

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN

THE SCOPE OF WORK CONSISTS OF ALL MATERIALS, EQUIPMENT, LABOR, MAINTENANCE, SUBMITTALS, PRODUCTS AND SERVICES REQUIRED TO SUPPLY AND PLACE HIGH USE LAWN SEED MIX AS INDICATED ON THE DRAWINGS, ITEM 659 AND AS SPECIFIED HERE.

SUBMITTALS

AT LEAST 30 DAYS PRIOR TO INTENDED USE, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SAMPLES AND SUBMITTALS FOR APPROVAL. DO NOT ORDER MATERIALS UNTIL ENGINEER'S APPROVAL OF SAMPLES, CERTIFICATIONS OR TEST RESULTS HAS BEEN OBTAINED. DELIVERED MATERIALS SHALL CLOSELY MATCH THE APPROVED SAMPLES. ACCEPTANCE SHALL NOT CONSTITUTE FINAL ACCEPTANCE. THE ENGINEER RESERVES THE RIGHT TO REJECT ON OR AFTER DELIVERY ANY MATERIAL THAT DOES NOT MEET THESE SPECIFICATIONS.

SEED: SUBMIT A MANUFACTURER'S CERTIFICATE OF COMPLIANCE TO THE SPECIFICATIONS WITH EACH SHIPMENT OF EACH TYPE OF SEED. THESE CERTIFICATES SHALL INCLUDE THE GUARANTEED PERCENTAGES OF PURITY, WEED CONTENT AND GERMINATION OF THE SEED, AND ALSO THE NET WEIGHT AND DATE OF SHIPMENT. NO SEED MAY BE SOWN UNTIL THE CONTRACTOR HAS SUBMITTED THE CERTIFICATES.

FERTILIZER: SUBMIT PRODUCT LITERATURE OF SEEDING FERTILIZER AND CERTIFICATES SHOWING COMPOSITION AND ANALYSIS. SUBMIT THE PURCHASING RECEIPT SHOWING THE TOTAL QUANTITY PURCHASED FOR THE PROJECT PRIOR TO INSTALLATION.

HYDROSEEDING: PRIOR TO THE START OF HYDROSEEDING, SUBMIT QUALIFICATIONS FOR HYDROSEEDING INSTALLER & CERTIFIED STATEMENT FOR APPROVAL AS TO THE NUMBER OF POUNDS OF MATERIALS TO BE USED PER 100 GALLONS OF WATER.

SEEDING SCHEDULE: INDICATING ANTICIPATED PLANTING DATES FOR EACH TYPE OF SEEDING, INCLUDING EROSION CONTROL SEEDING.

WOOD CELLULOSE FIBER MULCH: SUBMITS PRODUCT LITERATURE.

QUALITY ASSURANCE

QUALIFICATION OF LANDSCAPE CONTRACTOR: THE WORK OF THIS SECTION SHALL BE PERFORMED BY A LANDSCAPE CONTRACTING FIRM WHICH HAS SUCCESSFULLY INSTALLED WORK OF A SIMILAR QUALITY, SCHEDULE REQUIREMENT, AND CONSTRUCTION DETAILING WITH A MINIMUM OF FIVE YEARS EXPERIENCE. SUBMIT PROOF THAT THE LANDSCAPE CONTRACTING FIRM MEETS THIS REQUIREMENT.

QUALIFICATION OF FOREMAN OR CREW LEADER: ALL WORK OF UNLOADING, STOCKPILING, STORING, TRANSPORTING ON-SITE, PLANTING, STAKING AND GUYING, FERTILIZING, AND MAINTENANCE OF TREES, SHRUBS, VINES, GROUND COVER, AND PERENNIALS SHALL BE SUPERVISED BY A FOREMAN OR CREW LEADER WHO IS A CERTIFIED LANDSCAPE PROFESSIONAL OR A CERTIFIED HORTICULTURIST. SUBMIT PROOF OF CERTIFICATION. FOREMAN AND CREW LEADER SHALL REMAIN ON THE PROJECT ON A CONSISTANT BASIS FROM THE BEGINNING OF PLANTING THROUGH PROVISIONAL ACCEPTANCE.

DELIVER SEED IN ORIGINAL SEALED, LABELED, AND UNDAMAGED CONTAINERS.

THE SEASON FOR SEEDING SHALL BE AS FOLLOWS:

SPRING: APRIL 1ST TO JUNE 1ST
 FALL: AUGUST 15TH TO OCTOBER 15TH

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

THE ACTUAL PLANTING OF SEED SHALL BE DONE, HOWEVER, ONLY DURING PERIODS WITHIN THIS SEASON WHICH ARE NORMAL FOR SUCH WORK AS DETERMINED BY WEATHER CONDITIONS AND BY ACCEPTED PRACTICE IN THIS LOCALITY. SEED LOAM AREAS WITHIN 5 DAYS OF SPREADING THE LOAM TO PREVENT LOSS OF SOIL VIA WATER AND WIND EROSION AND TO PREVENT THE FLOW OF SEDIMENT, FERTILIZER, AND PESTICIDES ONTO ROADWAYS, SIDEWALKS, AND INTO CATCH BASINS.

SEED SHALL BE FRESH, CLEAN, NEW CROP SEED. GRASS SHALL BE OF THE PREVIOUS YEAR'S CROP AND THE WEED SEED CONTENT SHALL NOT EXCEED 1% BY WEIGHT. THE SEED SHALL BE FURNISHED AND DELIVERED, IN THE PROPORTION SPECIFIED, IN NEW, CLEAN, SEALED, AND PROPERLY LABELED CONTAINERS. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SUBMIT MANUFACTURER'S CERTIFICATES OF COMPLIANCE. SEED WHICH HAS BECOME WET, MOLDY OR OTHERWISE DAMAGED SHALL NOT BE ACCEPTABLE.

SEED SPECIES: CONTRACTOR SHALL SUBMIT WEIGHT BY SEED COUNT FOR EACH SEED MIXTURE. STATE-CERTIFIED SEED OF GRASS SPECIES, AS FOLLOWS:

1. LAWN SEED MIX APPLICATION RATE: 8.0 LBS PER 1,000 SF

NAME	COMPOSITION	GERMINATION (MIN)	PURITY (MIN)
FURY TALL FESCUE (OR APPROVED EQUAL)	27%	90%	90%
CORONADO TALL FESCUE (OR APPROVED EQUAL)	27%	90%	90%
ENDEAVOR FESCUE (OR APPROVED EQUAL)	26%	90%	90%
IQ PERENNIAL RYEGRASS (OR APPROVED EQUAL)	10%	90%	90%
BROOKLAWN KENTUCKY BLUEGRASS (OR APPROVED EQUAL)	10%	85%	90%

