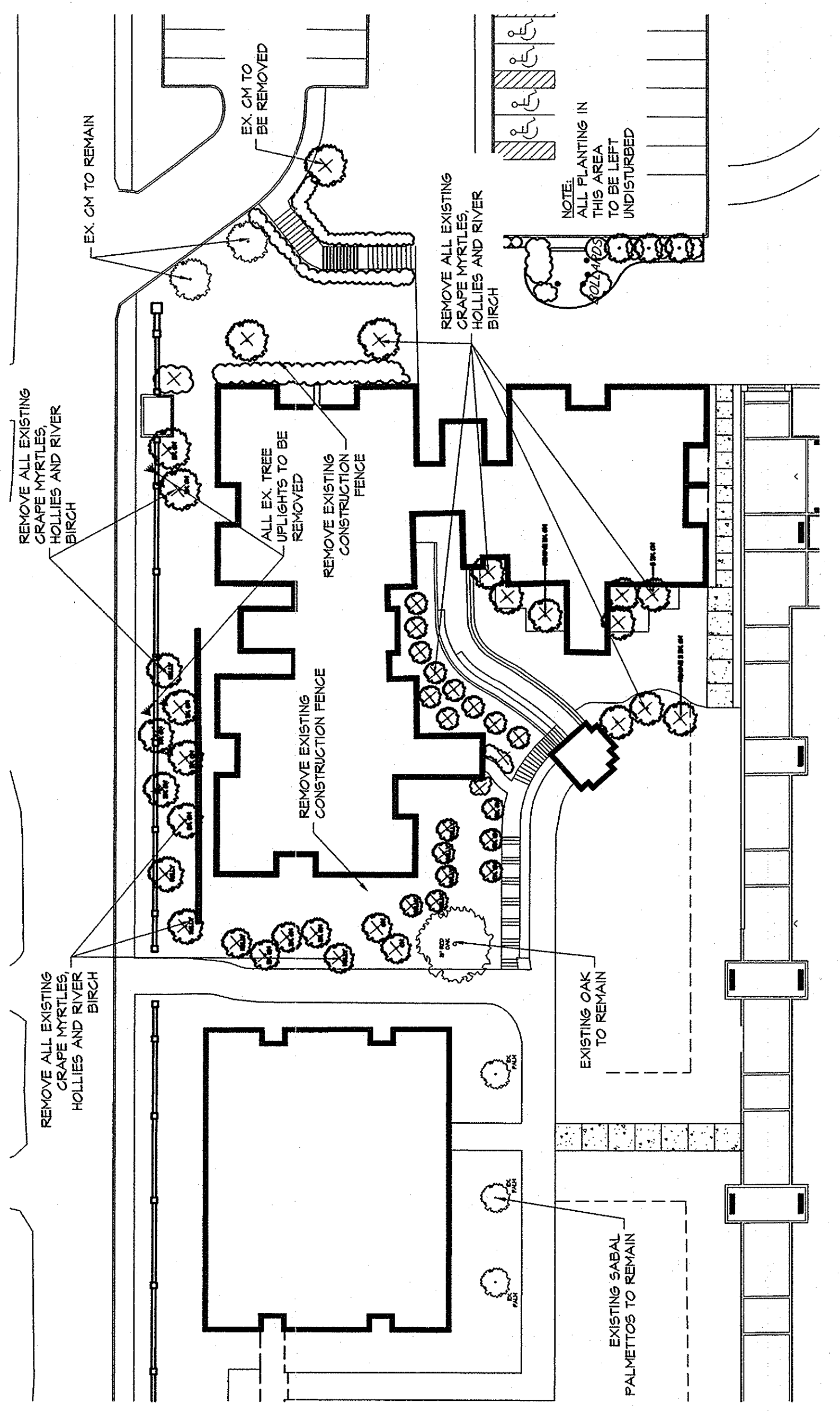
AS NOTED

**D DONOR WALL**  
 SCALE 1"=1'-0"

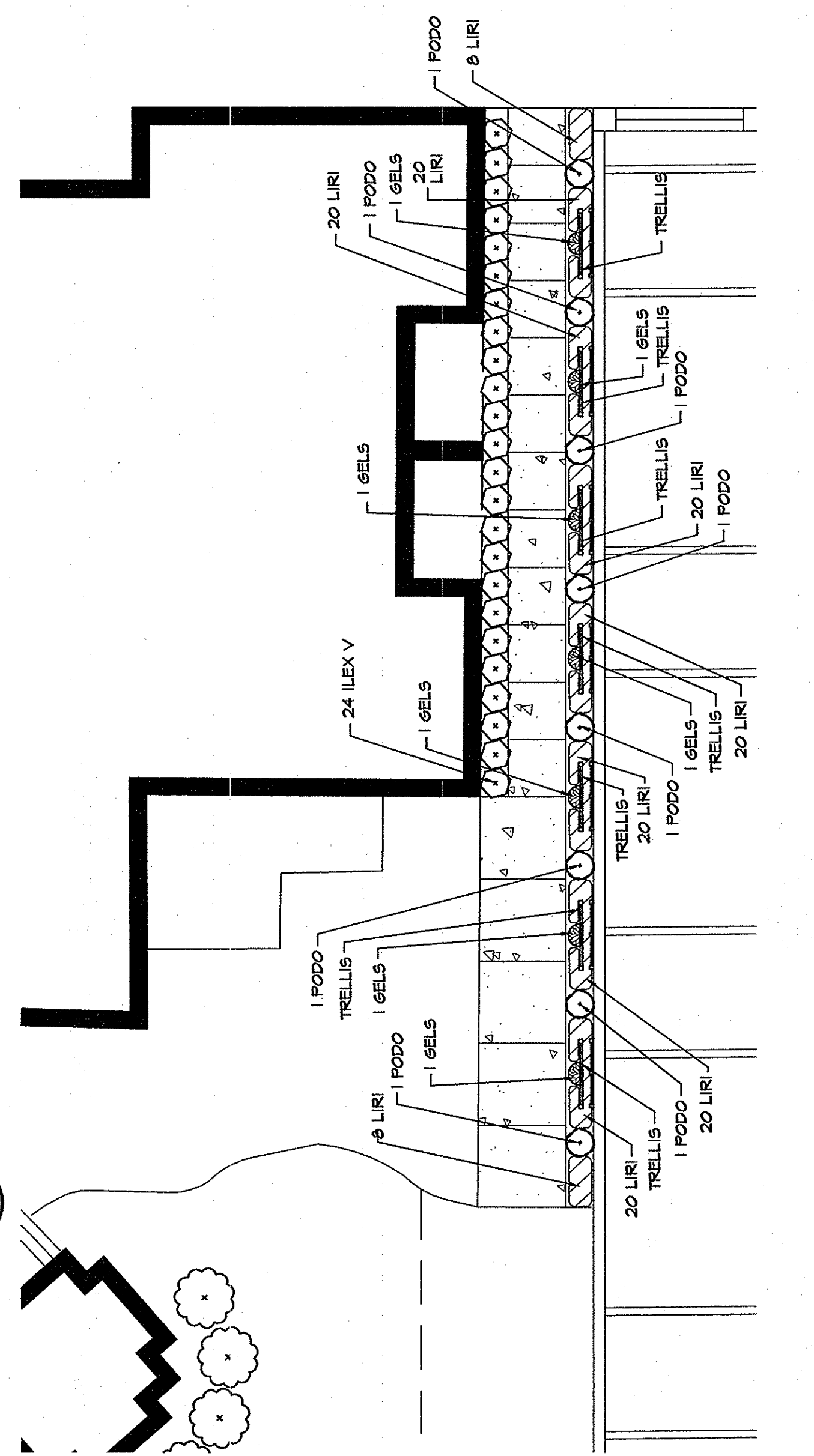


**GENERAL NOTES**

- EXISTING ECOLOGY AND AESTHETICS WILL OBTAIN CHANGE ADJUSTMENT OF THESE PLANS TO FIT THE COVER EXISTING GRANITE GRAVEL, 4" IN SIZE. PROVIDE SAMPLE FOR APPROVAL.
- LOCATIONS OF THESE UTILITIES SHOWN ARE APPROXIMATE AND FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE RESULTING FROM THE FAILURE TO DO SO. CONTACT PALMETTO UTILITY PROTECTION SERVICE AT 1-800-521-8811 AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL INFORM LANDSCAPE ARCHITECT IF PROPOSED DESIGN IS IN CONFLICT WITH EXISTING OR PROPOSED UTILITIES. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING CONSTRUCTION TO ADJUST PROPOSED DESIGN OR UTILITIES AS NECESSARY TO RESOLVE CONFLICTS.
- BASE PLAN DATA DERIVED FROM SITE SURVEY PROVIDED BY B.P. BARBER.



