

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

STRUCTURAL MEASURES

- 1. STABILIZED CONSTRUCTION ENTRANCE:** The Contractor shall construct a temporary stone apron at the designated entranceways to the site to limit mud tracking onto area roadways. It shall consist of ASTM C-33, Size #20-30 washed stone surface 30' wide x 50' long x 8" deep.
- 2. HAY BALE DAM:** The Contractor shall construct a Hay Bale Dam around all stockpile areas. The Hay Bale Dam shall be constructed with the following provisions:
 - a. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
 - b. Each bale shall be embedded in the soil a minimum of 4'.
 - c. Bales shall be securely anchored in place by stakes, steel jacks, or rebar driven through the bales. The first stake in each bale shall be angled toward the previously laid bale.
 - d. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
 - e. The sediment collected along the hay bales shall be periodically gathered and placed on the site.
 - f. Bales shall be removed when they have served their usefulness so as not to block or impeded storm flow or drainage.
- 3. SILT FENCE:** A silt fence shall be constructed at locations shown on the Engineering Plan. Installation will be as follows:
 - a. Install fence posts 8' o.c. on a slight angle toward the anticipated runoff source.
 - b. Dig a 4" trench along the up-drift side of the fence line.
 - c. Lay out all fence fabric along post line.
 - d. Wrap fabric around the first post and secure with cord.
 - e. Take fabric to the next post and make at 1' 10" all in the hem directly above the cord.
 - f. Repeat above step until last post is reached, wrap fabric around the post and secure with the cord.
 - g. Trace the lower 6" of fabric in the trench, cut-out up-hill.
 - h. Back fill trench.
- 4. LOW POINT INLET SEDIMENT FILTER:** The Contractor shall construct low point inlet sediment filters at those locations on the Engineering Plan to prevent the transport of sediment into the stormwater management system and surface water bodies. The Inlet Sediment Filter shall consist of:
 - a. Hardened curb or comparable wire mesh with 1/2" openings shall be placed over the curb inlet opening so that at least 12" of wire extends across the concrete gutter from the inlet opening.
 - b. Stone shall be piled against the wire so as to anchor it against the gutter and inlet and to cover the inlet opening completely. Two to three inches of coarse aggregate shall be used.
 - c. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the inlet, cleaned and replaced.

NON-STRUCTURAL MEASURES

- 1. PERMANENT VEGETATION:** Immediately following the completion of construction activities at the site, the Contractor shall stabilize with permanent vegetative cover all exposed and disturbed soils. Permanent vegetative cover shall be accomplished as specified below:
 - a. Topsoiling-The Contractor shall prepare areas to be stabilized with permanent vegetative cover by applying topsoil to a uniform depth of 4". Topsoil shall be friable and loamy and of good quality.
 - b. Seeded Preparation-Immediately following topsoiling the Contractor shall apply pulverized domestic limestone at the rate of 80 pounds per 1000 square feet and fertilizer (10-20-10) at the rate of 14 pounds per 1000 square feet. The time and fertilizer shall then be worked into the soil to a depth of 4" with a disc springtooth harrow or other suitable equipment.
 - c. Seeding-Seed shall consist of 31% perennial ryegrass, 23% chewing red fescue, 23% Kentucky bluegrass, applied at the rate of 3 pounds per 1000 square feet.
 - d. Apply mulch uniformly by hand or mechanically. Mulch anchoring shall be accomplished immediately after placement through use of Peg and Twine Method (or other approved method).
 - e. Seeding Dates: 2/15-5/1 or 8/15-10/15. If seed is not planted within these dates, the Contractor shall stabilize with mulch.
- 2. TEMPORARY VEGETATIVE COVER:**
 - a. Prior to halting construction for periods longer than 60 days and during the off season, the Contractor shall stabilize with temporary vegetative cover all exposed soils.
 - b. Temporary stabilization shall be accomplished by the following methods and materials:

Material	Type	Rate
time pulverized domestic	80 lbs/1000sf	
fertilizer (10-20-10)	14 lbs/1000sf	
seed annual ryegrass	3 lbs/1000sf	
mulch straw or salt hay	70 lbs/1000sf	

MATERIALS

- (1) Work line and fertilizer into soil to a depth of 2" with a disc, springtooth harrow, or other suitable equipment.
- (2) Apply seed at the given rate and firm with a roller or light drag.
- (3) Apply mulch uniformly by hand or mechanically. Mulch anchoring shall be accomplished immediately after placement through use of Peg and Twine Method (or other approved method).
- (4) Seed dates: 2/15-5/1 or 8/15-10/15. (May be planted throughout summer of soil moisture is adequate or can be irrigated). If seed is not planted within these dates, the Contractor shall stabilize with mulch.
- (5) **STABILIZATION WITH MULCH ONLY:** Apply uncroted straw or salt hay at the rate of 70lbs/1000 sf. It shall be anchored immediately through the use of Peg and Twine Method.
- (6) **PEG AND TWINE METHOD OF MULCH ANCHORING:** Drive 8-10" wooden pegs to within 2 to 3 inches of the soil surface every 4' in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a cross-cross and a square pattern. Secure twine around each peg with two or more turns.
- (7) **DUST CONTROL:** To control dust generation on-site, the Contractor shall wet construction traffic routes and staging areas.