2. ODOT NATIVE WILDFLOWER AND GRASS MIXTURE 5B

BOTANICAL NAME	COMMON NAME	APPLICATION RATE
ASCLEPIAS TUBEROSA	BUTTERFLY WEED	0.34 LB PER 1000 SF
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	
CASSIA FASCICULATA	PARTRIDGE PEA	
ECHINACEA PURPUREA	PURPLE CONEFLOWER	
ERYNGIUM YUCCIFOLIUM	RATTLESNAKE MASTER	
HELIOPSIS HELIANTHOIDES	OX-EYE SUNFLOWER	
MONARDA FISTULOSA	WILD BERGAMOT	
RATIBIDA PINNATA	GREYHEAD CONEFLOWER	
RUDBECKIA FULGIDA	ORANGE CONEFLOWER	
SILPHIUM TEREBINTHINACEUM	PRAIRIE DOCK	
SILPHIUM TRIFOLIATUM	WHORLED ROSINWEED	0.046 LB PER 1000 SF
SOLIDAGO RIGIDA	STIFF GOLDENROD	
ANDROPOGON GERARDII	BIG BLUESTEM	
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	0.069 LB PER 1000 SF

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

WOOD CELLULOSE FIBER MULCH

MULCH TO COVER HYDROSEEDED AREAS WITH SLOPES LESS THAN THREE TO ONE (3:1) SHALL BE FIBER PROCESSED FROM WHOLE WOOD CHIPS AND CLEAN RECYCLED NEWSPRINT IN A 1:1 PROPORTION MANUFACTURED SPECIFICALLY FOR STANDARD HYDRAULIC MULCHING EQUIPMENT. FIBER SHALL NOT BE PRODUCED FROM RECYCLED MATERIAL SUCH AS SAWDUST, PAPER, OR CARDBOARD.

MOISTURE CONTENT SHALL NOT EXCEED 10 PERCENT, PLUS OR MINUS 3 PERCENT AS DEFINED BY THE PULP AND PAPER INDUSTRY STANDARDS. FIBER SHALL HAVE A WATER HOLDING CAPACITY OF NOT LESS THAN 900 GRAMS WATER PER 100 GRAMS FIBER.

THE MULCH SHALL BE OF SUCH CHARACTER THAT THE FIBER WILL BE DISPERSED INTO A UNIFORM SLURRY WHEN MIXED WITH WATER. IT SHALL BE NONTOXIC TO PLANT LIFE OR ANIMAL LIFE.

THE MULCH SHALL CONTAIN A NON-PETROLEUM BASED ORGANIC TACKIFIER AND A GREEN DYE TO ALLOW FOR EASY VISUAL METERING DURING APPLICATION BUT SHALL BE NON-INJURIOUS TO PLANT GROWTH.

FERTILIZER SHALL BE A COMMERCIAL PRODUCT COMPLYING WITH THE STATE AND UNITED STATES FERTILIZER LAWS. DELIVER TO THE SITE IN THE ORIGINAL UNOPENED CONTAINERS THAT SHALL BEAR THE MANUFACTURER'S CERTIFICATE OF COMPLIANCE COVERING ANALYSIS. FERTILIZER SHALL CONTAIN NOT LESS THAN THE PERCENTAGES OF WEIGHT OF INGREDIENTS AS RECOMMENDED BY THE SOIL ANALYSIS.

NITROGEN FERTILIZER SHALL BE SLOWLY SOLUBLE UREA FORMALDEHYDE, METHYLENE UREA, OR ISOBUTYLIDENE DIUREA; OR SLOW RELEASE SULFUR-COATED UREA. PHOSPHORUS SHALL BE SUPERPHOSPHATE OR TREBLE SUPERPHOSPHATE.

POTASSIUM SHALL BE SULFATE OF POTASH, K2SO4.

SALT INDEXES PER UNIT OF NUTRIENT FOR NITROGEN, PHOSPHOROUS, AND POTASSIUM SHALL BE LESS THAN 1.0 WHEN COMPARED TO SODIUM NITRATE (6.3). PROVIDE TREATMENTS AS NEEDED FOR FUNGUS OR PEST CONTROL. ALL TREATMENTS SHALL BE APPROVED BY THE ENGINEER AND THE OHIO DEPARTMENT OF FOOD AND AGRICULTURE FOR THE INTENDED USES AND APPLICATION RATES.

PROVIDE POST EMERGENT CRAB GRASS CONTROL THROUGHOUT THE MAINTENANCE PERIOD TO ENSURE A GERMINATED AND MOWN LAWN FREE OF CRAB GRASS.

EROSION CONTROL MATTING SHALL BE GEO-JUTE EROSION CONTROL FABRIC OR APPROVED EQUAL. THE JUTE IS CONSTRUCTED IN AN OPEN WEAVE WHICH ALLOWS HYDROSEEDING BEFORE OR AFTER INSTALLATION. THE JUTE IS COMPLETELY NATURAL, UNDYED, UNBLEACHED AND CONTAINS NO TOXINS OR SYNTHETIC FIBRES. IT'S COMPLETELY BIODEGRADABLE WITHIN TWO YEARS. HUGS ALL GROUND SURFACES TO HOLD SOIL AND SEED IN PLACE.

LAWN SHALL BE INSTALLED IMMEDIATELY AFTER FINISH GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL REQUEST AND RECEIVE WRITTEN APPROVAL OF FINE GRADING FROM THE RESIDENT ENGINEER.

LIMIT OF GRADING AND EARTHWORK SHALL BE LIMIT OF SEEDING UNLESS OTHERWISE INDICATED ON THE CONTRACT DOCUMENTS. ALL LAWN AREAS DISTURBED OUTSIDE THE LIMIT OF SEEDING SHALL BE PREPARED AND SEEDED AS SPECIFIED HEREIN AT NO ADDITIONAL COST.

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

CONVENTIONAL SEEDING

1. SEEDING SHALL BE DONE IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. SOW THE SEED WITH APPROVED SEEDING DEVICE. NO SEEDING SHALL BE DONE IN WINDY WEATHER.

2. FOR SLOPES NOT AS STEEP AS ONE VERTICAL FOOT TO THREE HORIZONTAL FEET SEED SHALL BE LIGHTLY RAKED INTO THE GROUND, AFTER WHICH THE GROUND SHALL BE ROLLED AND COMPACTED. AFTER COMPACTING SPREAD A LIGHT LAYER OF SALT MARSH HAY MULCH OVER THE ENTIRE SEEDBED, AND THOROUGHLY AND EVENLY WATER WITH A FINE SPRAY THE ENTIRE BED TO PENETRATE THE SOIL TO A DEPTH OF AT LEAST 2 INCHES. HAY WHICH IS NOT SALT MARSH HAY OR WHICH IS NOT CERTIFIED WEED-FREE STRAW, SHALL NOT BE USED.