**A DEMOLITION PLAN**  
 SCALE 1"=30'-0"

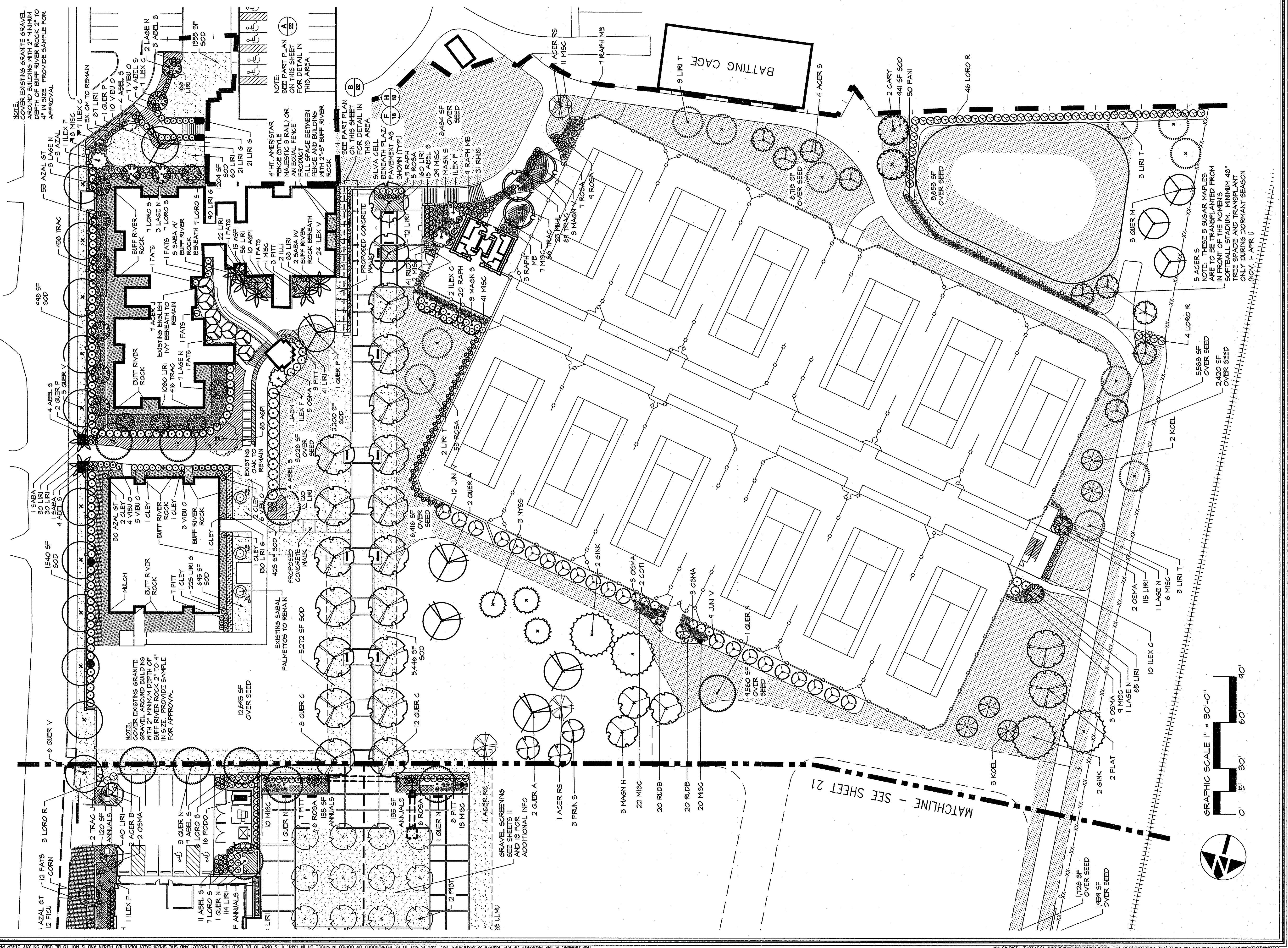


**B TRELLIS DETAIL @ DORMS**  
 SCALE 1"=10'-0"

**PLANTING LEGEND**

[Symbol]	SOD
[Symbol]	OVER SEED
[Symbol]	LIRIOPE 'BIG BLUE'
[Symbol]	LIRIOPE 'GIANT'
[Symbol]	ANNUALS
[Symbol]	RIVER ROCK
[Symbol]	HOLLY FERN
[Symbol]	ASIATIC JASMINE
[Symbol]	BLACK-EYED SUSAN
[Symbol]	MULCH