- 6. MAINTENANCE:**
 - a. Maintenance shall occur on a regular basis consistent with favorable plant growth, soils and climatic conditions.
 - b. When it becomes necessary, the Owner will inform the Contractor of unsatisfactory conditions of erosion and sediment devices, at such time the Contractor shall improve the conditions of said devices to meet with the approval of the Owner.
 - c. Should unforeseen erosive conditions develop during construction, the Contractor shall take steps to remedy such conditions and to prevent damage to adjacent properties as a result of increased runoff and/or sediment displacement.
 - d. Seeded areas that have been washed away shall be filled and graded as necessary and then reseeded. This procedure shall be repeated after each storm or until no more signs of erosion are evident.
 - e. The sediment collected along the temporary diversions shall be periodically gathered and placed back on the site.
 - f. Control measures shall apply to subsequent owners if site is conveyed.
 - g. Control measures shall apply to dwelling construction on individual lots (g. shall apply only to projects where dwellings are being constructed).
- 7. GENERAL:**
 - a. Existing vegetative cover beyond the limits of construction shall be retained until final stabilization is complete.
 - b. The Contractor shall schedule and conduct his operations to minimize erosion of soils and to prevent silt and mudflowing of streams, rivers, irrigation systems and impoundments (lakes, reservoirs, etc.). Construction of drainage facilities and performance of their control each which will contribute to the control of erosion and sedimentation shall be carried out in conjunction with earthwork operations or as soon thereafter as practicable.
 - c. When borrow material is obtained from other than commercially operated sources, erosion of the borrow site shall be so controlled both during and after completion of the work that erosion will be minimized and sediment will not enter streams or other bodies of water. Waste or disposal areas and construction waste shall be located and constructed in a manner that will keep sediment from entering streams.
 - d. When work areas are located in or adjacent to live streams, such areas shall be separated from the main stream by a dike or other barrier to keep sediment from entering a flowing stream.
 - e. Waste from aggregate washing or other operation containing sediment shall be treated by filtration, a settling basin or other means sufficient to reduce the sediment content to not more than that of the stream into which it is discharged.
 - f. Pollutants such as fuels, lubricants, solvents, oil, paint, and other harmful materials shall not be discharged into or near rivers, streams and impoundments or into natural or man-made channels leading thereto. Wash water or waste from concrete mixing operations shall not be allowed to enter live streams.

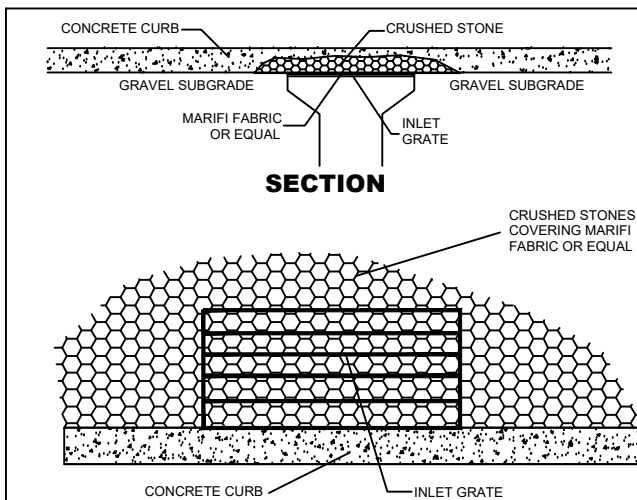
- CONSTRUCTION SCHEDULE:**
 - a. Construct temporary soil erosion and sediment control measures.
 - b. Clearing and grubbing.
 - c. Install underground drains and recharge basin. Establish permanent cover.
 - d. Rough grade.
 - e. Construction of building.
 - f. Final grading.
 - g. Construct parking area and roadway.
 - h. Collect silt and sediment and place back on site.
 - i. Landscape treatment.