3. FOR ALL SLOPES STEEPER THAN OR EQUAL TO THREE TO ONE (3:1) IMMEDIATELY INSTALL EROSION CONTROL MATTING AS DESCRIBED IN THIS SECTION. SEED ONLY WHEN THE BED IS IN A FRIABLE CONDITION, NOT MUDDY OR HARD. RESTORE AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

FOR HYDROSEEDING, PRIOR TO THE START OF WORK, FURNISH A CERTIFIED STATEMENT AS TO THE NUMBER OF POUNDS OF MATERIALS TO BE USED PER 100 GALLONS OF WATER. THIS STATEMENT SHALL ALSO SPECIFY THE NUMBER OF SQUARE FEET OF HYDROSEEDING THAT CAN BE COVERED WITH THE QUANTITY OF SOLUTION IN THE HYDROSEEDER. FOR THE HYDROSEEDING PROCESS, A MOBILE TANK WITH A CAPACITY OF AT LEAST 500 GALLONS SHALL BE FILLED WITH WATER AND THE MIXTURE NOTED ABOVE IN THE SPECIFIED PROPORTIONS. THE RESULTING SLURRY SHALL BE THOROUGHLY MIXED BY MEANS OF POSITIVE AGITATION IN THE TANK. AT NO TIME SHALL THE MOBILE TANK OR TANK TRUCK BE ALLOWED ONTO THE PREPARED HYDROSEED BEDS. ONLY HOSE APPLICATION SHALL BE PERMITTED. THE HOSE SHALL BE EQUIPPED WITH A NOZZLE OF A PROPER DESIGN TO ENSURE EVEN DISTRIBUTION OF THE HYDROSEEDING SLURRY OVER THE AREA TO BE HYDROSEEDED AND SHALL BE OPERATED BY A PERSON THOROUGHLY FAMILIAR WITH THIS TYPE OF SEEDING OPERATION.

HYDROSEEDING SHALL BE A MULTI-STEP PROCESS. STEP ONE SHALL CONSIST OF SPREADING 100 PERCENT OF THE REQUIRED SEED UNIFORMLY OVER THE PREPARED LOAM BED SO THAT THE SEED COMES INTO DIRECT CONTACT WITH THE SOIL. TO MARK THE PROGRESS OF THE HYDROSEEDING OPERATION THE CONTRACTOR SHALL ADD THE FOLLOWING TO THE SLURRY:

FOR SLOPES LESS STEEP THAN THREE TO ONE (3:1) ADD 300 LBS. PER ACRE OF THE WOOD CELLULOSE FIBER MULCH TO THE SLURRY.

FOR SLOPES LESS STEEP THAN THREE TO ONE (3:1) STEP TWO SHALL CONSIST OF A SEPARATE APPLICATION OF WOOD CELLULOSE FIBER MULCH IMMEDIATELY FOLLOWING THE FIRST STEP OF HYDROSEEDING NOTED ABOVE. APPLY THE WOOD CELLULOSE FIBER MULCH AT A RATE OF 1,700 POUNDS PER ACRE. (TOTAL WOOD CELLULOSE FIBER MULCH COVER SHALL BE 2000 LBS. PER ACRE.)

MAINTENANCE OF LAWNS

BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS SEEDED FOR THE FOLLOWING TIME PERIOD:

SEEDED AREAS - A 90 DAY ACTIVE GROWING PERIOD OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LONGER. IN THE EVENT THAT SEEDING OPERATIONS ARE COMPLETED TOO LATE IN THE FALL FOR ADEQUATE GERMINATION AND GROWTH OF GRASS, THEN MAINTENANCE SHALL CONTINUE INTO THE FOLLOWING SPRING FOR THE MINIMUM 60 DAY PERIOD. IN ADDITION, INSTALL BLANKETS OR NETTING TO PREVENT LOAM DEGRADATION AND MOVEMENT OVER THE WINTER. SUBMIT PRODUCT LITERATURE AND SAMPLES TO THE RESIDENT ENGINEER FOR REVIEW. BLANKETS AND NETTING SHALL BE PLACED IN A TIMELY MANNER AT NO ADDITIONAL COST TO THE OWNER.

DESIGN AGENCY	
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET	1402
TOTAL	2339

Michael Baker International

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

MAINTENANCE OF LAWNS (CONT.)

MAINTENANCE SHALL INCLUDE RESEEDING, MOWING, WATERING, WEEDING, FERTILIZING A MINIMUM OF TWO TIMES IN ADDITION TO THE FERTILIZER INCORPORATED BY HARROWING INTO THE SPREAD LOAM, AND RESETTING AND STRAIGHTENING OF PROTECTIVE BARRIERS. LAWN WORK MAINTENANCE SHALL ALSO INCLUDE FUNGUS AND/OR PEST CONTROL (TREATMENT AS REQUIRED AND APPROVED BY RESIDENT ENGINEER).

DURING THE MAINTENANCE PERIOD, ANY DECLINE IN THE CONDITION OF SEEDED AREAS SHALL REQUIRE IMMEDIATE ACTION TO IDENTIFY POTENTIAL PROBLEMS AND TO UNDERTAKE CORRECTIVE MEASURES.

WATERING SHALL BE DONE IN A MANNER THAT WILL PROVIDE UNIFORM COVERAGE, PREVENT EROSION DUE TO APPLICATION OF EXCESSIVE QUANTITIES OVER SMALL AREAS, AND PREVENT DAMAGE TO THE FINISHED SURFACE BY THE WATERING EQUIPMENT.

THE CONTRACTOR SHALL PROVIDE ALL LABOR AND ARRANGE FOR ALL WATERING NECESSARY TO ESTABLISH AN ACCEPTABLE LAWN. IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 2 INCHES FOR SEEDED AREAS AND 4 INCHES FOR SODDED AREAS. AT NO TIME SHALL A TANK TRUCK BE ALLOWED ON THE SEEDED AND/OR SODDED SURFACE.

WATERING SHALL BE DONE IN A MANNER THAT WILL PROVIDE UNIFORM COVERAGE, PREVENT EROSION DUE TO APPLICATION OF EXCESSIVE QUANTITIES OVER SMALL AREAS, AND PREVENT DAMAGE TO THE FINISHED SURFACE BY THE WATERING EQUIPMENT. THE CONTRACTOR SHALL FURNISH SUFFICIENT WATERING EQUIPMENT TO APPLY WATER TO THE REQUIRED SOIL DEPTHS EACH 8-HOUR PERIOD.

LAWN AREAS SHALL BE PROTECTED BY A 6-FOOT HIGH STANDARD CHAIN LINK BARRIER SET 18 EIGHTEEN INCHES (18") IN THE GROUND AT TEN FOOT (10') INTERVALS AND CONNECTED BY NO. TEN (10) WIRE. FLAGS OF WHITE CLOTH SHALL BE SECURED TO THE WIRE AT CENTER POINTS BETWEEN STAKES.

BARRIERS MUST BE RAISED IMMEDIATELY AFTER LAWN CONSTRUCTION AND SHALL BE MAINTAINED UNTIL ACCEPTANCE. BARRIERS SHALL BE REMOVED AND DISCARDED AS DIRECTED BY THE OWNERSHIP.

