

STANDARD FOR PERMANENT VEGETATIVE **COVER FOR SOIL STABILIZATION**

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
- C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING. D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
- 2. SEEDBED PREPARATION A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/ - FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-0 R EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED
- PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING. B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

A. PERMANENT VEGETATIVE MIXTURES & PLANTING RATES

) KY. BLUEGRASS –

HARD FESCUE -4 LBS/1000 SQ.FT. 175 LBS/ACRE CHEWING FESCUE -175 LBS/ACRE 4 LBS/1000 SQ.FT STRONG CREEPING RED FESCUE - 175 LBS/ACRE 4 LBS/1000 SQ.FT PERENNIAL RYEGRASS -45 LBS/ACRE 1 LBS/1000 SQ.FT

45 LBS/ACRE

1 LBS/1000 SQ.FT

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE—TEXTURED SOIL. C. AFTER SEEDING. FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED. D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORTFIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

- A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT). THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWER'S MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
- APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH

- ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COST. 1. PFG AND TWINF
- MULCH NETTINGS
- 3. CRIMPER MULCH ANCHORING COULTER TOOL 4. LIQUID MULCH-BINDERS

B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

SEQUENCE OF CONSTRUCTION:

- PHASE 1: INSTALL STONE ANTI-TRACKING PAD AND OTHER SOIL EROSION SEDIMENT CONTROL MEASURES INCLUDING DOWN SLOPE PERIMETER HAY BALES AND SILT FENCING. PHASE 2: CLEAR AND ROUGH GRADE FOR NEW BUILDING SITE AND OTHER STRUCTURES REQUIRING EXCAVATION.
- PHASE 3: EXCAVATION, CONSTRUCTION, AND STABILIZATION OF DETENTION BASIN(S), EXCAVATE AND INSTALL UNDERGROUND PIPING AND DRAINAGE STRUCTURES. PHASE 4: EXCAVATE FOR BUILDING FOUNDATION.
- PHASE 5: COMPLETE BUILDING CONSTRUCTION.
- PHASE 6: EXCAVATE AND INSTALL ON SITE IMPROVEMENTS INCLUDING CURBING, UNDERGROUND PIPING, AND DRAINAGE STRUCTURES.
- PHASE 7: FINAL GRADING ON SITE. PHASE 8: INSTALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING.

SOMERSET-UNION SOIL CONSERVATION DISTRICT SOIL EROSION & SEDIMENT CONTROL NOTES:

- 1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO
- NJ STATE STANDARDS 3. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN
- (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7^{IH} EDITION LAST REVISED JANUARY 2014
- . A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
- 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- 7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1) 8. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6'PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- 9. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY. 10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND
- COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED 11. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE
- DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY 12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL 13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR
- RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS. 14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP
- 15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.

_OUTLET STRUCTURE (SEE DETAIL)

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CRUSHED STONE

TEMPORARY PERFORATED SEDIMENT

RISER DETAIL BASIN #2

2) ALL SEDIMENT BASINS SHALL BE CLEANED OUT AS REQUIRED.

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORIT

STABILIZED CONSTRUCTION ENTRANCE

- 16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT. 17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE
- SOMERSET-UNION SOIL CONSERVATION DISTRIC
- 18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT. AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

STANDARD FOR TEMPORARY VEGETATIVE **COVER FOR SOIL STABILIZATION**

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1 B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42
- C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION

1. SITE PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES

B. WORK I IMF AND FFRTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED. C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED IN ACCORDANCE WITH THE ABOVE. D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

A. TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTHS

- COOL SEASON GRASSES (1) PERENNIAL RYEGRASS - 100 LBS / ACRE; PLANT BETWEEN MARCH 1 AND MAY 15 BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 0.5 INCHES. SPRING OATS - 86 LBS / ACRE; PLANT BETWEEN MARCH 1 AND MAY 15 BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 1.0 INCHES.
-) WINTER BARLEY 96 LBS / ACRE; PLANT BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 1.0 INCHES. (4) ANNUAL RYEGRASS - 100 LBS / ACRE; PLANT BETWEEN MARCH 1 AND JUNE 15 BETWEEN AUGUST 1 AND SEPTEMBER 15; AT A DEPTH OF 0.5 INCHES. (5) WINTER CEREAL RYE - 112 LBS / ACRE; PLANT BETWEEN AUGUST 1 AND NOVEMBER 15; AT A DEPTH OF 1.0 INCHES.
- -WARM SEASON GRASSES: (1) PEARL MILLET - 20 LBS / ACRE; PLANT BETWEEN MAY 15 AND AUGUST 15; AT A DEPTH OF 1.0 INCHES.
- (2) MILLET (GERMAN OR HUNGARIAN) 30 LBS / ACRE; PLANT BETWEEN MAY 15 AND AUGUST 15; AT A DEPTH OF 1.0 INCHES.
- CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER
- ON COARSE TEXTURED SOIL. C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC
- D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.
- MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.
- A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
- APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
- ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COST. PEG AND TWINE 2 MULCH NETTINGS
- 3. CRIMPER MULCH ANCHORING COULTER TOOL 4. LIQUID MULCH-BINDERS
- B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIES IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE

BASIN COMPACTION NOTES

- 1. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- 2. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH 3. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER
- UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC 4. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, FTC.)
- 5. TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE NORMAL RUBBER TIRES,. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
- 6. FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGARDING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BI UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.



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SOIL EROSION AND SEDIMENT CONTROL NOTES & DETAILS PROJECT: BALDWAS REALTY LLC 4151-99-001

PROPOSED WAREHOUSE BLOCK 516.01, LOTS 4.03 & 5 545 & 549 WESTON CANAL ROAD (CR 623) FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PROTECT YOURSELF PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:

SHFFT No:

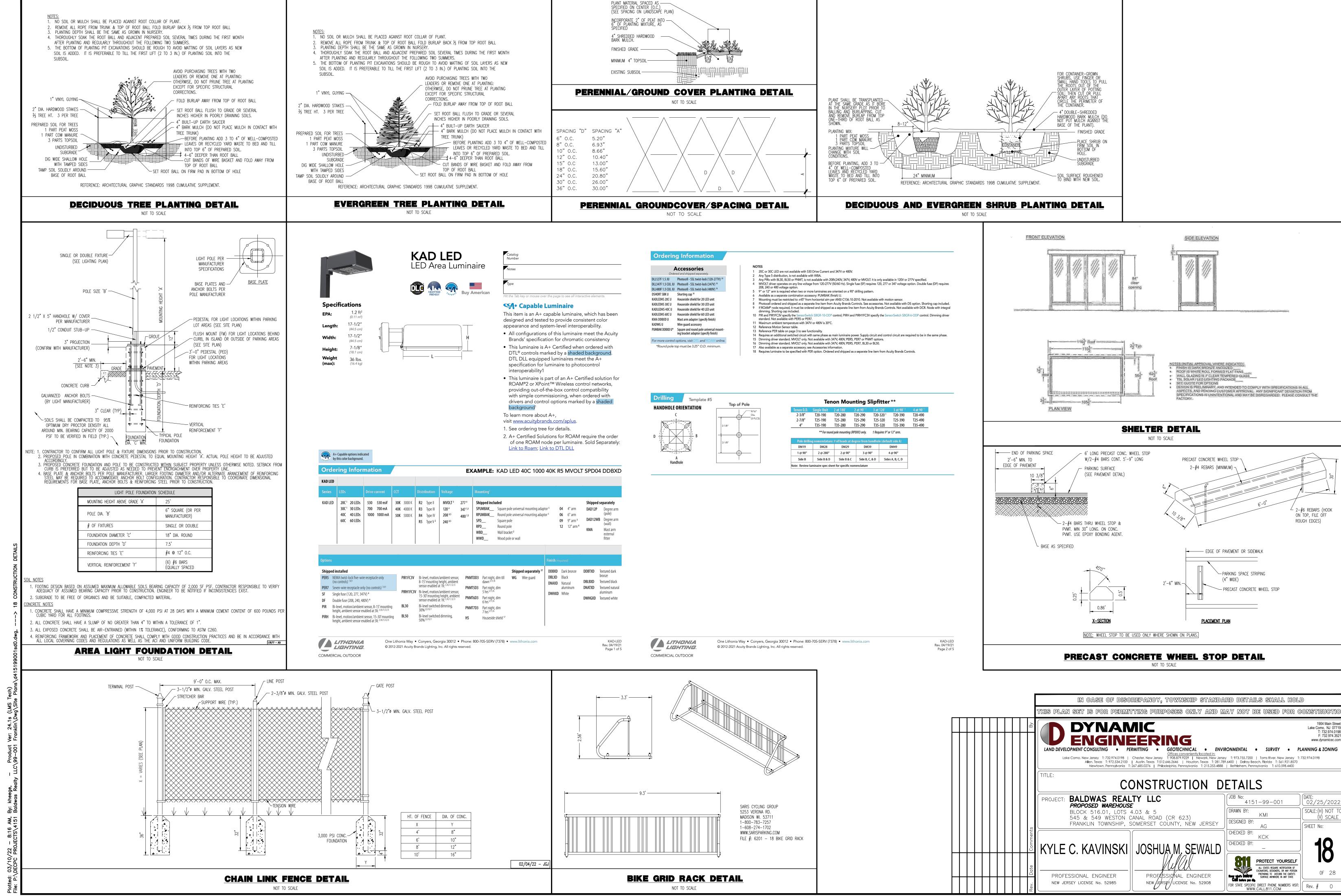
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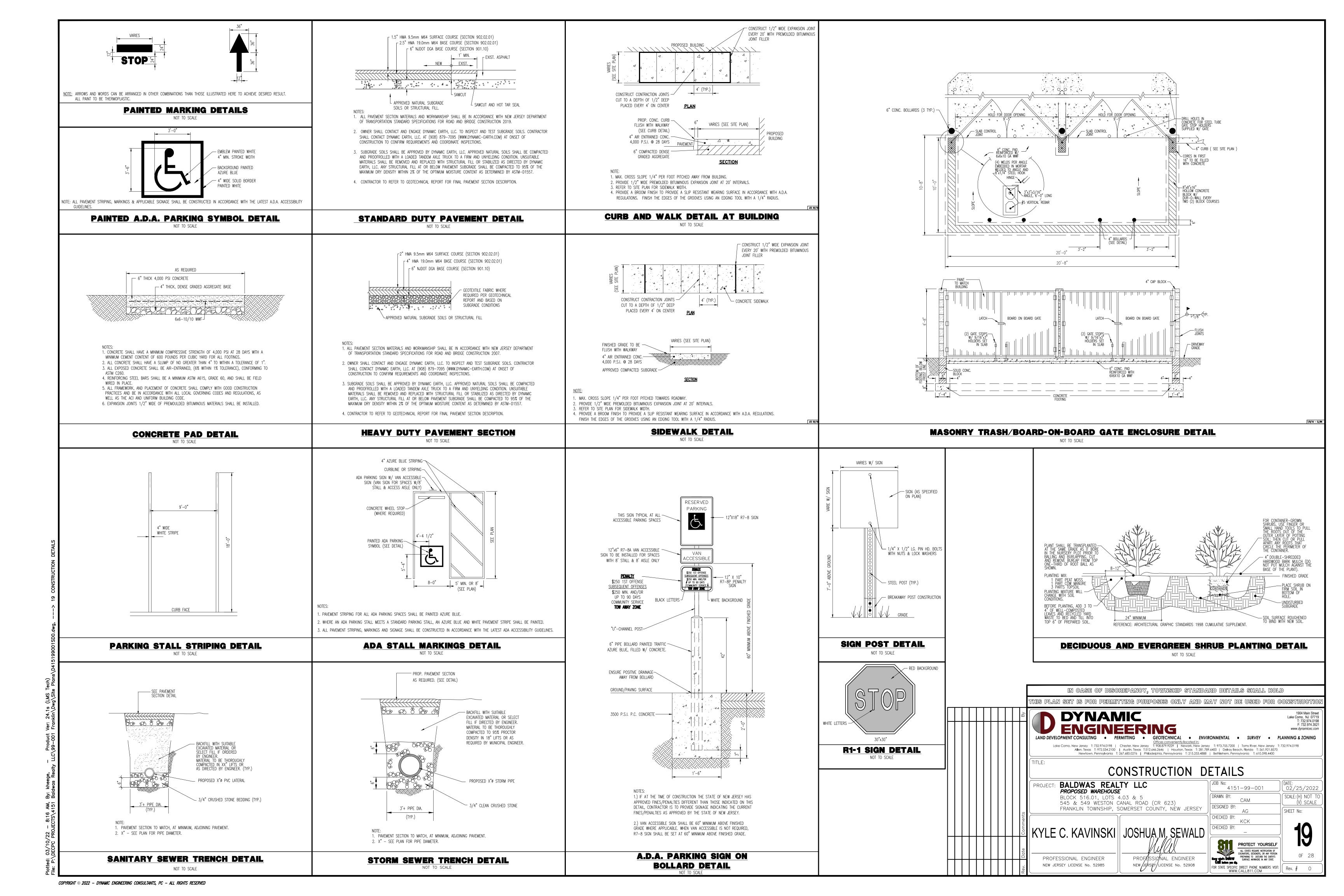