MATERIALS

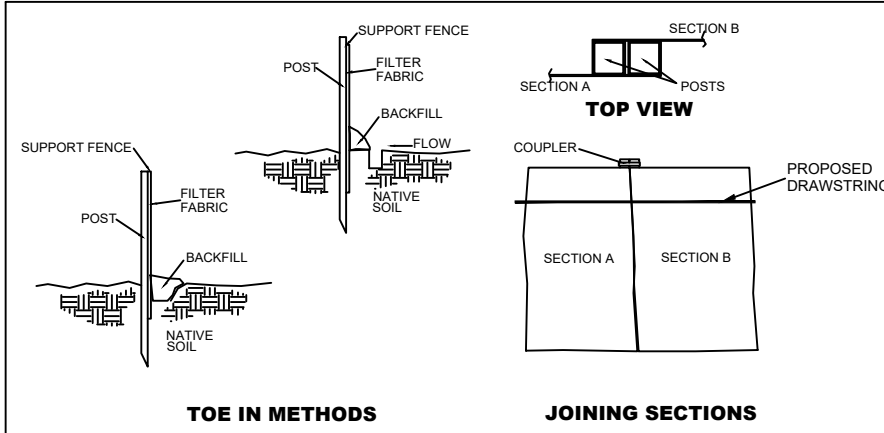
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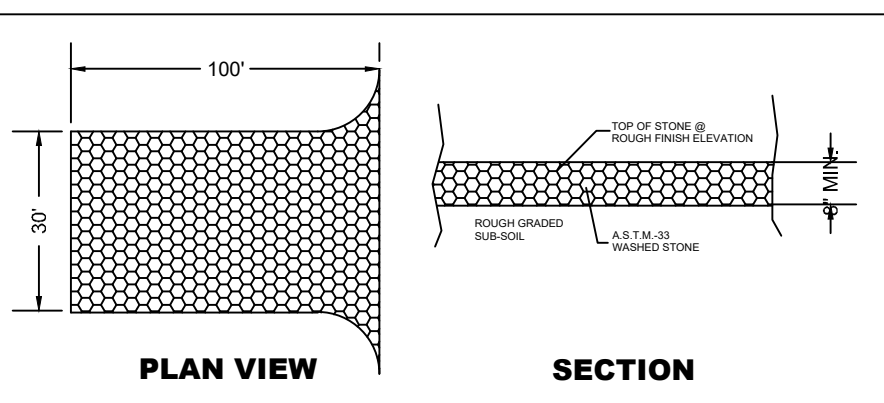
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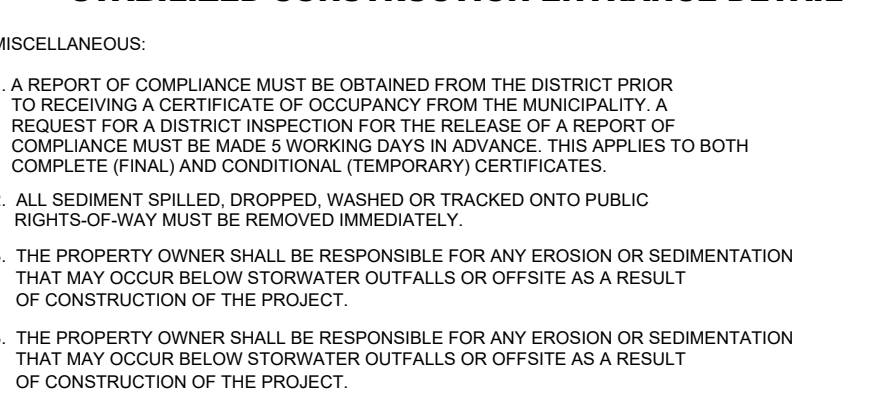
INLET FILTER DETAIL



ENVIROFENCE DETAIL



STABILIZED CONSTRUCTION ENTRANCE DETAIL



ELEVATION LEGEND
 XXX = EXISTING SPOT ELEVATION NAVD83
 XXX' B = EXISTING BOTTOM OF CURB ELEVATION
 XXX' T = EXISTING TOP OF CURB ELEVATION



REVISIONS

NO.	DATE	BY	DESCRIPTION	NO.	DATE	BY	DESCRIPTION

ARTHUR PONZIO CO.
 ENGINEERS & SURVEYORS
 PLANNERS

400 NORTH DOVER AVENUE, ATLANTIC CITY, N.J. 08401
 PHONE: 609-344-8194 FAX: 609-344-1594
 NEW JERSEY STATE AUTH. NO.: 24GA28001300