BIRD AND ANIMAL CONTROL SHALL BE INSTALLED AS NECESSARY TO ESTABLISH LAWN AND MEADOW AREAS AS SPECIFIED HEREIN. CONTRACTOR SHALL PROPOSE LEGAL BIRD AND ANIMAL CONTROL METHODS FOR APPROVAL BY RESIDENT ENGINEER.

AFTER THE GRASS IN SEEDED AREAS HAS GERMINATED, RESEED ALL AREAS AND PARTS OF AREAS THAT FAIL TO SHOW A UNIFORM STAND OF GRASS. RESEED SUCH AREAS AND PARTS OF AREAS REPEATEDLY UNTIL ALL AREAS ARE COVERED WITH A SATISFACTORY GROWTH OF GRASS WITH NO LESS THAN 20 GRASS SHOOTS PER SQUARE INCH AND 2880 GRASS SHOOTS PER SQUARE FOOT. RESEEDING TOGETHER WITH NECESSARY GRADING, FERTILIZING, AND TRIMMING SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL KEEP LAWN AREAS MOWED UNTIL ACCEPTANCE OF THE CONTRACT BY CUTTING TO A HEIGHT OF 2 INCHES WHEN GROWTH REACHES 3 INCHES OR AS DIRECTED BY THE RESIDENT ENGINEER.

AT EACH MOWING, ALL EDGES OF WALKS, DRIVES, PLANT BEDS AND OTHER BORDER CONDITIONS SHALL BE EDGE TRIMMED BY HAND OR MACHINE TO PRODUCE STRAIGHT AND UNIFORM EDGE CONDITIONS.

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

REMOVE AND DISCARD FROM PAVED AREAS ONLY CLIPPINGS AND DEBRIS GENERATED BY EACH MOWING AND EDGING OPERATION LEGALLY OFF-SITE. RESIDENT ENGINEER, IF PRACTICAL AND AESTHETIC, MAY ALLOW SWEEPING (NOT BLOWING) CLIPPINGS BACK INTO GRASS. MOWERS SHALL BE EQUIPPED WITH MULCHING BLADES. DO NOT REMOVE FROM GRASS AREAS ANY CLIPPINGS THAT HAVE BEEN GENERATED BY MOWING OPERATIONS. DO NOT MOW GRASS WHEN WET.

NATIVE WILDFLOWER MIX MOWING

FIRST GROWING SEASON:

DURING THE FIRST GROWING SEASON, WHENEVER CANOPY HEIGHT (OVERALL VEGETATION) REACHED 18"-24", USE A BRUSH HOG MOWER OR STRING TRIMMER TO TRIM THE MEADOW TO A HEIGHT OF 8". TRIMMING SHOULD CEASE BY MID-SEPTEMBER.

SECOND AND SUBSEQUENT GROWING SEASONS:

PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2" (MARCH-APRIL), TRIM ANY MATERIAL STANDING FROM THE PREVIOUS YEAR CLOSE TO THE GROUND, APPROXIMATELY 2".

APPLICATIONS OF FERTILIZER SHALL BE APPLIED TO SEEDED AREAS AT INSTALL, AT THE TIME OF THE FIRST MOWING, AND TWO MONTHS AFTER SECOND APPLICATION AND SHALL BE PERFORMED AND PAID FOR UNDER THIS ITEM. FIRST APPLICATION OF FERTILIZER SHALL BE AS RECOMMENDED BY SOIL TESTING. SECOND APPLICATION SHALL BE APPLIED AT A RATE THAT ENSURES THAT ONE-HALF POUND OF NITROGEN IS APPLIED PER 1,000 SQUARE FEET. PHOSPHORUS AND POTASSIUM SHALL BE APPLIED PROPORTIONALLY IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOIL TESTS AND THE QUANTITIES PREVIOUSLY INTEGRATED INTO THE SOIL DURING THE FIRST APPLICATION.

A THIRD APPLICATION OF NITROGEN FERTILIZER SHALL BE APPLIED TO SEEDED AREAS APPROXIMATELY TWO MONTHS AFTER THE SECOND APPLICATION AND SHALL BE PAID FOR UNDER THIS SECTION. THIS THIRD APPLICATION SHALL CORRESPOND TO THE FOLLOWING APPLICATION RATES DEPENDENT UPON THE MONTH OF APPLICATION.

MAY 1-15: APPLY 1.0 POUND OF NITROGEN PER 1,000 SQUARE FEET.

JUNE 15-30: APPLY 1.0 POUND OF NITROGEN PER 1,000 SQUARE FEET.

AUGUST 15 THROUGH SEPTEMBER 15: APPLY 1.0 POUND OF NITROGEN PER 1,000 SQUARE FEET.

NOVEMBER 1-15: APPLY 1.5 POUNDS OF NITROGEN PER 1,000 SQUARE FEET

NITROGEN FERTILIZER SHALL BE COMPOSED OF 50 PERCENT SLOW RELEASE NITROGEN FERTILIZER.

PROMPTLY REMOVE SOIL AND DEBRIS CREATED BY LAWN WORK FROM PAVED AREAS. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS, OR OTHER PAVED AREAS.

ERECT BARRICADES, PROTECTION, AND WARNING SIGNS AS REQUIRED TO PROTECT NEWLY PLANTED AREAS FROM TRAFFIC AND ANIMALS. MAINTAIN BARRICADES THROUGHOUT MAINTENANCE PERIOD AND REMOVE AFTER LAWN IS ESTABLISHED.

FOLLOWING THE MINIMUM REQUIRED MAINTENANCE PERIODS FOR LAWNS, THE CONTRACTOR SHALL REQUEST THE ENGINEER IN WRITING FOR A FORMAL INSPECTION OF COMPLETED WORK. REQUEST FOR INSPECTION SHALL BE RECEIVED BY THE ENGINEER AT LEAST 10 DAYS BEFORE ANTICIPATED DATE OF INSPECTION.

ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN (CONT.)
ITEM 659, SEEDING AND MULCHING, CLASS 5B, AS PER PLAN (CONT.)

AT THE END OF THE MAINTENANCE PERIOD, SEEDED AREAS SHALL HAVE A CLOSE STAND OF GRASS AS DEFINED ABOVE WITH NO WEEDS PRESENT AND NO BARE SPOTS GREATER THAN 3 INCHES IN DIAMETER OVER GREATER THAN 5 PERCENT OF THE OVERALL SEEDED AREA. AT LEAST 90 PERCENT OF THE GRASS ESTABLISHED SHALL BE PERMANENT GRASS SPECIES. IF SEEDED AREAS ARE DEFICIENT, THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL SEEDED AREAS SHALL BE EXTENDED UNTILL DEFICIENCIES ARE CORRECTED. SEEDED AREAS TO BE CORRECTED SHALL BE PREPARED AND RESEDED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

AT THE TIME OF ACCEPTANCE, THE CONTRACTOR SHALL REMOVE TEMPORARY BARRIERS USED TO PROTECT LAWN AREAS.