State Project Number:  
**H27-6056-MJ-C**

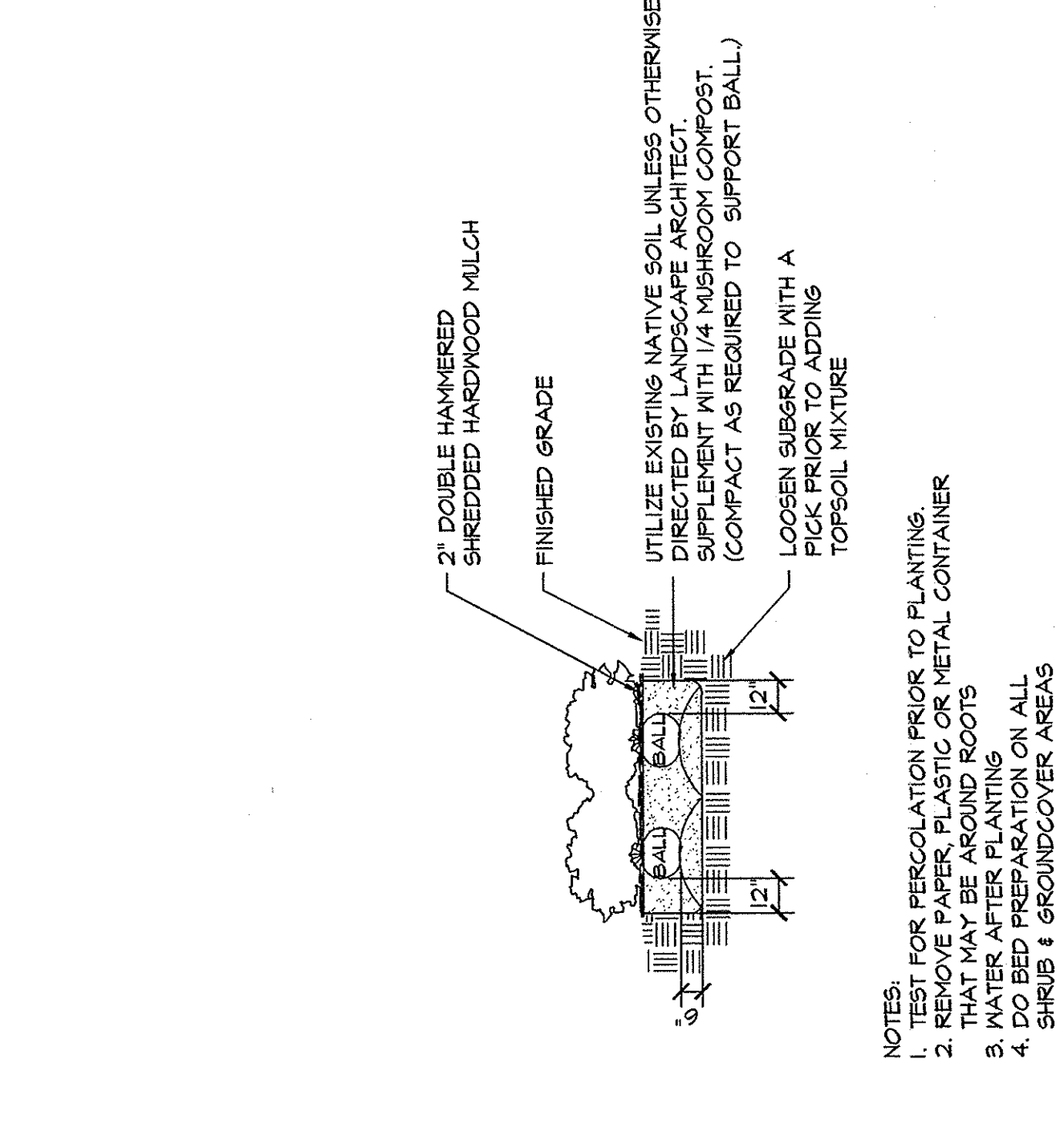


**PLANTING NOTES**

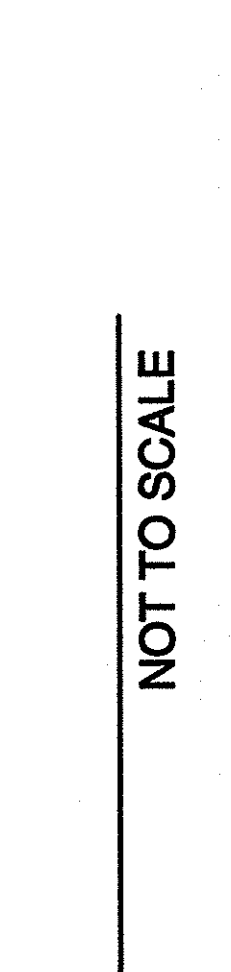
1. PLANTS LABELED NC ARE NOT IN CONTRACT AND ARE NOT A PART OF THIS PHASE OF WORK.
2. REQUIREMENTS FOR THE MEASUREMENTS, BRANCHING, GRADINGS, QUALITY, BALLING AND BURLAPING OF PLANTS IN THE PLANT LIST GENERALLY FOLLOWS OR EXCEEDS A CODE OF STANDARDS CURRENTLY RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN THE AMERICAN STANDARDS FOR NURSERY STOCK. SEE THE PLANT LIST FOR MORE RESTRICTIVE REQUIREMENTS.
3. ALL PLANTS SHALL HAVE A WELL FORMED HEAD WITH MINIMUM CALIPER HEIGHT AND SPREAD ON THE TREE. PLANTS SHALL BE TYPICAL OF THE SPECIES. BRANCHES SHALL BE UNWOUNDED AND SHAPE SHALL BE TYPICAL OF THE SPECIES.
4. MEASUREMENT OF CANOPY HEIGHT SHALL INCLUDE NOT MORE THAN FIFTY (50) PER CENT OF THIS YEAR'S VERTICAL GROWTH (TOP CANOPE).
5. THE LANDSCAPE CONTRACTOR IS HEREBY NOTIFIED OF THE EXISTENCE OF UNDERGROUND UTILITIES WITHIN THE LIMITS OF THE PROJECT AREA. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITY LINES PRIOR TO CONSTRUCTION OF DISSING OPERATIONS.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND LAYOUT OF PLANTING AREAS. ALL STAKES ARE READY FOR INSPECTION ON VARIOUS PLANTING AREAS. ALL LAYOUT WORK SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO OPENING ANY PLANTING PITS.
7. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO VERIFY THAT EACH EXCAVATED TREE OR SHRUB PIT WILL PERCOLATE (DRAIN) PRIOR TO ADDING TOPSOIL AND INSTALLING TREES OR SHRUBS. THE CONTRACTOR SHALL VERIFY ACCURACY AND EFFECT OF LANDSCAPE ARCHITECT'S PERCOLATION TESTING AND EFFECT OF PERCOLATION TESTING. IF THE SOIL AT GIVEN AREA DOES NOT DRAIN PROPERLY TO A DRAIN OR GRAVEL SUMP SHALL BE INSTALLED OR THE PLANTING RECONSIDERED.
8. SHOULD THE LANDSCAPE CONTRACTOR ENCOUNTER UNSATISFACTORY PERCOLATION TEST RESULTS, THE CONTRACTOR SHALL ADVISE THE LANDSCAPE ARCHITECT IMMEDIATELY AND SHALL ADVISE THE HEALTH AND VIGOR OF THE PLANTS. HE MUST ADVISE THE LANDSCAPE ARCHITECT IN WRITING OF THE CONDITIONS PRIOR TO INSTALLING PLANTING AREAS ARE SUITABLE FOR PROPER GROWTH AND DEVELOPMENT OF THE PLANTS TO BE INSTALLED.
9. PLANTING PITS FOR TREE AND SHRUBS SHALL BE PREPARED AS PER DETAILS.
10. DOUBLE HANDED SHREDDERED HARDWOOD MULCH SHALL BE APPLIED TO ALL GRASS BEDS BY THE CONTRACTOR. BEDS SHALL BE TREATED WITH PREPARED MULCH BY THE CONTRACTOR BEFORE MULCH IS APPLIED. SHREDDERED HARDWOOD MULCH SHALL BE TWO INCHES DEEP. A SAMPLE OF SHREDDERED HARDWOOD MULCH SHALL BE PRESENTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL.
11. ALL TREES ARE TO BE STAKED IMMEDIATELY AFTER PLANTING AS DETAILLED. STAKING SHALL BE DONE IMMEDIATELY AFTER PLANTING AS DETAILLED. END OF THE ONE YEAR GUARANTEE PERIOD.
12. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP A REASONABLY NEAT AND CLEAN STATE THROUGHOUT THE INSTALLATION PROCESS. STREETS AND PAVED AREAS SHALL BE CLEANED REGULARLY TO REMOVE DEBRIS AND MATERIALS AND OTHER DEBRIS RESULTING FROM WORK OF THE PROJECT.
13. PLANTS SHALL BE GUARANTEED FOR THE DURATION OF ONE (1) FULL YEAR AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD. ANY PLANT NOT IN A HEALTHY AND VIGOROUS STATE AT THE END OF THE GUARANTEE PERIOD SHALL BE REPLACED AT NO COST TO THE OWNER. PLANTS SHALL BE REPLACED AT NO COST TO THE OWNER. PLANTS SHALL BE REPLACED AT NO COST TO THE OWNER. PLANTS SHALL BE REPLACED AT NO COST TO THE OWNER.
14. REPLACEMENTS OF DEAD OR UNSATISFACTORY MATERIAL SHALL BE MADE IMMEDIATELY. REPLACEMENTS SHALL BE MADE IMMEDIATELY. REPLACEMENTS SHALL BE MADE IMMEDIATELY.
15. SHOULD THE CONTRACTOR NOT MAKE REPLACEMENTS IN A SATISFACTORY MANNER, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RETAINAGE TO HAVE THE REPLACEMENTS MADE IN ACCORD WITH THE SPECIFICATIONS BY ANOTHER CONTRACTOR.
16. NO EXCAVATION OR PLANTING PIT SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT.
17. PLANT MATERIAL QUANTITIES PROVIDED IN THE PLANT LIST ARE FOR REFERENCE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR THE ACTUAL PLANT MATERIAL QUANTITIES. DISCREPANCIES BETWEEN QUANTITIES SHOWN ON THE PLANTING PLAN AND ACTUAL QUANTITIES SHALL BE SUBJECT TO THE CLARIFICATION OF DISCREPANCIES FROM THE LANDSCAPE ARCHITECT IS NOT POSSIBLE THEN QUANTITIES SHOWN ON THE PLANTING PLAN SHALL TAKE PRECEDENCE.

**GRASSING SCHEDULE (PER 1000 SF)**

- NOTE: SEED ALL DISTURBED AREAS DUE TO GRADING OR TRENCHING AND ALL AREAS NOT TO BE PLANTED OR SOODED
- FROM: MAY 1 - AUGUST 31  
 FROM: SEPTEMBER 1 - APRIL 30
- 2 LB. ANNUAL RYE
  - 1 LB. BROOKTOP MILLET
  - 1 LB. HILLED BERBERA
  - 1 LB. HILLED BERBERA
  - 25 LBS. 10-10-10 FERTILIZER
  - 100% SLOW RELEASE NITROGEN
  - 15 LBS. LIMESTONE