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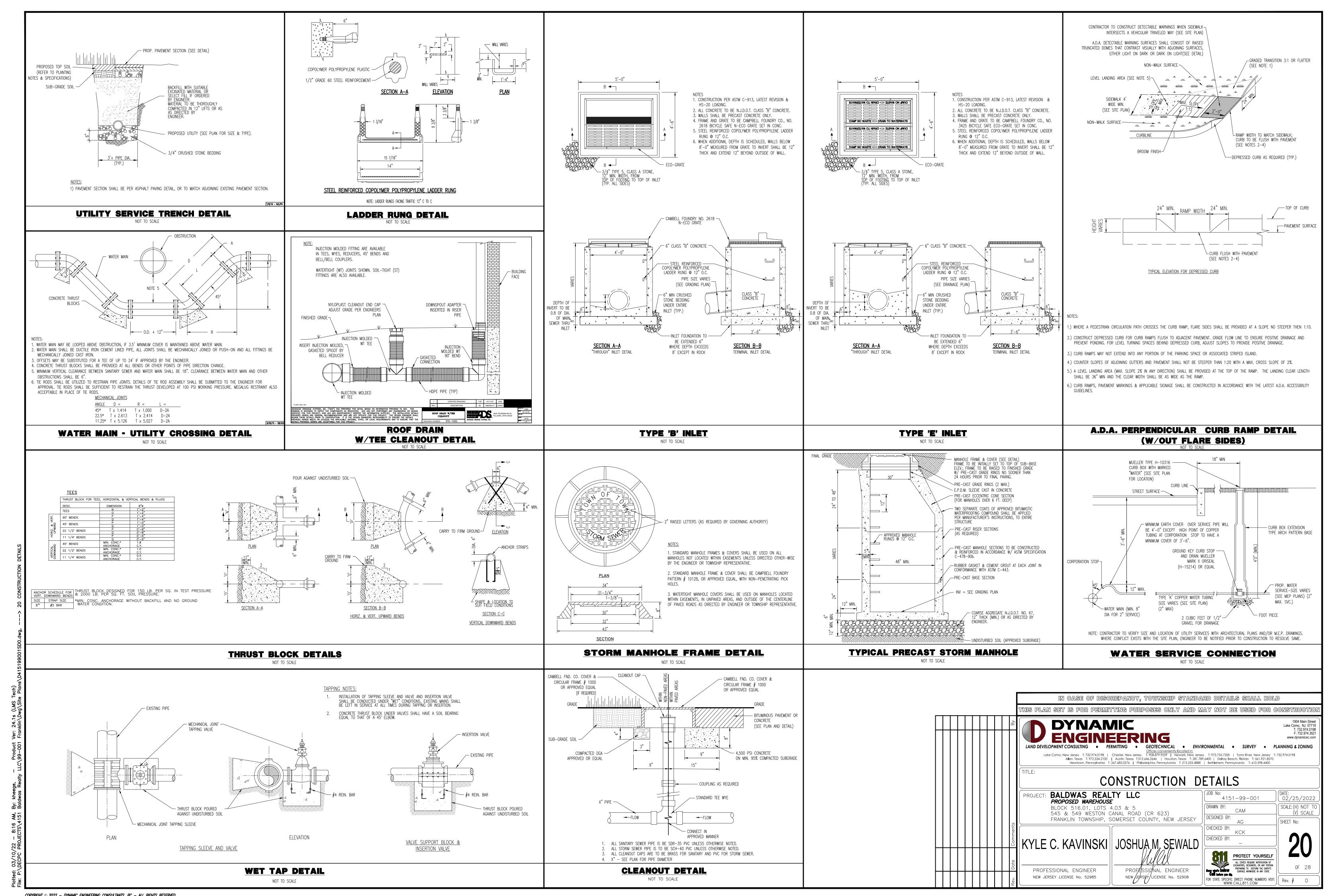
KYLE C. KAVINSKI | JOSHUA,M., SEWALD PROFESSIONAL ENGINEER PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 52985 NEW /JERSEY/LICENSE No. 52908