FURNISH FULL AND COMPLETE WRITTEN INSTRUCTIONS FOR MAINTENANCE OF THE LAWNS TO THE ENGINEER AT THE TIME OF ACCEPTANCE IN CONFORMANCE WITH SUBMITTALS REQUIREMENTS.

ENGINEER'S INSPECTION SHALL DETERMINE WHETHER MAINTENANCE SHALL CONTINUE.

ALL AREAS WITHIN CONSTRUCTION LIMITS WITHOUT A SPECIFIED GROUND TREATMENT SHALL RECEIVE ITEM 659, SEEDING AND MULCHING, CLASS 1, AS PER PLAN

SEEDED LAWN SHALL BE MEASURED FOR PAYMENT PER SQUARE YARD COMPLETE IN-PLACE AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN TO CONSIST OF ALL LABOR MATERIALS AND EQUIPMENT, MAINTENANCE, FERTILIZER APPLICATIONS, HERBICIDE AND PESTICIDE TREATMENTS, INSTALLATION AND REMOVAL OF ALL PROTECTION FENCING, AND ALL OTHER INCIDENTALS.

ITEM 451 - REINFORCED CONCRETE PAVEMENT MISC.:
CONCRETE CROSSWALK - INTEGRALLY COLORED

CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, SUBMITTALS, MEETINGS AND INCIDENTALS FOR A COMPLETE AND FUNCTIONING CONCRETE CROSSWALK AS PER ITEM 451, DRAWINGS, SPECIFICATIONS AND THE FOLLOWING.

CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR EACH DECORATIVE CEMENT CONCRETE PAVEMENT MIXTURE AND CONCRETE COLOR SAMPLES AT LEAST 4-INCHES BY 4-INCHES IN SIZE TO ENGINEER FOR APPROVAL PRIOR TO ORDERING CONCRETE. INCLUDE ALTERNATE MIXTURE DESIGNS WHEN CHARACTERISTICS OF MATERIALS, PROJECT CONDITIONS, WEATHER, TEST RESULTS, OR OTHER CIRCUMSTANCES WARRANT ADJUSTMENTS.

COLOR CONCRETE PIGMENT SHALL BE ASTM C 979, SYNTHETIC MINERAL -OXIDE PIGMENTS OR COLORED WATER REDUCING ADMIXTURES; COLOR SHALL BE STABLE, NONFADING, AND RESISTANT TO LIME AND OTHER ALKALIS. COLOR SHALL BE INTEGRALLY MIXED WITH THE CONCRETE. INTEGRAL CONCRETE COLOR BASIS OF DESIGN IS L.M. SCOFIELD'S CHROMIX 1017 BARCELONA BROWN.

CONCRETE PIGMENT APPROVED MANUFACTURERS ARE:

1. INCRETE SYSTEMS INC.
2. L.M. SCOFIELD COMPANY.
3. SOLOMON COLORS.

LIQUID RELEASE AGENTS SHALL BE MANUFACTURER'S STANDARD CLEAR, EVAPORATING FORMULATION THAT FACILITATES RELEASE OF STAMP MATS AND TEXTURE ROLLERS. APPROVED PRODUCTS AND MANUFACTURES ARE:

ITEM 451 - REINFORCED CONCRETE PAVEMENT MISC.:
CONCRETE CROSSWALK - INTEGRALLY COLORED (CONT.)

1. ARTCRETE, INC.: FAUX BRICK LIQUID RELEASE AGENT.
2. BON TOOL CO.: LIQUIFORM RELEASE AGENT.
3. DECORATIVE CONCRETE SUPPLY INC.; DECOSUP LIQUID RELEASE.
4. INCRETE SYSTEMS INC.; LIQUID RELEASE.
5. RAFCO PRODUCTS; BRICKFORM LIQUID RELEASE AGENT.
6. SOUTHERN COLOR COMPANY, INC.; CLEAR LIQUID RELEASE AGENT.
7. SUPERSTONE, INC.; BUBBLE GUM LIQUID RELEASE.
8. SYMONS CORPORATION; CLEAR LIQUID RELEASE.

CONTRACTOR SHALL SEAL CROSSWALKS. SEALANT SHALL BE CLEAR ACRYLIC SEALER. APPLY UNIFORMLY IN TWO COATS IN CONTINUOUS OPERATIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. ALLOW FIRST COAT TO DRY BEFORE APPL YING SECOND COAT, AT 90-DEGREES TO THE DIRECTION OF THE FIRST COAT USING SAME APPLICATION METHOD AND RATE.

BEGIN SEALING DRY SURFACE NO SOONER THAN 28 DAYS AFTER CONCRETE PLACEMENT. THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS, SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT THE CONCRETE CROSSWALK, AS REQUIRED IN THIS SPECIFICATION AND SHOWN IN THE DRAWINGS, SHALL BE PAID UNDER THE UNIT PRICE OF ITEM 451 REINFORCED CONCRETE, MISC.: CONCRETE CROSSWALK - INTEGRALLY COLORED.

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET TOTAL
1403 2339

ITEM SPECIAL - REINFORCED CONCRETE. MISC.:
 CONCRETE CROSSWALK - INTEGRALLY COLORED MOCK UP

THIS ITEM CONSISTS OF BUILDING A CAST-IN-PLACE MOCKUP OF THE INTEGRALLY COLORED/ BROOM FINISHED CONCRETE CROSSWALK FOR ENGINEERS REVIEW AND APPROVAL OF INTEGRAL COLOR AND BRUSH TEXTURE. UPON ENGINEERS APPROVAL OF FINISH AND COLOR SAMPLES SUBMITTED AS PER ITEM 451 REINFORCED CONCRETE MISC.: CONCRETE CROSSWALK - INTEGRALLY COLORED, CONTRACTOR SHALL CAST AND CONSTRUCT MOCKUP SECTION OF CROSSWALK TO DEMONSTRATE TYPICAL PATTERN, TEXTURE, SURFACE FINISH, COLOR, JOINTS, AND STANDARD OF WORKMANSHIP.

MOCKUP SHALL BE 36 BY 36 INCHES AND DEMONSTRATE TYPICAL PATTERN, TEXTURE, SURFACE FINISH, COLOR, JOINTS, AND STANDARD OF WORKMANSHIP OF ALL PORTIONS OF CROSSWALK. MOCK UP SHALL NOT INCLUDE AGGREGATE BASE OR WIRE/REBAR. BUILD MOCKUP IN THE LOCATION DIRECTED BY THE ENGINEER. THE MOCKUP SHALL BE REVIEWED BY THE ENGINEER FOR COLOR AND TEXTURE, AESTHETIC QUALITIES OF WORKMANSHIP, AND OTHER MATERIAL AND CONSTRUCTION QUALITIES.