**B SHRUB PLANTING**  
 23 NOT TO SCALE



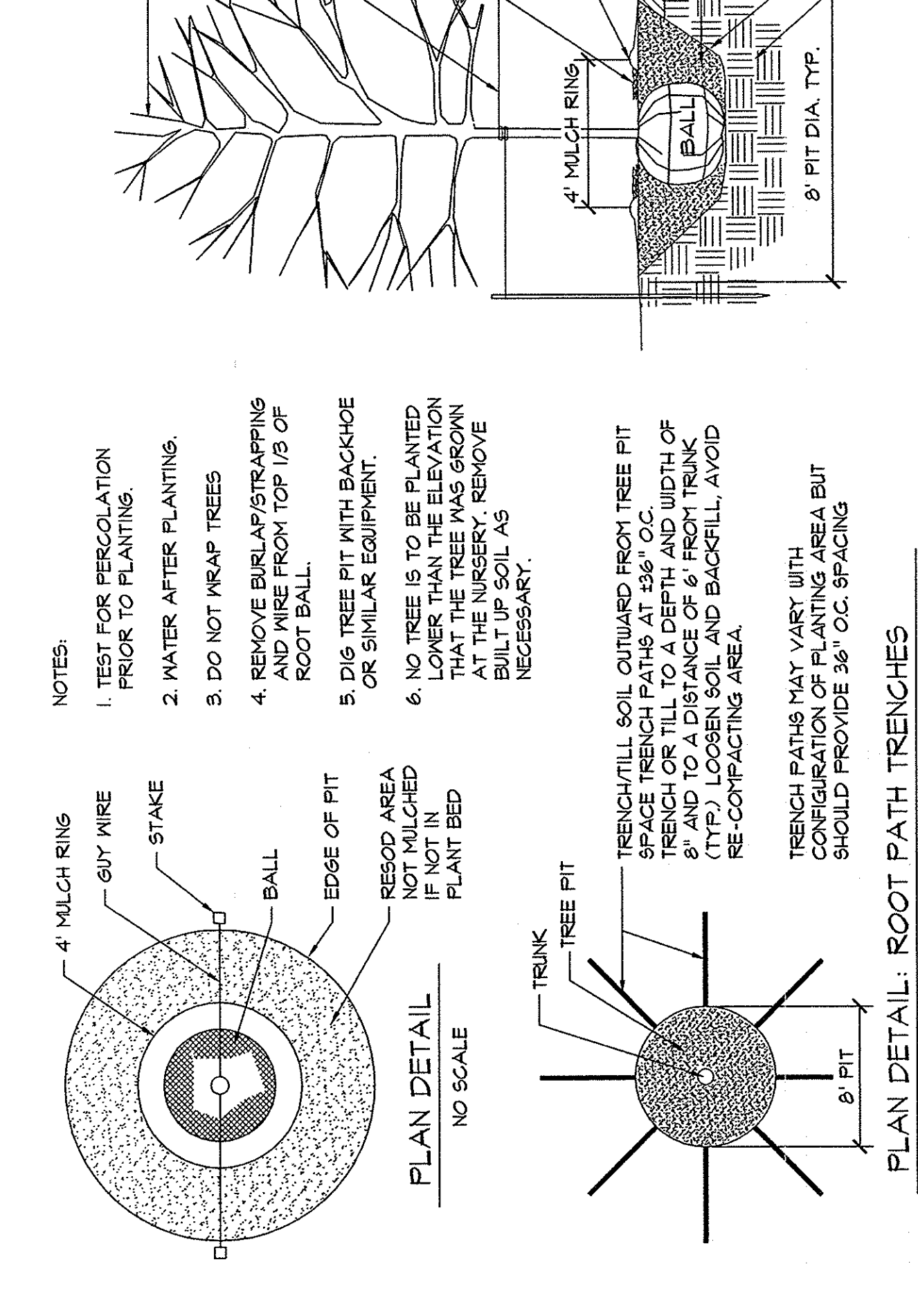
**C PERCOLATION TEST**  
 23 ISOMETRIC

**INSTRUCTIONS FOR PERFORMING A PERCOLATION TEST**

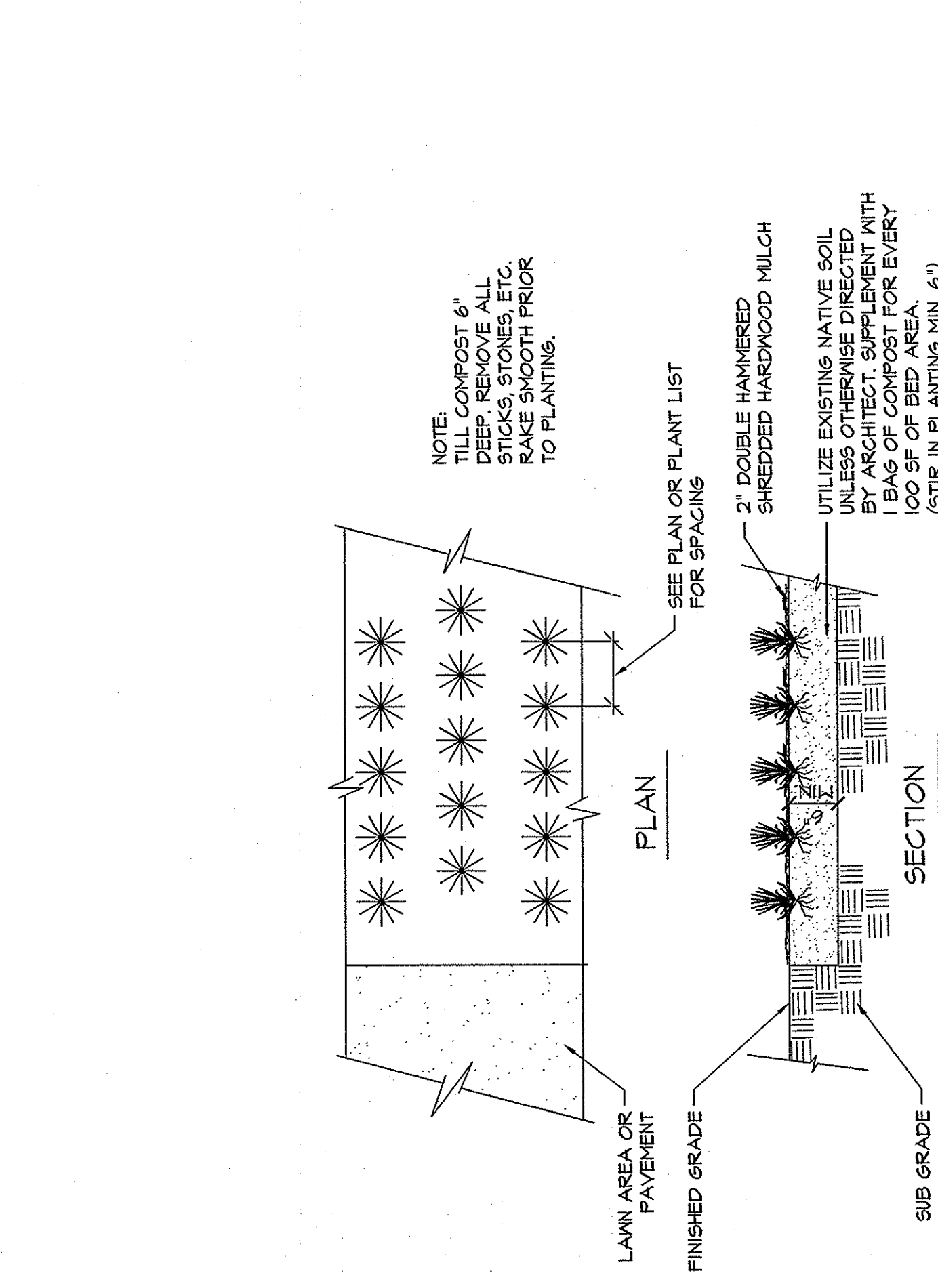
1. WITH A SHOVEL OR POSTHOLE DIGGER, DIG HOLE 18" TO 24" DEEP. HOLE DIAMETER SHOULD BE A MINIMUM OF 4 INCHES. THE DIAMETER OF THE HOLE SHOULD BE UNIFORM FROM TOP TO BOTTOM WITH THE BOTTOM BEING FLAT.
2. FILL HOLE WITH WATER TO THE TOP AND LET STAND FOR AT LEAST AN HOUR TO PRE-WET THE SOIL.
3. REFILL HOLE TO WITHIN A COUPLE INCHES OF THE TOP. DON'T OVERFLOW THE HOLE.
4. TO AID IN MEASUREMENT, PLACE A STICK ACROSS THE TOP OF THE HOLE AND USE A RULER OR MEASURING TAPE TO MARK PERIODIC DROPS IN WATER LEVEL.
5. ALLOW THE HOLE TO DRAIN FOR AT LEAST ONE HOUR. A LONGER PERIOD OF TIME (2 TO 3 HOURS) WILL GIVE A MORE ACCURATE READING OF AVERAGE PERCOLATION RATES.
6. DETERMINE AVERAGE DROP IN WATER LEVEL PER HOUR AND REFER TO THE TABLE BELOW TO INTERPRET RESULTS.

HOW TO INTERPRET RESULTS	SITE IS...
IF WATER LEVEL IN HOLE DROPS... LESS THAN ONE-HALF INCH PER HOUR	POORLY DRAINING AND SUITED TO NET-SITE SPECIES
ONE HALF-INCH TO ONE INCH PER HOUR	MODERATELY WELL DRAINING AND ACCEPTABLE FOR MANY SPECIES INCLUDING NET-SITE SPECIES
MORE THAN ONE INCH PER HOUR	WELL DRAINING AND SUITABLE FOR ALL SPECIES INCLUDING SENSITIVE SPECIES