JON J. BARNHART
 PROFESSIONAL PLANNER N.J. NO. 33LI00581500
 PROFESSIONAL ENGINEER N.J. NO. GE43483

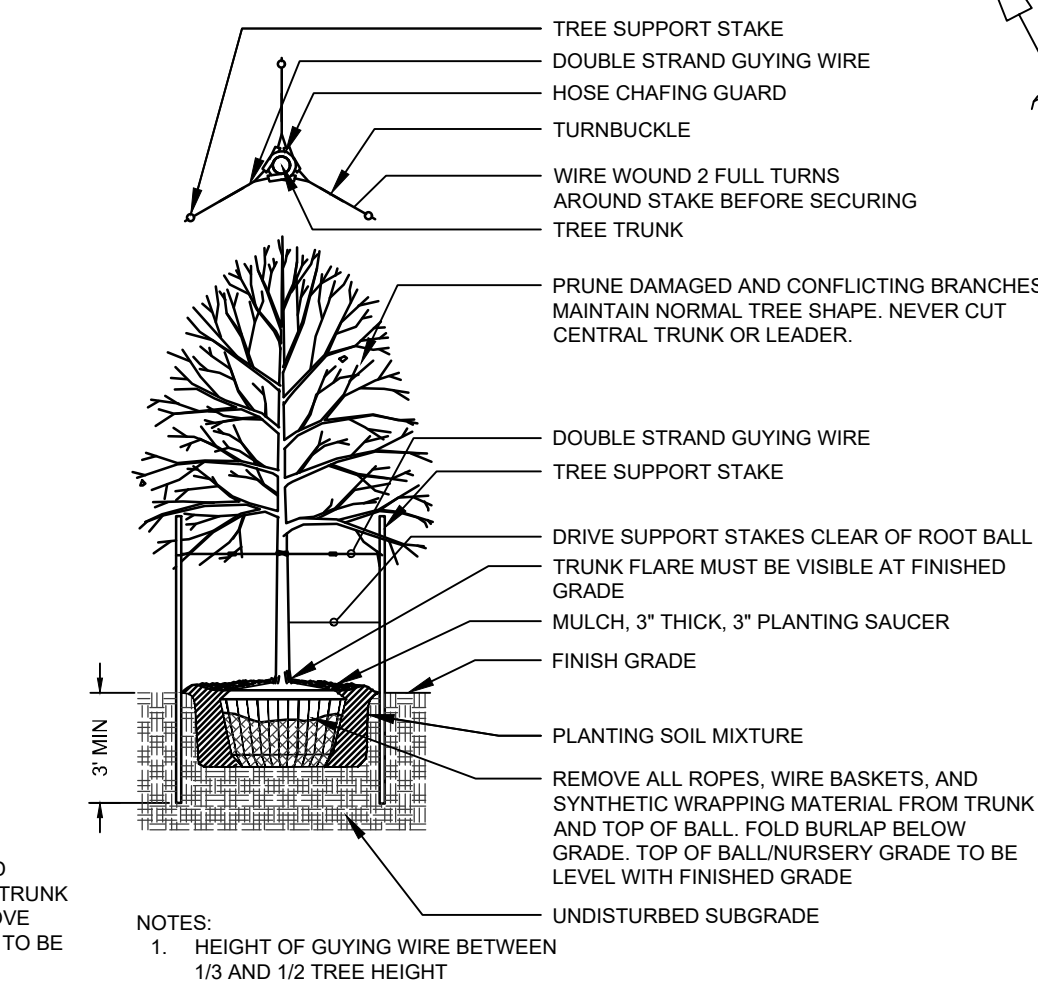
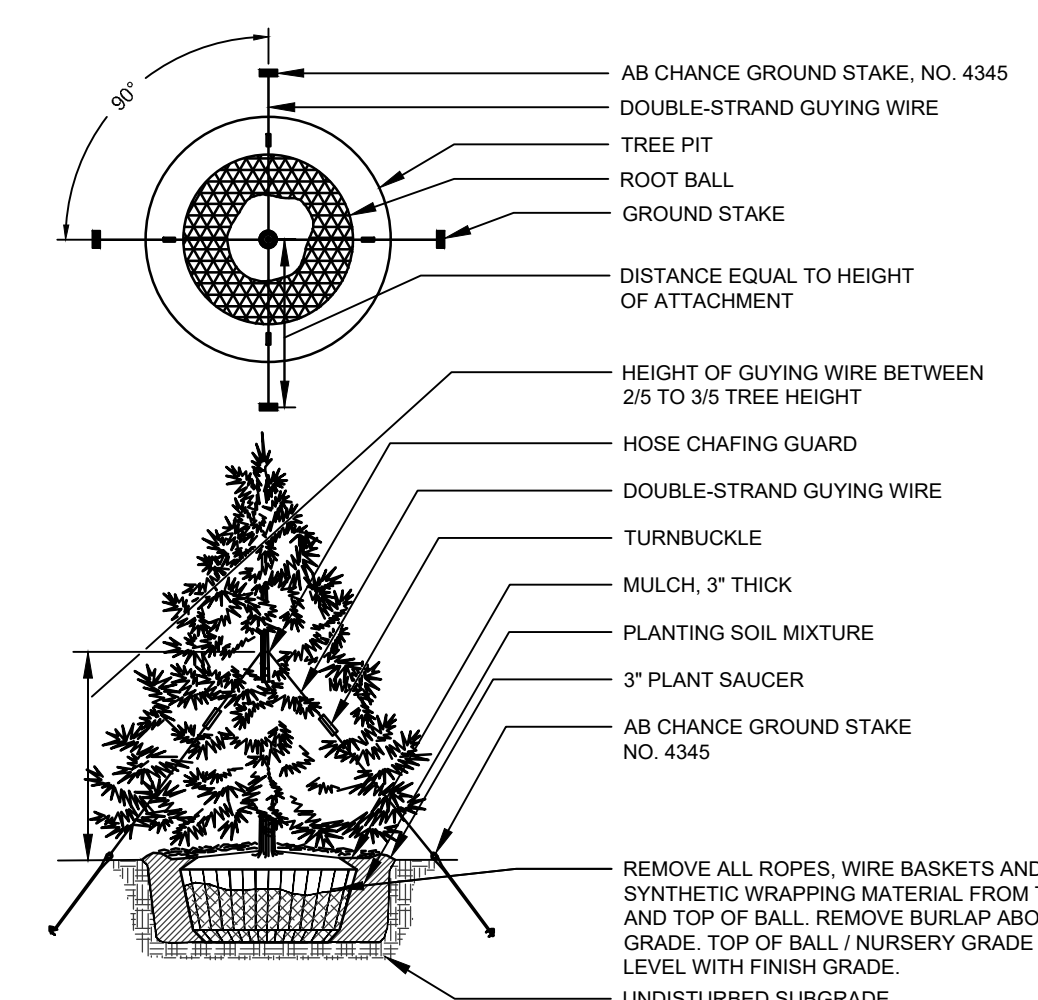