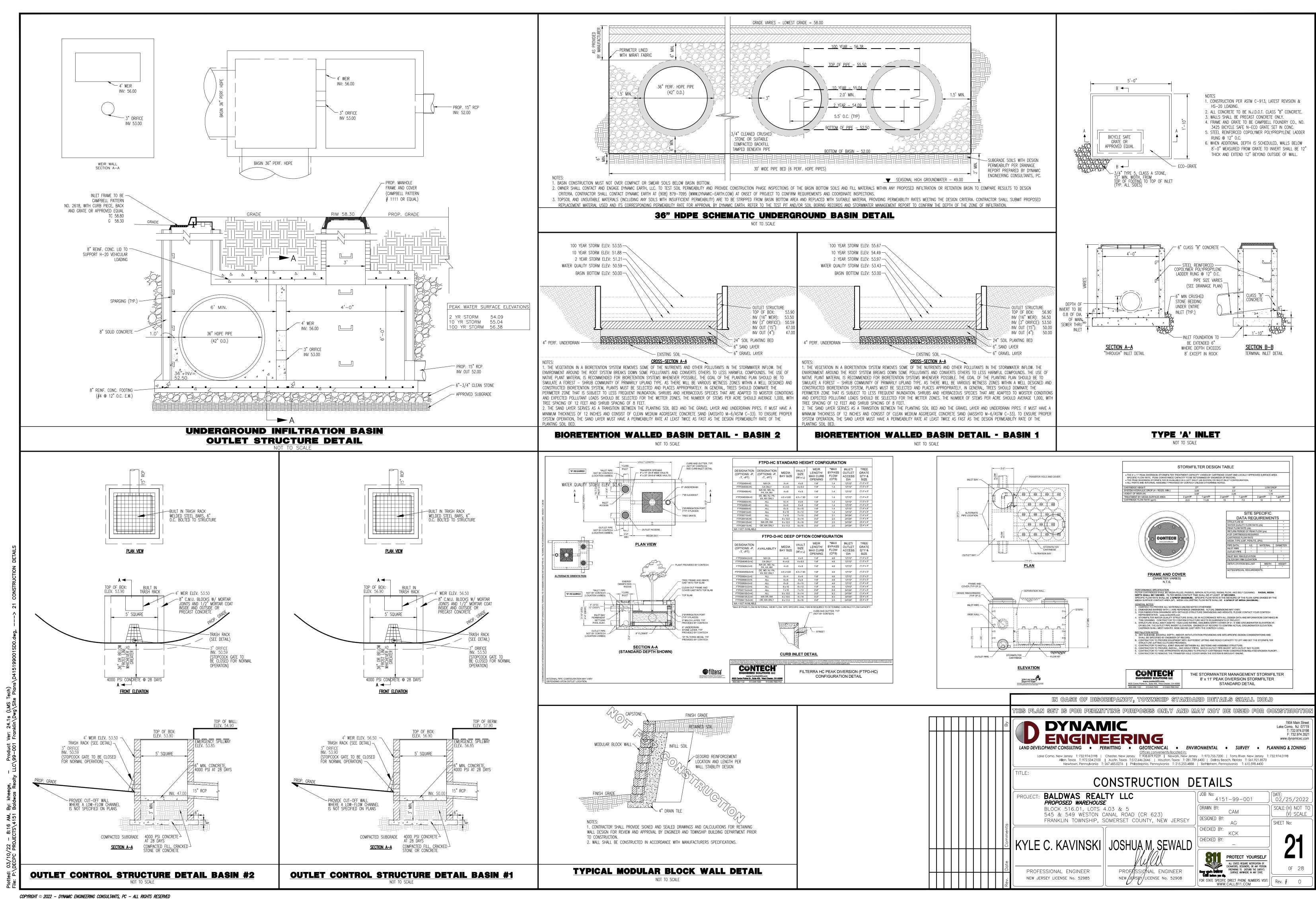
INLET FILTER DETAIL

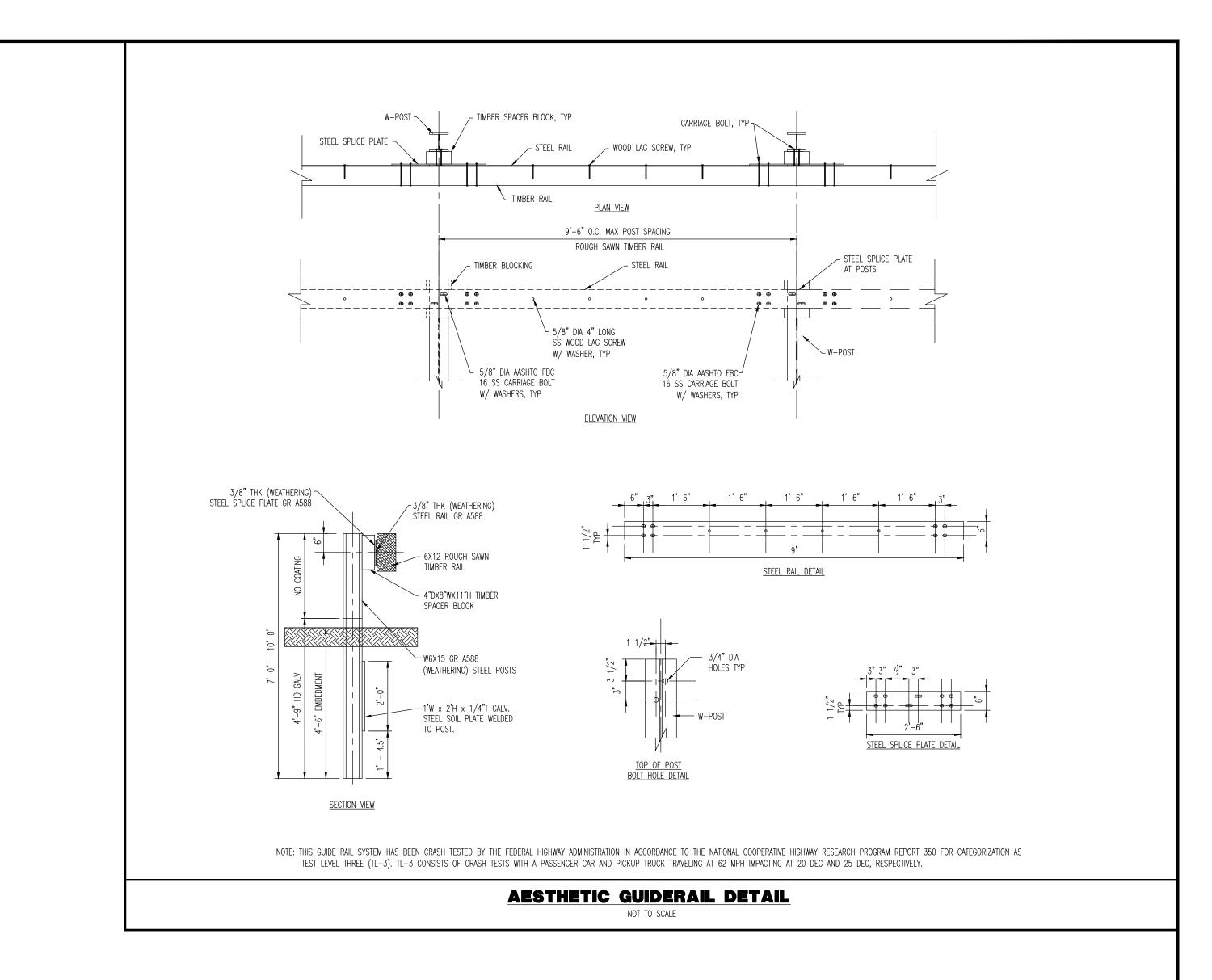