**D PERCOLATION TEST**  
 23 ISOMETRIC



**A TREE PLANTING AND STAKING**  
 23 NOT TO SCALE

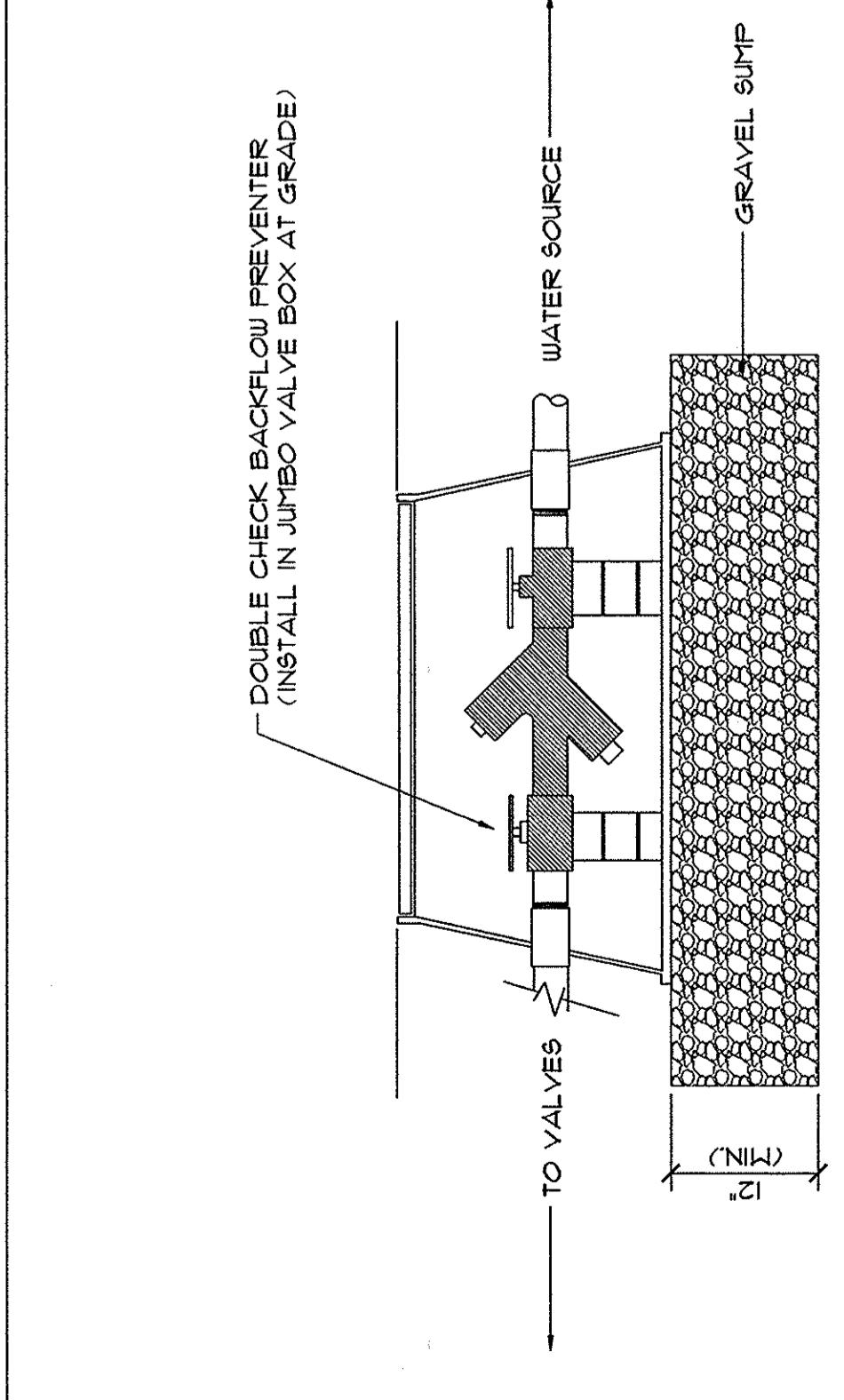


**E TREE PROTECTION FENCING**  
 23 NOT TO SCALE

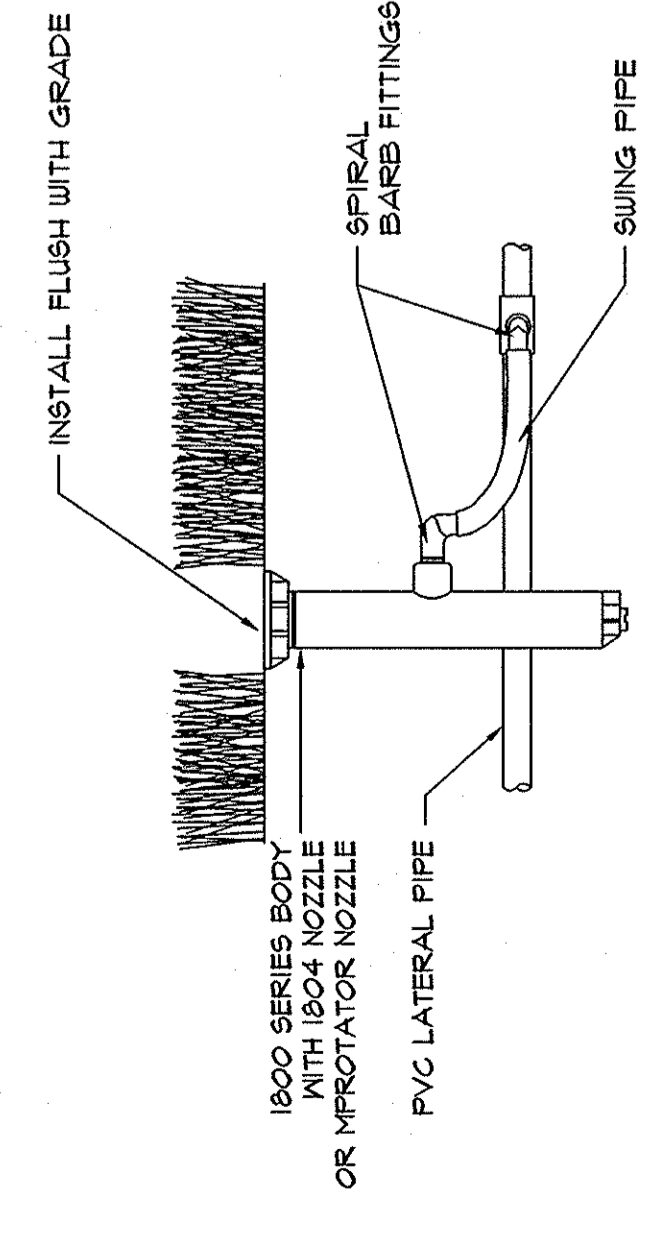




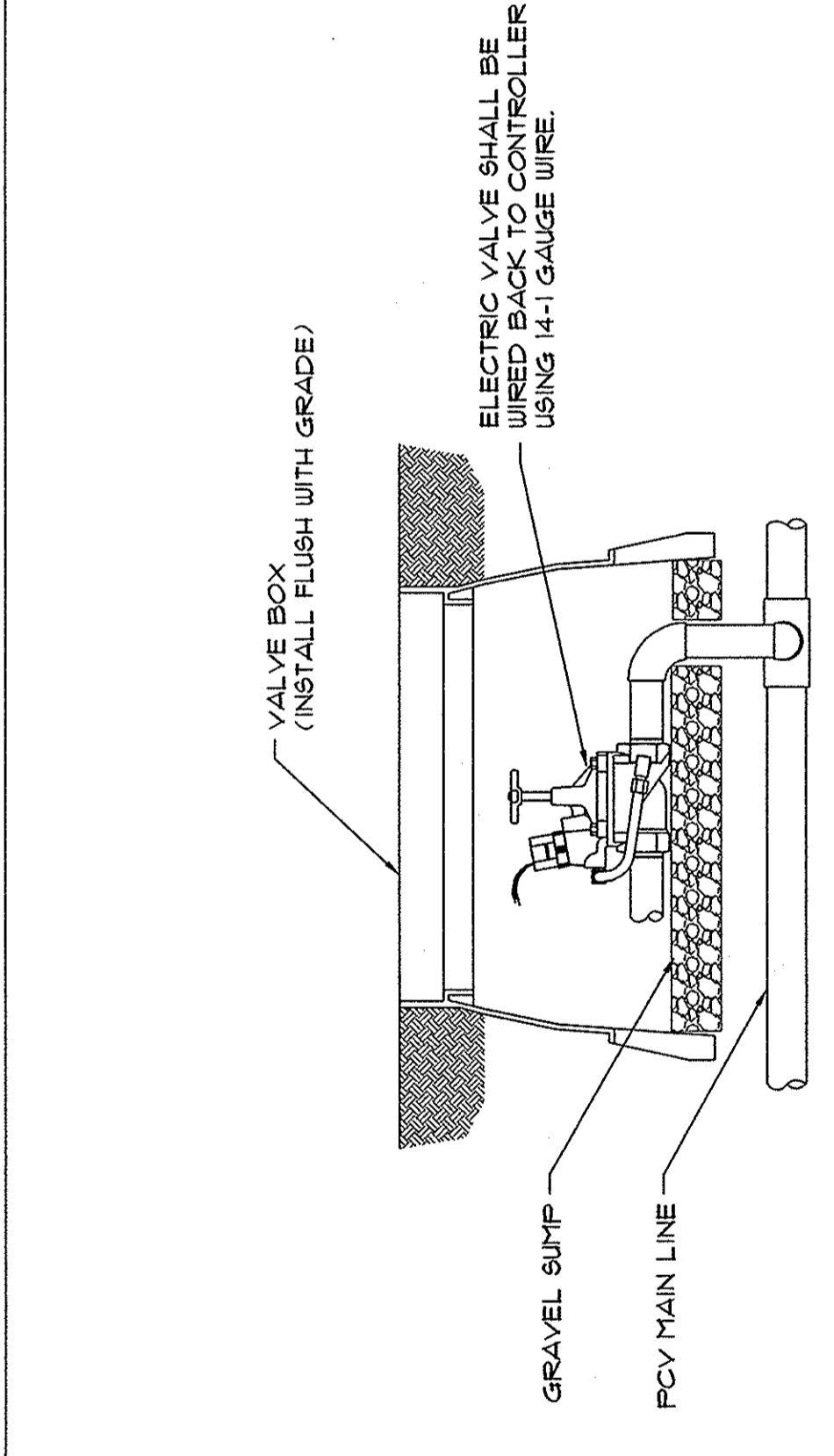




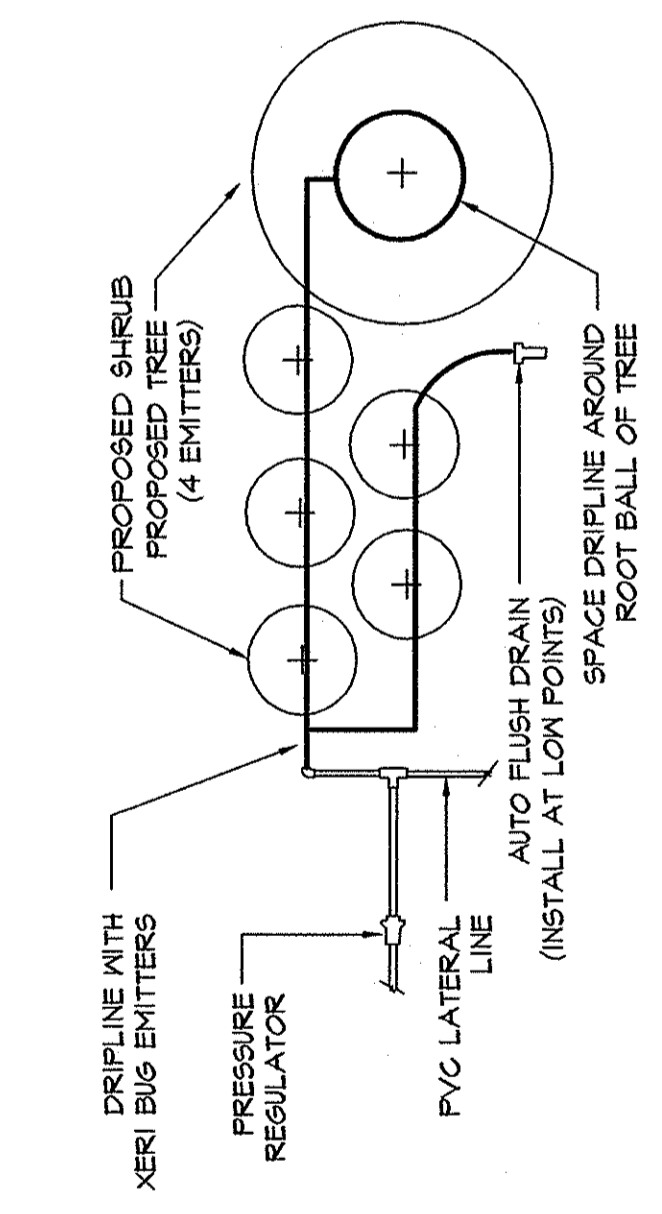
**A** SECTION  
26 NOT TO SCALE  
**BACKFLOW PREVENTER**



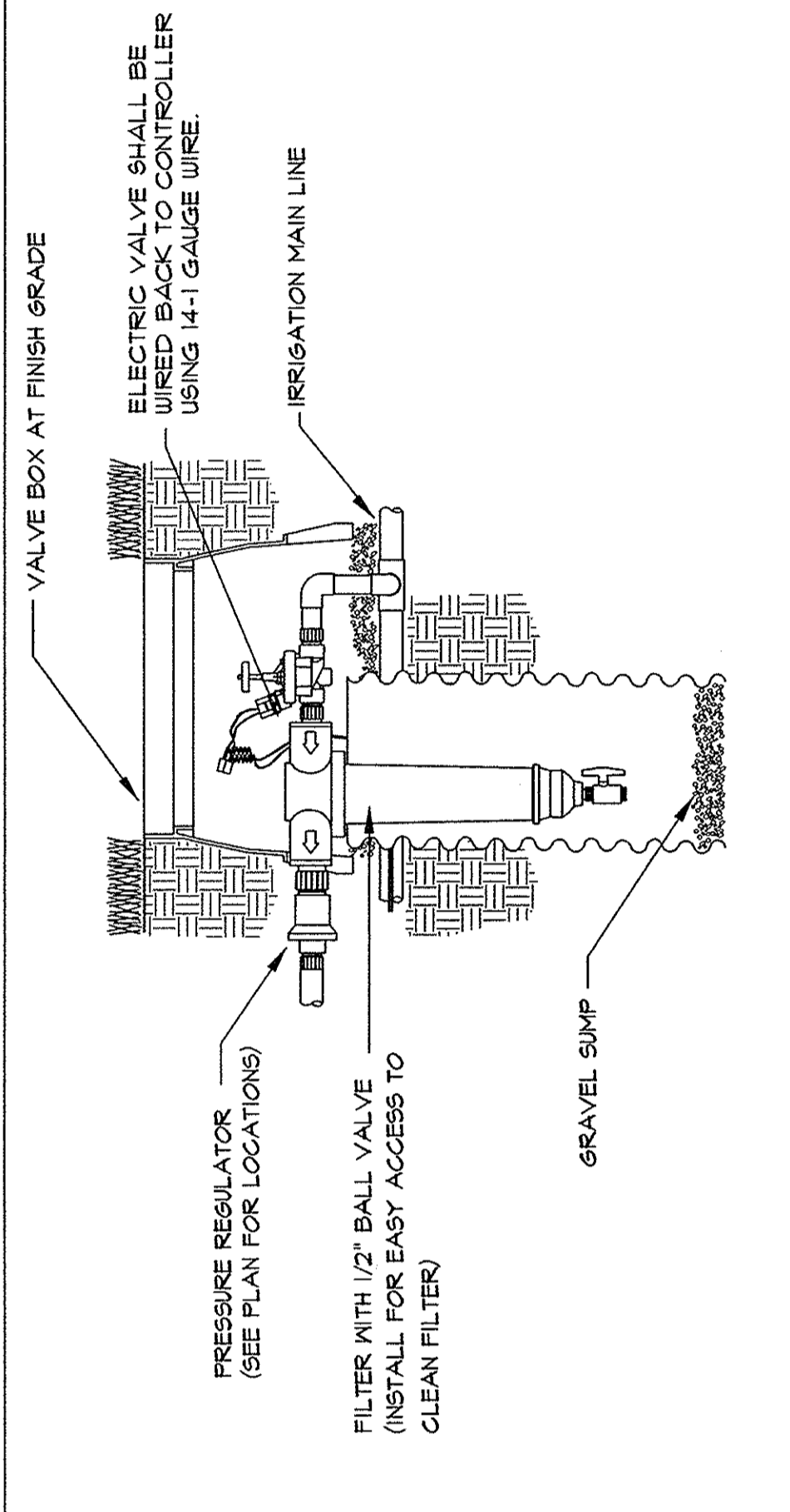
**E** SECTION  
26 NOT TO SCALE  
**POP-UP SPRAY SPRINKLER**