IF DIRECTED BY THE ENGINEER, CONSTRUCT ONE ADDITIONAL MOCKUP TO ACHIEVE THE DESIRED RESULTS. DO NOT ORDER MATERIALS IN EXCESS OF MATERIALS REQUIRED TO CONSTRUCT THE MOCKUP. RETAIN AND MAINTAIN ACCEPTED SAMPLE PAVEMENT DURING CONSTRUCTION IN AN UNDISTURBED CONDITION AS A CRITERION FOR JUDGING THE ACCEPTANCE OF THE BEING PERFORMED. UPON COMPLETION OF THE PROJECT, REMOVE AND DISPOSE OF THE MOCKUPS PER CMS 202.

THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS, SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT AND DISPOSE OF THE MOCKUP(S), INCLUDING INTEGRALLY COLORED CONCRETE, CONCRETE CURING COMPOUND AND SEALER.

ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE)
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 1)
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 2)

THIS ITEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND AS PER ODOT 305, 452, AND 609. PAYMENT FOR THIS ITEM INCLUDES ALL EQUIPMENT, LABOR, AND MATERIAL FOR EXCAVATION, SUBGRADE COMPACTION, ITEM 304 AGGREGATE BASE COURSE, COMPACTION, ODOT 305 CONCRETE PAVER BASE (INCLUDING EXPANSION AND CONTROL JOINTS WITH FILLER, ODOT #2 DIA. PVC FORMED WEEP HOLES, INSTALLATION OF THE SAND SETTING BED, POLYMERIC SAND JOINT FILLER, GEOTEXTILE FILTER FABRIC, #9 STONE), AND ANY OTHER INCIDENTAL WORK RELATING TO THE COMPLETE IN PLACE INSTALLATION OF THE PAVERS OVER CONCRETE. CONTRACTOR TO SUBMIT PAVER AND POLYMERIC SAND MATERIAL SAMPLES TO PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. CONTRACTOR SHALL SUPPLY FOUR (4) REPRESENTATIVE FULL-SIZE SAMPLES OF PAVER, THAT INDICATE THE RANGE OF COLOR VARIATION AND TEXTURE EXPECTED IN THE FINISHED INSTALLATION. PROVIDE PAVERS WITHOUT FROGS, CHIPS, CRACKS, DISCOLORATIONS, CORES, OR OTHER DEFECTS IN SURFACES EXPOSED TO VIEW IN THE COMPLETED WORK. MIX PAVERS FROM SEVERAL PALLETS OR CUBES, AS THEY ARE PLACED, TO PRODUCE A UNIFORM BLEND OF COLORS AND TEXTURES. CUT PAVERS WITH A MOTOR-DRIVEN MASONRY SAW EQUIPMENT TO PROVIDE CLEAN, SHARP EDGES. USE FULL UNITS WITHOUT CUTTING WHERE POSSIBLE. HAMMER CUTTING IS NOT ACCEPTABLE. SET PAVER WITH JOINTS TO BE A MINIMUM OF 1/16" AND A MAXIMUM OF 1/8". DO NOT EXCEED 1/8" PAVER-TO-PAVER OFFSET FROM FLUSH NOR 1/8" INCH IN 10 FEET FROM INDICATED SLOPE FOR FINISHED SURFACE. INSTALL WEEP HOLES AS SHOWN ON DETAILS. ALL PAVERS SHALL HAVE BEVELED EDGE WITH SPACING LUGS. HANDLE AND COMPACT AND INSTALL BRICKS AS PER DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS.

POLYMERIC SAND SHALL BE PLACED IN THE JOINTS AS SOON AS POSSIBLE AFTER FINAL PAVER SETTING. PAVER SURFACE SHALL BE COMPLETELY DRY AT THE TIME OF GROUTING. SPECIFIC POLYMERIC SAND PLACEMENT SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS. POLYMERIC SAND SHALL BE PLACED INTO JOINTS SO FINISH GRADE OF POLYMERIC SAND IS A MINIMUM OF 1/8" LOWER THAN PAVER SURFACE AND AS PER MANUFACTURER'S RECOMMENDED METHODS. ALL RESIDUAL SAND RESIDUE SHALL BE REMOVED FROM THE PAVER SURFACE PRIOR TO BEGINNING THE CURING PROCESS. THE CURING PROCESS FOR THE POLYMERIC SAND SHOULD BE PER THE MANUFACTURER'S SPECIFICATIONS. AFTER CURING PERIOD, EXCESS POLYMERIC SAND SHOULD BE REMOVED FROM EXPOSED PAVER SURFACES; WASH AND SCRUB CLEAN.

BRICK #1 (22ND ST.)
 PAVER COLORS SHALL MATCH THE 22ND STREETSCAPE TREATMENT BETWEEN CENTRAL AVE AND WOODLAND AVE.

ALT. 1:
 THE COLOR FOR THE RUNNING BOND CLAY PAVER PATTERN SHALL BE COMPRISED OF THE FOLLOWING BLEND RATIO MANUFACTURED BY ENDICOTT CLAY PRODUCTS

-RED BLEND
 THE COLOR FOR THE SOLDIER COURSE CLAY PAVER COLOR SHALL BE DARK IRONSPOT. THE STYLE FOR ALL CLAY PAVERS SHALL BE 4"X8" LUGGED WITH A RELIEVED EDGE.

CONTACT: ENDICOTT CLAY PAVER COMPANY, 57120 707TH RD, ENDICOTT, NE 68350
 PHONE: 1-402-729-3315, ENDICOTT@ENDICOTT.COM

ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE)
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 1)
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK 2)
(CONT.)

ALT. 2:
 THE COLOR FOR THE RUNNING BOND CLAY PAVER PATTERN SHALL BE COMPRISED OF THE FOLLOWING BLEND RATIO MANUFACTURED BY WHITACRE GREER COMPANY
 -CINNAMON #42 (35%)
 -TANGERINE #43 (65%)
 THE COLOR FOR THE SOLDIER COURSE CLAY PAVER COLOR SHALL BE CIMMEREAN #53
 CONTACT: WHITACRE GREER COMPANY 1400 S. MAHONING AVE.
 ALLIANCE, OH 44601, PHONE 1-330-823-5502, WWW.WGPAVER.COM

BRICK #2 (22ND/CARNEGIE SIDEWALK CORNERS)

ALT. 1:
 4"X8"X2-3/8" TRADITIONAL PREST BRICK.
 SOLDIER COURSE BANDING, HERRINGBONE FIELD.
 -MATRIX #1428 (DARK GRAY)
 CONTACT: HANOVER ARCHITECTURAL PRODUCTS 5000 HANOVER ROAD, HANOVER, PA 17331, 800-426-4242, WWW.HANOVERPAVERS.COM