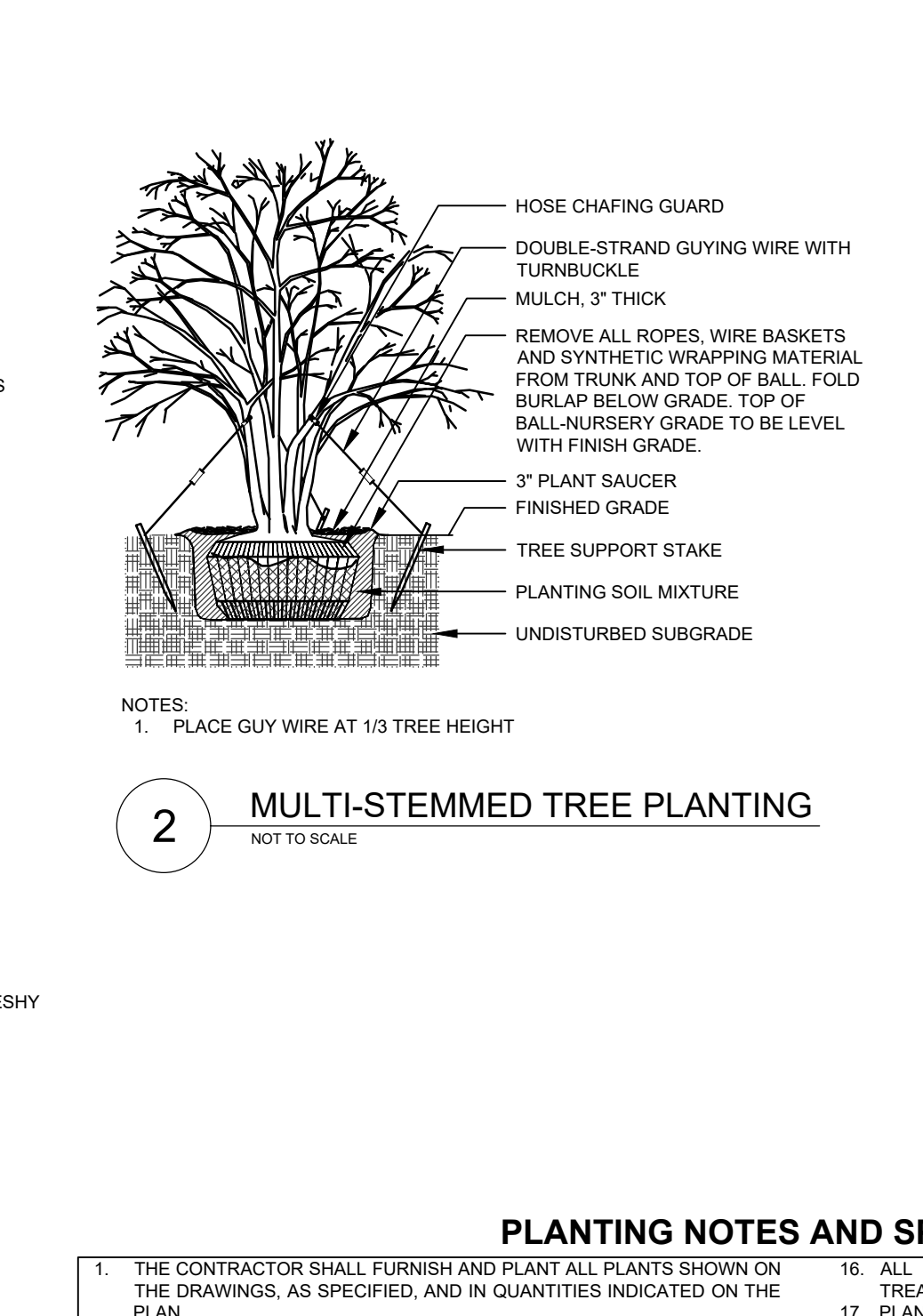
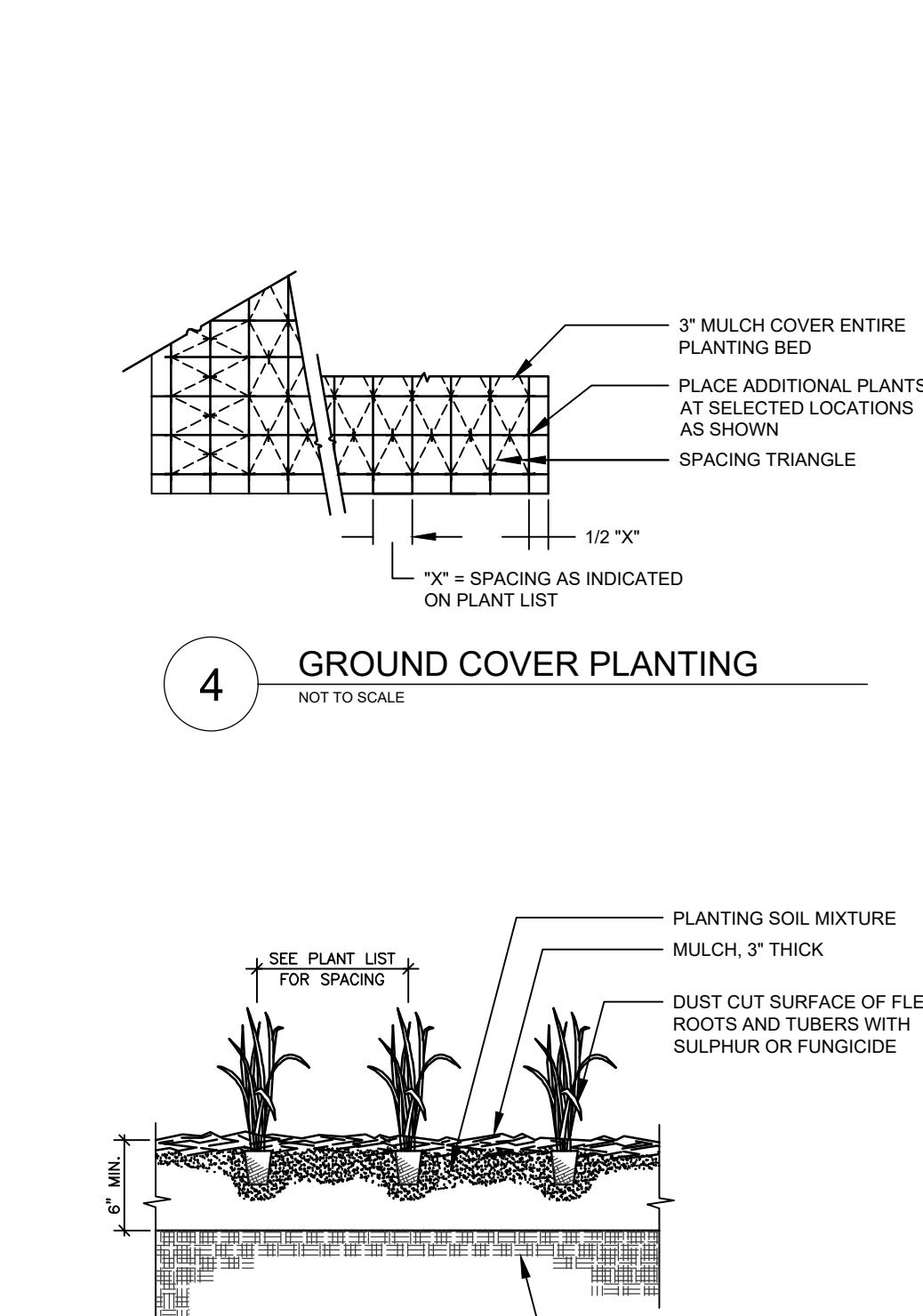
ARTHUR W. PONZIO, JR.
 PROFESSIONAL PLANNER N.J. NO. 33LI00267600
 PROFESSIONAL LAND SURVEYOR N.J. NO. 24GS02831400