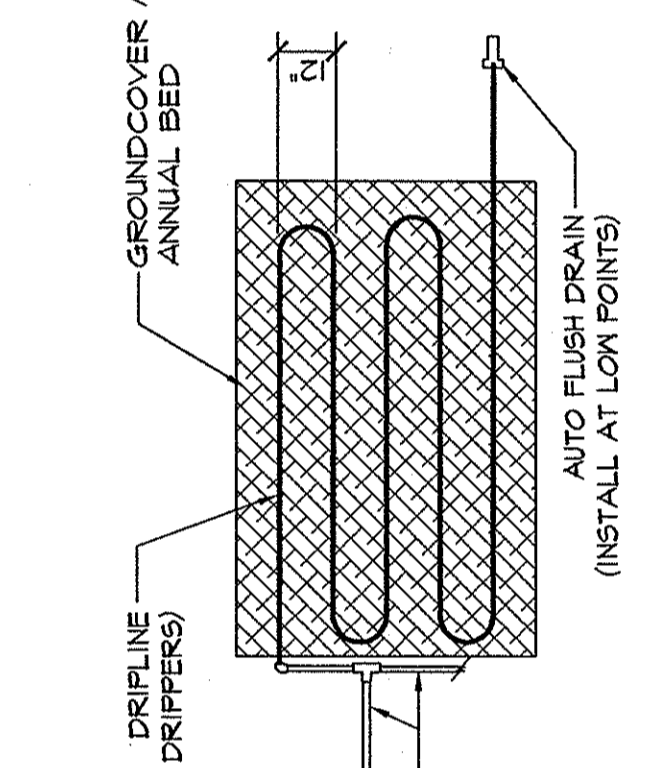
**B** SECTION  
26 NOT TO SCALE  
**ELECTRIC VALVE**



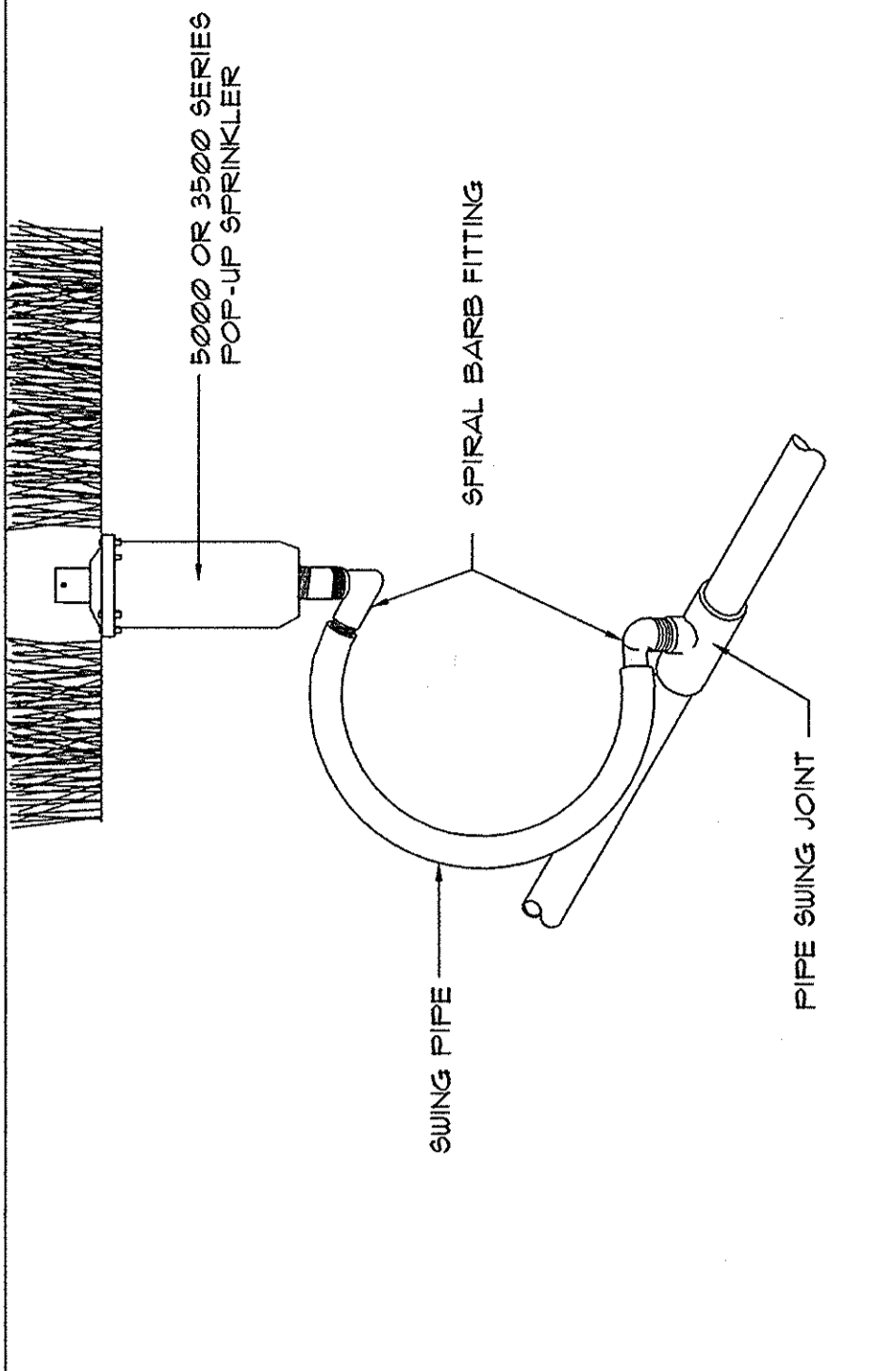
**F** PLAN  
26 NOT TO SCALE  
**DRIPLINE IN SHRUBS**



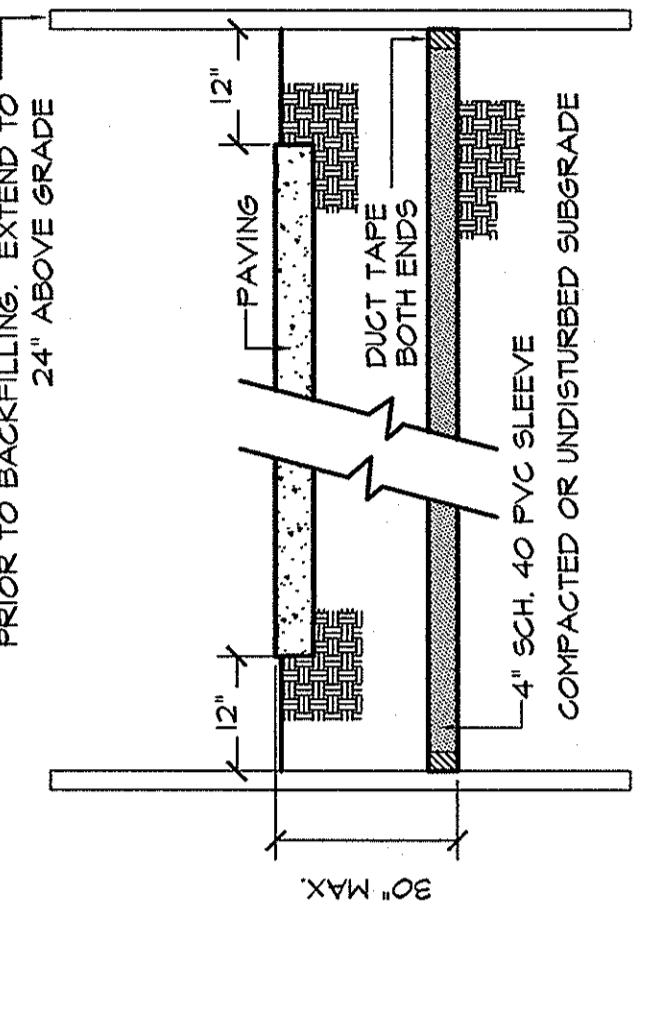
**C** SECTION  
26 NOT TO SCALE  
**ELECTRIC VALVE-DRIP ZONE**