ALT. 2:
 UNILOCK HOLLANDSTONE BRICK
 SOLDIER COURSE BANDING, HERRINGBONE FIELD.
 3-7/8" X 7-7/8" X 2-3/8"
 -CHARCOAL
 CONTACT: 12560 SHEETS RD., RITTMAN, OH 44270, 1-800-UNILOCK, WWW.UNILOCK.COM

SQUARE #1 (DECK AND 22ND/CARNEGIE CURVE)

ALT. 1:
 12"X12"X3" PREST PAVER.
 -MATRIX #1428 (DARK GRAY)
 -LIMESTONE GRAY
 -MATRIX #1930 (LIGHT TAN)
 -GLACIER WHITE
 CONTACT: HANOVER ARCHITECTURAL PRODUCTS 5000 HANOVER ROAD, HANOVER, PA 17331, 800-426-4242, WWW.HANOVERPAVERS.COM

ALT. 2:
 UNILOCK EUROPAVER – SQUARE EDGE
 12" X 12" X 2-3/4"
 -GRANITE (MEDIUM GRAY)
 -CHARCOAL (DARK GRAY)
 -MODENA (SPECKLED WHITE)
 -CORVARA (LIGHT GRAY)

CONTACT: 12560 SHEETS RD., RITTMAN, OH 44270, 1-800-UNILOCK, WWW.UNILOCK.COM

ITEM SPECIAL - PARK BENCH

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTALS, AND INSTALLATION NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL BENCH AS SHOWN ON DRAWINGS. THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS. SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT THIS ITEM AND SHALL BE PAID BY EACH UNDER ITEM SPECIAL - PARK BENCH.

CONTRACTOR TO SELECT FROM THE TWO BENCHES LISTED BELOW OR SUPPLY AN APPROVED EQUAL.

1. BENCH 270-60I MANUFACTURED BY DUMOR, LENGTH 6'. CAST ALUMINUM FRAME BENCHES WITH IPE SLATS. FRAME COLOR: BLACK, POWDER COATED

2. TRIO BENCH, BACKED WITH ARMRESTS BY FORMS+SURFACES, LENGTH 6'. SURFACE MOUNTED, CAST ALUMINUM FRAME BENCHES WITH IPE SLATS. FRAME COLOR: BLACK, POWDER COATED

ITEM SPECIAL - BIKE RACK

THIS ITEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND MANUFACTURER'S RECOMMENDED INSTALLATION. PAYMENT FOR THIS ITEM INCLUDES ALL EQUIPMENT, LABOR, AND MATERIALS FOR SITE PREPARATION, SHOP DRAWINGS, MOUNTING HARDWARE, CONCRETE FOOTER & FORMWORK AND ANY OTHER INCIDENTAL WORK RELATING TO THE COMPLETE IN PLACE INSTALLATION OF THE BICYCLE RACKS. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. BICYCLE RACK SHALL BE SURFACE MOUNTED TO A CONCRETE FOOTER. CONCRETE FOOTER SHALL HAVE A MINIMUM DEPTH OF 12" AND OFFSET ALL BICYCLE RACK BOLT HOLES AND FOOTER A MINIMUM OF 4"X4"X12" DEEP AND SHALL MATCH SIZE AND SHAPE OF SURROUNDING PAVERS. CONCRETE FOOTER SHALL BE MATCHED IN COLOR TO SURROUNDING PAVEMENT, OR BRICK. THE CONCRETE FOOTER SHALL BE 3,000 PSI. APPROVED MODELS AND MANUFACTURERS/SALES REPRESENTATIVE ARE AS SPECIFIED BELOW

ALT. 1:
 MADRAX MODEL U238-IG-P, 2.375" OD X 22" LONG "U" BIKE RACK IN SILVER COLOR FINISH FOR GROUND EMBEDMENT.
 CONTACT: MAD RAX, 1090 UNIEK DRIVE, WAUNAKEE WI, 53587.
 PHONE: 1-800-448-7931, WWW.MADRAX.COM

ALT. 2:
 VICTOR STANLEY BIKE RACK MODEL BRWS-101 IN SILVER COLOR
 CONTACT: VICTOR STANLEY, P.O. BOX DRAWER 330, DUNKIRK, MD 20754
 PHONE: 1-800-368-2573, WWW.VICTORSTANLEY.COM

ITEM SPECIAL - OVAL PLANTER BENCH

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTALS, AND INSTALLATION NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL OVAL PLANTER BENCH AS SHOWN ON DRAWINGS. THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS. SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT THIS ITEM AND SHALL BE PAID BY EACH UNDER ITEM SPECIAL - OVAL PLANTER BENCH.

CONTRACTOR TO SELECT FROM THE OVAL PLANTER BENCHES LISTED BELOW OR SUPPLY AN APPROVED EQUAL.

1. STREETLIFE MOBILE GREEN ISLES OVAL - 5 MODULE COMBINATION. NO BACKREST. SLATS: FSC HARDWOOD. PLANTER FINISH: DARK GRAY POWDER COATED. (2) PLANTER MODULES, (2) PLANTER+SEATING MODULES, (1) 2-TIERED DOUBLE SEAT TREE PLANTER MODULE. FREESTANDING.

2. TOURNESOL SITEWORKS KITSAP MODULAR METAL PLANTER WALLS. FREESTANDING WITH ROUND CORNERS. POWDER COAT "PUDDLE". (1) WALLY BENCH PER PLANTER, FSC HARDWOOD.

DESIGN AGENCY

Michael Baker
 INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID

82382

SHEET TOTAL

1404 2339

ITEM SPECIAL - PLANTER BENCH

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTALS, AND INSTALLATION NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL PLANTER BENCH AS SHOWN ON DRAWINGS. THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS, SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT THIS ITEM AND SHALL BE PAID BY EACH UNDER ITEM SPECIAL - PLANTER BENCH.

CONTRACTOR TO SELECT FROM THE PLANTER BENCHES LISTED BELOW OR SUPPLY AN APPROVED EQUAL.

1. STREETLIFE SOLID 8 BENCH (118" LONG). NO ARMREST OR BACKREST. SLATS: FSC HARDWOOD. SUPPORT POST FINISH: DARK GRAY POWDER COATED. SURFACE MOUNT.

2. FORMS+SURFACES VECTOR SEATING SYSTEM. 8 FOOT, NO ARMREST OR BACKREST. SLATS: FSC CUMARU HARDWOOD.SUPPORT POST FINISH: DARK GRAY POWDER COATED. SURFACE MOUNT.

ITEM SPECIAL - SQUARE PLANTER

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTALS, AND INSTALLATION NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL SQUARE PLANTER AS SHOWN ON DRAWINGS. THIS ITEM INCLUDES ALL LABOR, EQUIPMENT, TOOLS, SUBMITTALS, INCIDENTALS AND MATERIALS REQUIRED TO CONSTRUCT THIS ITEM AND SHALL BE PAID BY EACH UNDER ITEM SPECIAL - SQUARE PLANTER.