SOIL EROSION & SEDIMENT CONTROL PLAN
 BLOCK 289 & 290 LOT (289) 1,9,12,14 & (290) 2,3,4,
 ATLANTIC CITY ATLANTIC COUNTY NEW JERSEY

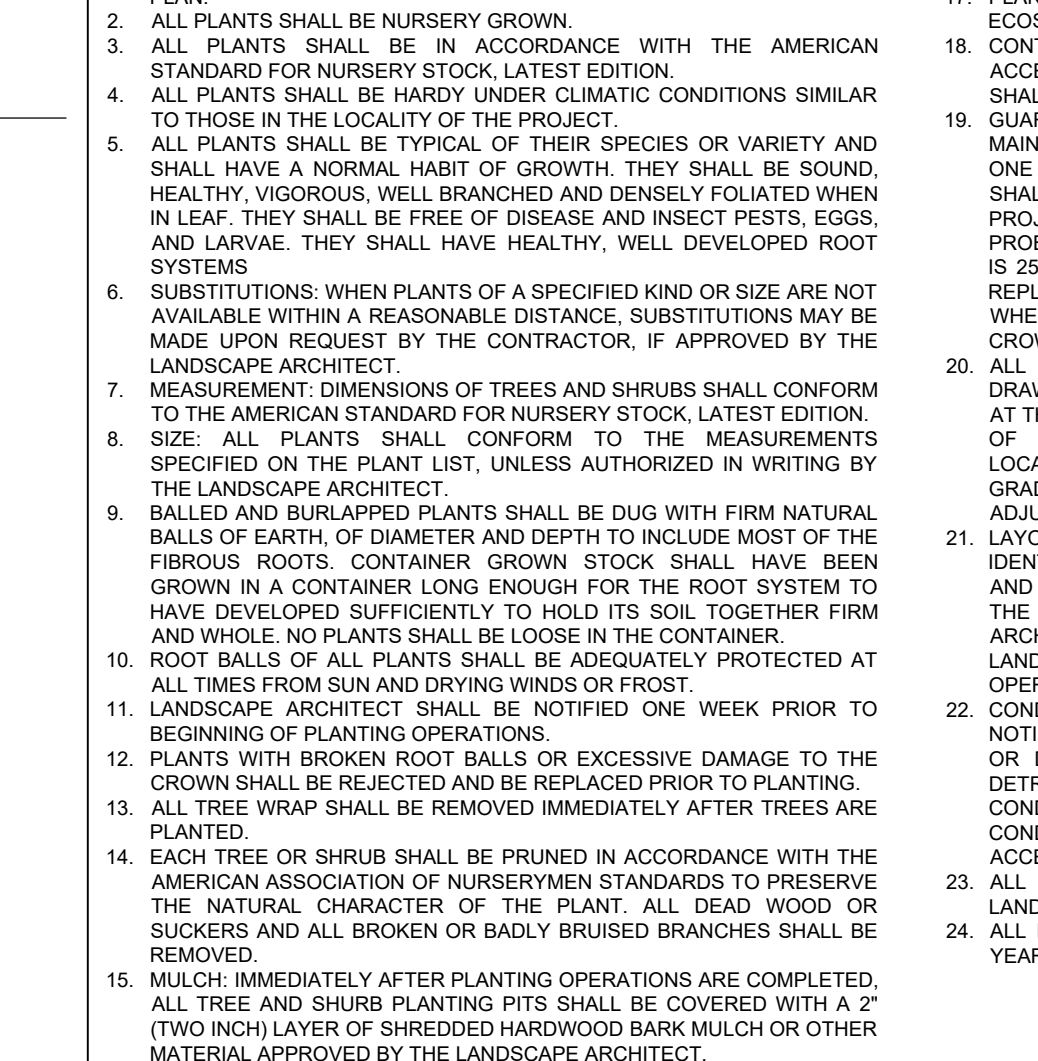
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 DATE: 08-18-22