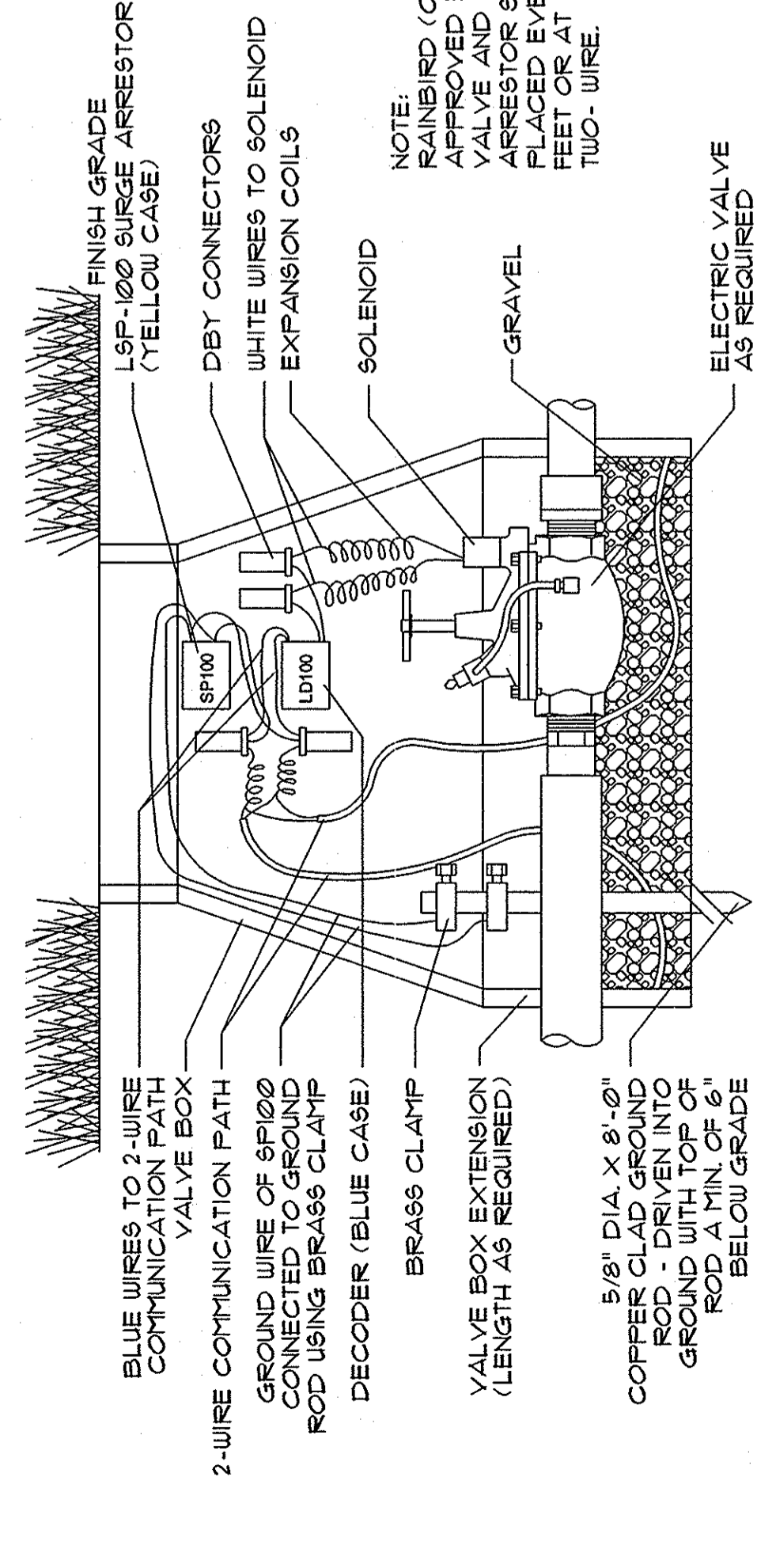
**G** PLAN  
26 NOT TO SCALE  
**DRIPLINE IN GROUNDCOVER**



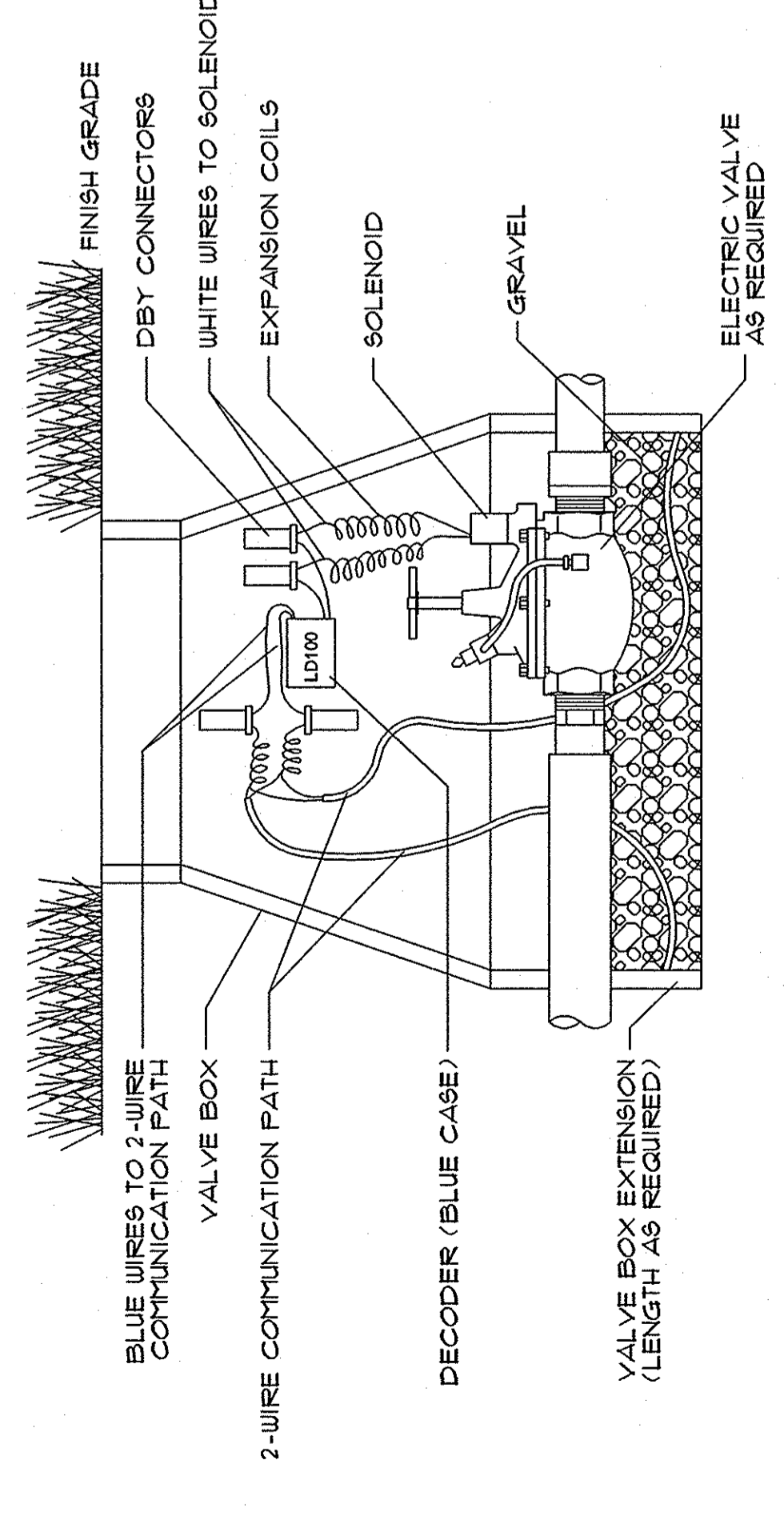
**D** SECTION  
26 NOT TO SCALE  
**POP-UP ROTOR SPRINKLER**



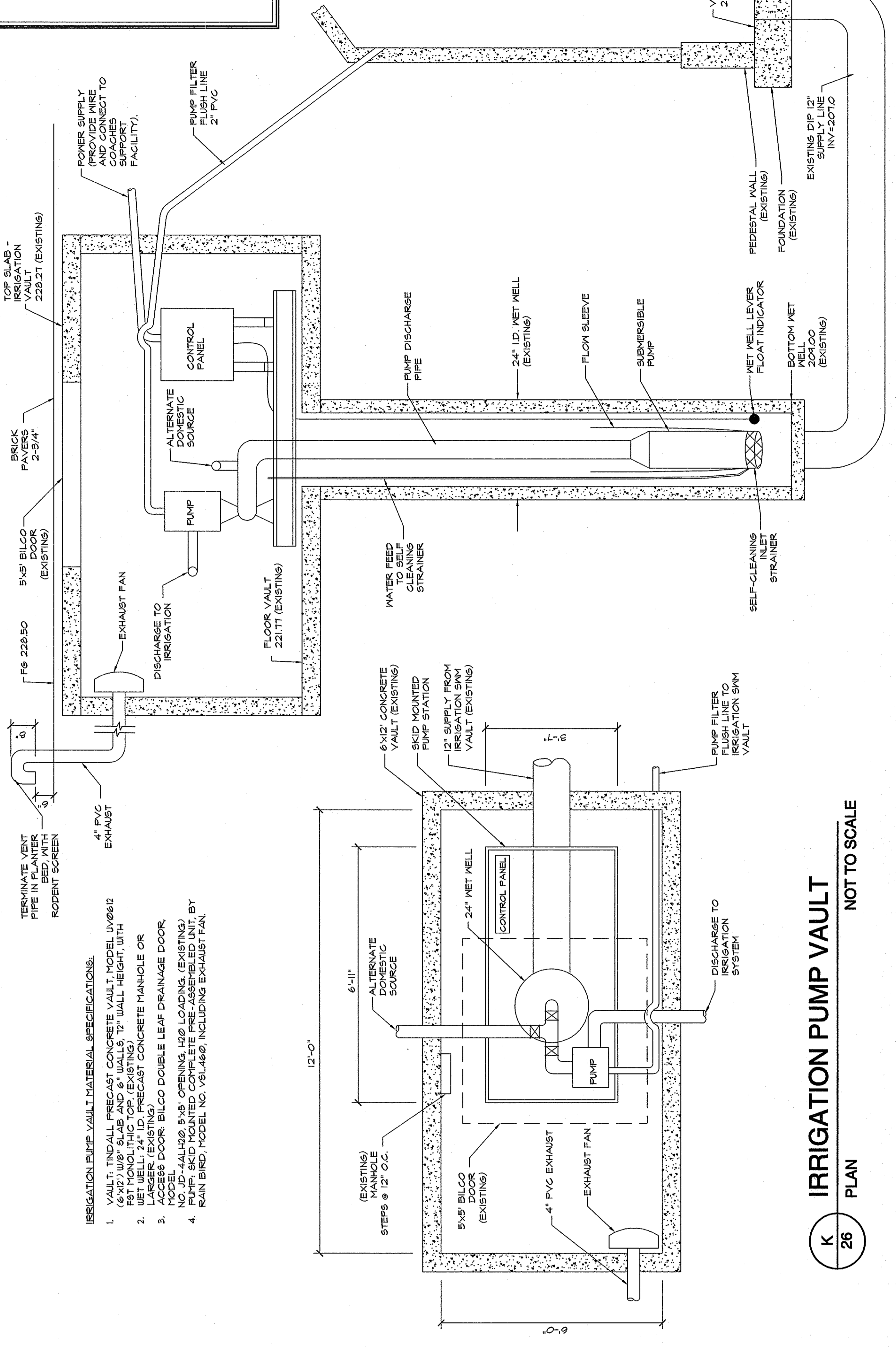
**H** SECTION  
26 NOT TO SCALE  
**PIPE SLEEVING**