NOT TO SCALE

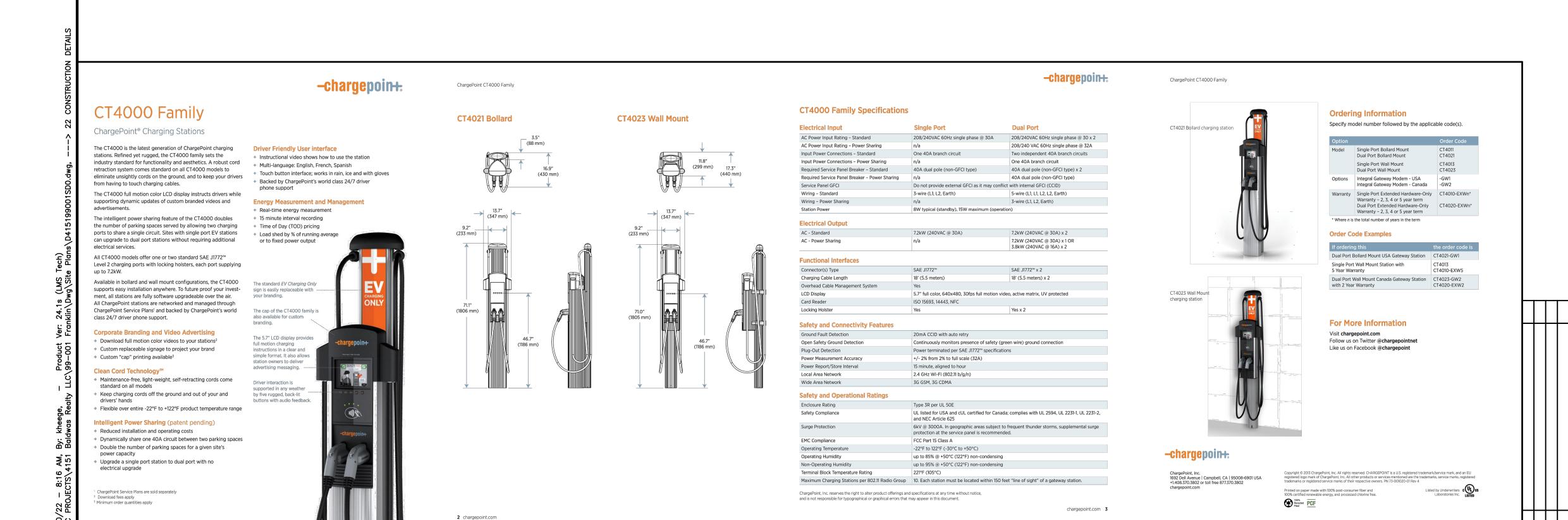












ELECTRIC CHARGING DETAIL