BY: WJP
 PROJ. NO.: 40008

SHEET NO.
C-5
 SHEET 5 of 5

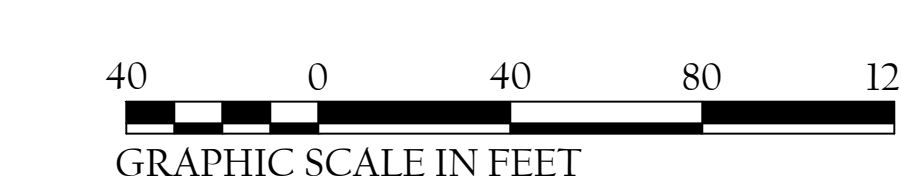
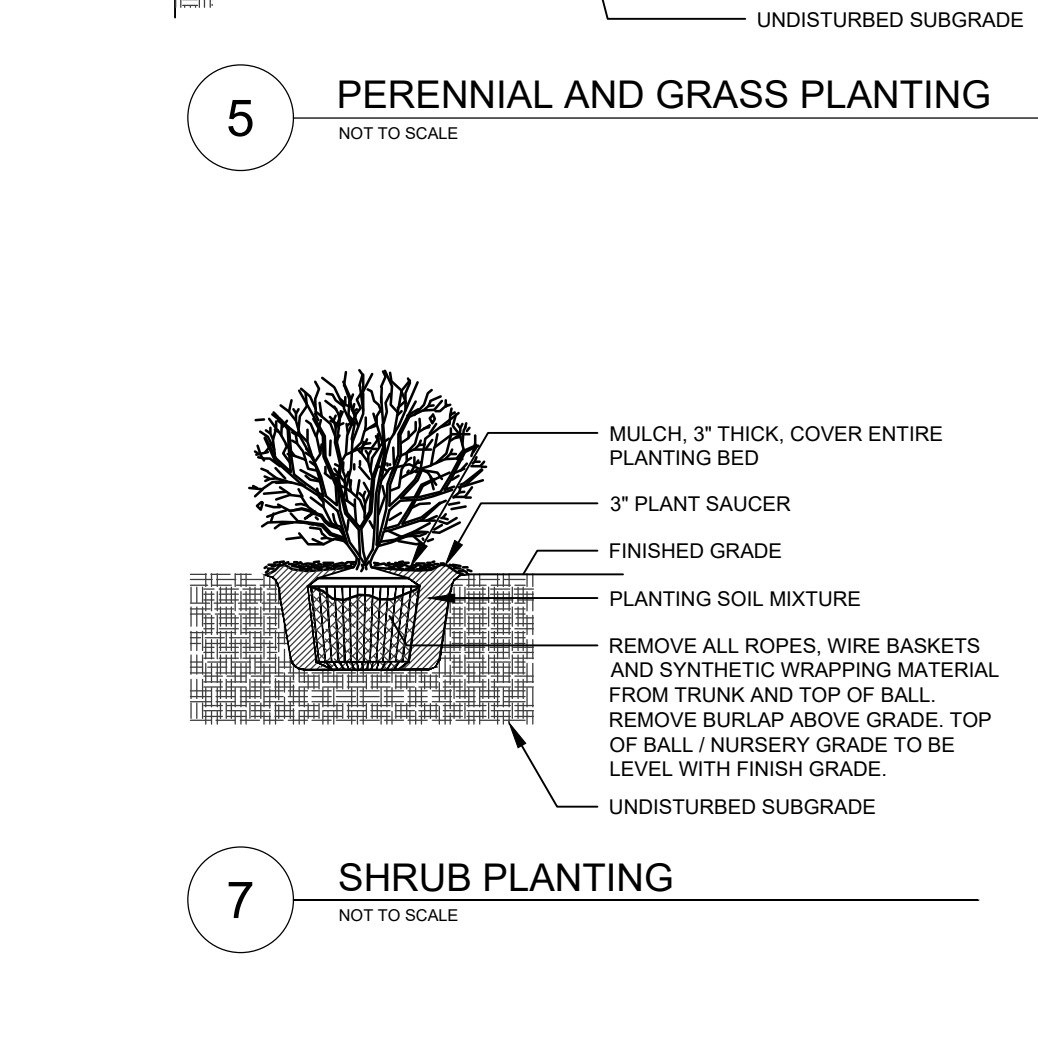
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LANDSCAPE LEGEND:



PLANTING NOTES AND SPECIFICATIONS

1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST.
2. ALL PLANTS SHALL BE NURSERY GROWN.
3. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
4. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
5. ALL PLANTS SHALL BE FREE OF DISEASE, INJURIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS, AND LARVAE. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS.
6. SUBSTITUTIONS, WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN THE SPECIFIED LEAD TIME, SHALL BE MADE UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE LANDSCAPE ARCHITECT.
7. THE REPLACEMENT DIMENSIONS OF TREES AND SHRUBS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
8. SIZE: ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED ON THE PLANT LIST, UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT.
9. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE ROOTS. ROOTS CONTAINING NURSERY STOCK SHALL BE PLANTED TO GROW IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL. TOGETHER FIRM WHOLE, NO PLANTING SHALL BE REQUIRED.
10. ROOT BALLS OF ALL PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST.
11. LANDSCAPE ARCHITECT SHALL NOTIFY ONE WEEK PRIOR TO BEGINNING OF PLANTING OPERATIONS.
12. PLANTS WITH BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REJECTED AND BE REPLACED PRIOR TO PLANTING.
13. ALL TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER TREES ARE PLANTED.
14. EACH TREE OR SHRUB SHALL BE PRUNED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF PROFESSIONAL LANDSCAPE ARCHITECTS, THE NATURAL CHARACTER OF THE PLANT, ALL DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUSHED BRANCHES SHALL BE REMOVED.
15. MULCH: IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED, ALL TREE AND SHRUB PLANTING PITS SHALL BE COVERED WITH A 2" (TWO INCH) LAYER OF SHREDDED HARDWOOD BARK MULCH OR OTHER MATERIAL APPROVED BY THE LANDSCAPE ARCHITECT.
16. ALL EVERGREENS AND TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICCANT SUCH AS "WILT-PROOF".
17. PLANTING SOIL AND BACKFILL SHALL CONSIST OF TOP SOIL AND ECOSOL AMENDMENT MIXTURES.
18. CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING PERIOD SHALL COMMENCE UPON FINAL ACCEPTANCE BY OWNER.
19. GUARANTEE: ALL PLANT MATERIAL SHALL BE GUARANTEED AND MAINTAINED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR, ONE FULL YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT DURING THE GUARANTEE PERIOD AND NOTIFY THE OWNER IF PROBLEMS DEVELOP. IF THE PROBLEM IS DUE TO THE FACT THAT IS 25% DEAD, OR MORE, SHALL BE CONSIDERED DEAD AND MUST BE REPLACED AT NO CHARGE. A TREE SHALL BE CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK, OR WHEN 25% OF THE CROWN IS DEAD.
20. ALL PLANTING SHALL BE AT THE LOCATIONS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADE, ALIGNMENT, AND TO THE INDICATED LAYOUT OF THE PLANTING BEDS. MINOR ADJUSTMENTS TO PLANTING LOCATIONS MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. IF THE CONTRACTOR SHALL NOTIFY THE OWNER IF MAJOR ADJUSTMENTS ARE REQUIRED.
21. LAYOUT OF PLANTING: THE CONTRACTOR SHALL LAYOUT WITH IDENTIFIABLE STAKES THE LOCATION OF ALL PLANTS. ARRANGEMENT AND OUTLINES OF PLANTING BEDS AS INDICATED IN THE DRAWING. THE LAYOUT OF PLANTING SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF PLANTING OPERATIONS. THE LANDSCAPE ARCHITECT SHALL BE ON SITE DURING PLANTING OPERATIONS.
22. CONDITIONS DETRIMENTAL TO PLANTS: THE CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE IN WRITINGS OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO THE GROWTH OF PLANTS. HE SHALL STATE THE CONDITION AND THE REASON THEREFOR, AND THE CORRECTED CONDITIONS, INCLUDING ANY CHANGE IN COST. FOR REVIEW AND ACCEPTANCE BY THE OWNER OR HIS REPRESENTATIVE.
23. ALL PLANTS TO BE SELECTED AND TAGGED IN THE FIELD BY THE LANDSCAPE ARCHITECT.
24. ALL LANDSCAPING SHALL BE GUARANTEED BY INSTALLER FOR ONE YEAR AND THEREAFTER BY OWNER.





"A" - CONTACT BEARING AREA OF BLOCK WITH EARTH, IN SQUARE FEET

NOTES:

1. BEARING AREAS ARE BASED ON UNDISTURBED SOIL WITH A BEARING CAPACITY OF 2000 LBS. PER SQ. FT. FOR A LESSER SOIL BEARING CAPACITY, THESE AREAS SHALL BE INCREASED ACCORDINGLY.
2. ALL CONCRETE THRUST BLOCKS SHALL BE CLASS "C".
3. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
4. THE COST OF THRUST BLOCKS SHALL BE INCLUDED IN THE PRICE BID FOR WATER MAINS.
5. TEST PRESSURE = 150 P.S.I.

2 TABLE OF THRUST BLOCKS