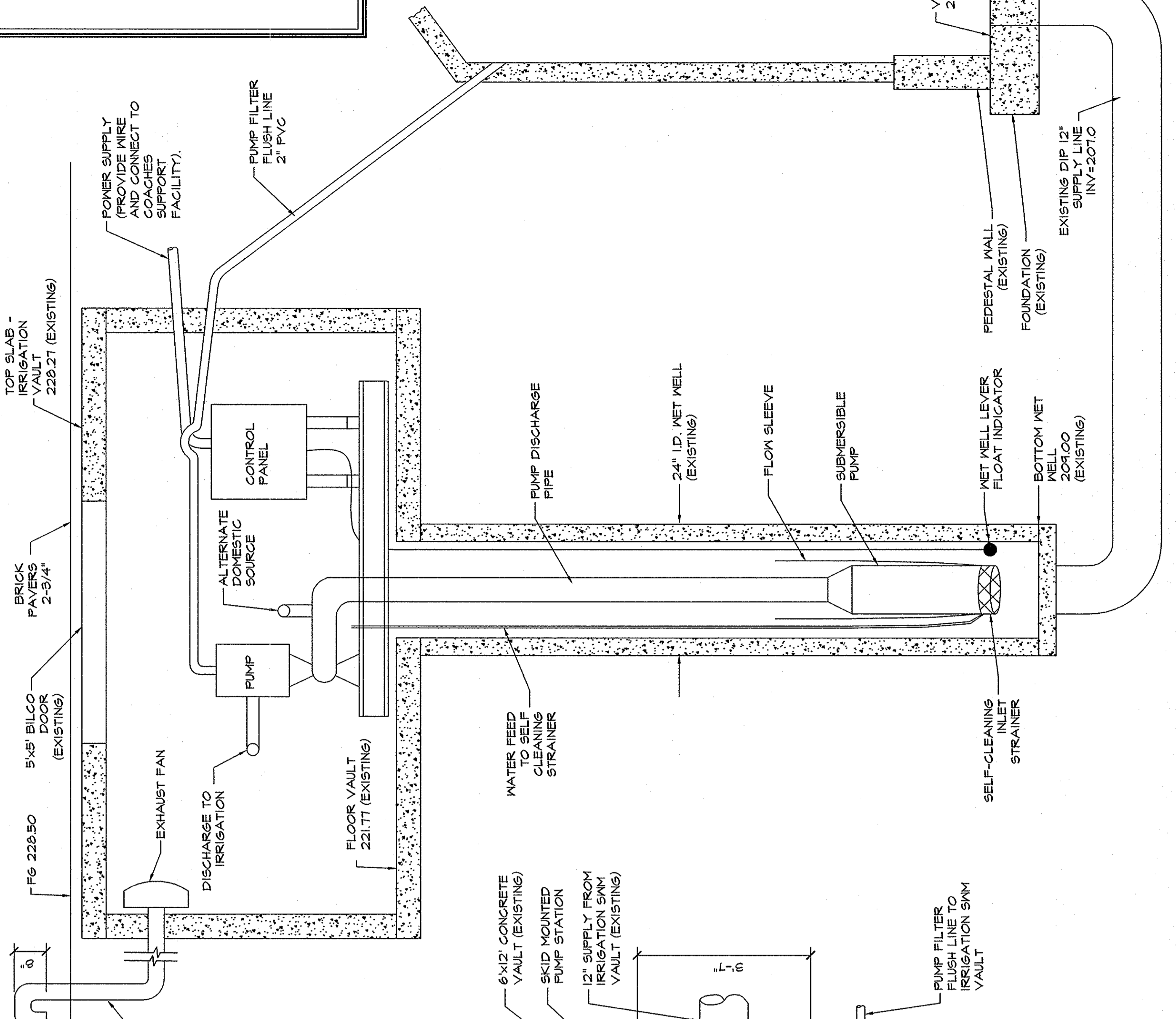
**I** SECTION  
26 NOT TO SCALE  
**TWO-WIRE VALVE, DECODER & SURGE ARRESTOR**



**J** SECTION  
26 NOT TO SCALE  
**TWO-WIRE VALVE AND DECODER**



**K** PLAN  
26 NOT TO SCALE  
**IRRIGATION PUMP VAULT**



**L** ELEVATION  
26 NOT TO SCALE  
**IRRIGATION PUMP VAULT**

PROJECT: ATHLETIC VILLAGE INFRASTRUCTURE DEVELOPMENT CONSTRUCTION <b>LANDSCAPE HARDSCAPE CONSTRUCTION</b> UNIVERSITY OF SOUTH CAROLINA RICHLAND COUNTY, S.C.		SHEET: <b>26</b> OF <b>27</b> N.B. NO. 2103, 2009 R.S. 54, 357-882 PROJECT NO. 07578 FILE NO. 35,786-888	
DATE: JANUARY 5, 2012 SCALE:		Engineering - Experience - Excellence <b>BP Barber</b> COLUMBIA • GREENVILLE • CHARLESTON FLORENCE • CHARLOTTE • SAVANNAH	
APPROVALS: DESIGNED BY: [Signature] CHECKED BY: [Signature] DRAWN BY: [Signature]		APPROVALS: DATE: 1/5/12 SIGNATURE: [Signature] DATE: 1/5/12 SIGNATURE: [Signature]	
REVISIONS: NO. DESCRIPTION DATE BY		PROJECT NO. 07578 SHEET 26 OF 27	

State Project Number:  
**H27-6056-MJ-C**

**DRAWING NOTES:**

- POLE SHALL BE MANUFACTURED BY STERNBERG, CATALOG NUMBER BARRINGTON 5214FP5 WITH CUSTOM FINISH RAL 7026 (DARK GREEN).
- PROVIDE AND INSTALL TIME CLOCK AND 4-POLE LIGHTING CONTACTOR ADJACENT TO EXISTING PANELBOARD. FEEDING SITE LIGHTING - VERIFY EXACT LOCATION. PROVIDE 120V. POWER FROM RELEVANT PANELBOARD. PROVIDE TIME CLOCK. SEE CONTROL DIAGRAM THIS SHEET FOR REQUIREMENTS.
- HANDLE 1 1/2" X 1 1/2" MINIMUM WITH COVER IDENTIFIED AS "ELECTRICAL". COLOR SHALL MATCH INSTALLED SURFACE. SIZE PER NEC REQUIREMENTS.
- 3/4" O AND 1/4" O GROUND IN 1" CONDUIT FOR ENTIRE LENGTH OF CIRCUIT RUN.
- FOUR (4) TYPE B LIGHTING FIXTURES FOR SIGN LIGHTING. FIXTURES SHALL BE MINIMUM 3' FROM SIGN AND 6' ABOVE GRADE. PROVIDE 12 X 12" CONCRETE BASE FOR STEM MOUNTS.
- TWO (2) TYPE C LIGHTING FIXTURES FOR COLUMN LIGHTING. FIXTURES SHALL BE PLACED 1' FROM WALL.
- POLE MOUNTED LIGHTING FIXTURE TYPE A. TYPICAL OF ALL POLE MOUNTED LIGHTING FIXTURES.
- FOUR (4) TYPE D LIGHTING FIXTURES FOR WALL LIGHTING. FIXTURES SHALL BE PLACED 1' FROM WALL AND FLUSH WITH WALL SURFACE. REFER TO LANDSCAPE DRAWINGS FOR DETAIL.
- COORDINATE LOCATION OF LIGHT POLE WITH DONOR WALL. ADJUST POLE AS NECESSARY.
- PROVIDE POLES AND BASES. INSTALL PREVIOUSLY PURCHASED LIGHT FIXTURES. TYPICAL FOR ALL LIGHT POLES ALONG SOUTH MARION STREET.
- PROVIDE AND INSTALL A 110V. OUTLET WITH LOCKABLE COVER FOR IRRIGATION SYSTEM ON EXTERIOR WALL. PROVIDE POWER TO OUTLET FROM NEAREST AVAILABLE SOURCE. COORDINATE EXACT LOCATION OF OUTLET WITH LANDSCAPE ARCHITECT.
- POLYLINE REPRESENTS 0.75 FC LIGHTING LEVEL AT GRADE LEVEL. TYPICAL.
- CONNECT TO EXISTING LIGHTING CIRCUIT OR STUB-OUTS.

**LIGHTING FIXTURE SCHEDULE**

TYPE	MANUFACTURER	CATALOG #	LAMP	VOLT	MOUNTING	REMARKS
A	STERNBERG	MSR05B/23/277/ROSH-S/ MED/CA/250AMP/MP250/ M005/0269/CM/RAL7026	1-250W MH	277	POLE (1)	MOUNTED ON 14" POLE, SINGLE HEAD, WITH LIES CUT-OFF OPTION, CONTROLLED BY TIME CLOCK.
B	HYDREL	4754-277-WMO-KM-SBA- HVR-SHD	1-28W T5	277	STEM	LINEAR SIGN LIGHT WITH INTEGRAL BALLAST.
C	WE-EF	665-3150 WITH 665-8136 LINEAR SPREAD LENS	1-CMH35 T-6	277	STEM	COLUMN SPOT WITH INTEGRAL BALLAST.
D	SISTEMALUX	S.8915-UNV-19	1-39W T4.5 MH	UNV	IN-GROUND	AIM WALK-OVER FIXTURE AT WALL. PROVIDE 12" OF GRAVEL FOR DRAINAGE.