CONTRACTOR TO SELECT FROM THE TWO SQUARE PLANTERS LISTED BELOW OR SUPPLY AN APPROVED EQUAL.

1. STREETLIFE BIG GREEN BENCH 59X59". NO SEATING SLATS. FRAME COLOR: DARK GRAY POWDER COATED

2. LANDSCAPE FORMS MITA PLANTER DOUBLE (30x56"). FRAME COLOR: DARK GRAY POWDER COATED.

ITEM SPECIAL - TRASH RECEPTACLE

THIS ITEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND MANUFACTURER'S RECOMMENDED INSTALLATION. PAYMENT FOR THIS ITEM INCLUDES ALL EQUIPMENT, LABOR, AND MATERIALS FOR SITE PREPARATION, SHOP DRAWINGS, BLACK PLASTIC PLASTIC LINER, AND ANY OTHER INCIDENTAL WORK RELATING TO THE COMPLETE IN PLACE INSTALLATION OF THE TRASH RECEPTACLE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. COLOR SHALL BE SILVER, APPROVED MODELS, AND MANUFACTURERS/SALES REPRESENTATIVE

ALT. 1:
 LANDSCAPE FORMS CHASE PARK 24"x39" SIDE OPENING TRASH RECEPTACLE, POWDER COATED SILVER.
 CONTACT: LANDSCAPE FORMS, 431 LAWNSDALE AVENUE, KALAMAZOO, MI 49048, KS 66062. PHONE 1-800-430-6209. WWW.LANDSCAPEFORMS.COM

ALT. 2:
 VICTOR STANLEY TRASH RECEPTACLE MODEL DSC-36, POWDER COATED SILVER CONTACT: VICTOR STANLEY, P.O. BOX DRAWER 330, DUNKIRK, MD 20754
 PHONE: 1-800-368-2573, WWW.VICTORSTANLEY.COM

ITEM SPECIAL - AIR KNIFE EXCAVATION

CONTRACTOR SHALL PERFORM AIR KNIFE EXCAVATION ALONG EXPOSED ROOTS OF TREES TO REMAIN ON THE NORTH SIDE OF CARNEGIE AND AS DIRECTED BY THE ENGINEER PER SPECIAL PROVISION - AIR KNIFE EXCAVATION DATED JUNE 16, 2022.
 ITEM SPECIAL - AIR KNIFE EXCAVATION ## FT

ITEM SPECIAL - TREE PROTECTION

CONTRACTOR SHALL PROTECT TREES INDICATED IN THE PLANS AS "TO BE PROTECTED" PER SPECIAL PROVISION - TREE PROTECTION DATED JUNE 16, 2022. ITEM SPECIAL - TREE PROTECTION ## EA

ITEM 609 - CURB, MISC.: LANDSCAPE BED (TYPE A & TYPE B)

THIS ITEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND ODOT 609. PAYMENT FOR THIS ITEM INCLUDES ALL EQUIPMENT, LABOR AND MATERIALS, SHOP DRAWINGS, EXCAVATION, SCARIFICATION OF SOIL UNDER LANDSCAPE BED, STONE SUBBASE, TYP 6 CURB, CONCRETE FORMWORK, JOINT MATERIAL, PLANTING BACKFILL MATERIAL, WEED BARRIER MAT, HARDWOOD MULCH, AND ANY OTHER INCIDENTAL WORK RELATING TO THE INSTALLATION OF THE LANDSCAPE BED. THIS ITEM DOES NOT INCLUDE LANDSCAPE MATERIAL AND PLANTING.

PLANTING BACKFILL MATERIAL SHALL CONSIST OF NATURAL LOAM TOPSOIL WITH THE ADDITION OF HUMUS ONLY, AND NO OTHER SOIL TYPE, SUCH AS A SAND OR CLAY SOIL TYPE, SHALL BE ACCEPTED. TOPSOIL MUST BE FREE FROM SUBSOIL, OBTAINED FROM AN AREA WHICH HAS NEVER BEEN STRIPPED. IT SHALL BE REMOVED TO A DEPTH OF ONE (1) FOOT, OR LESS IF SUBSOIL IS ENCOUNTERED. TOPSOIL SHALL BE OF UNIFORM QUALITY, FREE FROM HARD CLODS, STIFF CLAY, HARDPAN, SODS, PARTIALLY DISINTEGRATED STONE, LIME, CEMENT, ASHES, SLAG, CONCRETE, TAR RESIDUES, TARRED PAPER, BOARDS, CHIPS, STICKS OR ANY OTHER UNDESIRABLE MATERIAL. IF A TRUCKLOAD OF TOPSOIL IS CONSIDERED BY THE AGENCY TO CONTAIN TOO MUCH UNDESIRABLE MATERIAL TO BE CORRECTED ON THE SITE, THE ENTIRE TRUCK LOAD SHALL BE REJECTED. NO TOPSOIL SHALL BE DELIVERED IN A FROZEN OR MUDDY CONDITION. TOPSOIL SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

1. ORGANIC MATTER. MUST BE BETWEEN SEVEN PERCENT (7%) AND TWELVE PERCENT (12%) (NOT TO EXCEED 14%) BY WEIGHT, AS DETERMINED BY THE DRY COMBUSTION METHOD FOR TOTAL CARBON AND ORGANIC CARBON (USING A MULTIPLYING FACTOR OF 2 AS DESCRIBED IN METHODS OF SOIL ANALYSIS, #9, PART 2, 2ND ED. PUBLISHED BY THE AMERICAN SOCIETY OF AGRONOMY. THE ORGANIC CONTENT SHALL NOT EXCEED FOURTEEN PERCENT (14%).

2. PH RANGE. SHALL BE 6.0 TO 7.0 INCLUSIVE.

3. SIEVE ANALYSIS (BY WASH TEST, ASTM DESIGNATION C-117). PASSING 2" SIEVE (100%); PASSING 1" SIEVE (95% TO 100%); PASSING #4 SIEVE (90% TO 100%); PASSING #100 SIEVE (30% TO 60%).

4. CLAY. THE TEST METHOD TO MEASURE THE CLAY CONTENT OF THE SOIL SHALL BE ASTM D 422

WEED BARRIER MAT SHALL BE BLACK, NON WOVEN, GEOTEXTILE FABRIC WHICH IS UV STABILIZED, PERMEABLE TO AIR AND WATER, AND A MINIMUM WEIGHT OF 2 OZ/SQ YD. WEED MAT SHALL PROVIDE WEED CONTROL AND BE GUARANTEED BY MANUFACTURER TO LAST FOR 15 YEARS IN EXPOSED CONDITIONS. WEED MAT SHALL BE STAPLED TO SOIL AS PER MANUFACTURER'S DIRECTIONS, WITH MULCH PLACED ON TOP OF WEED MAT.

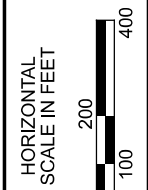
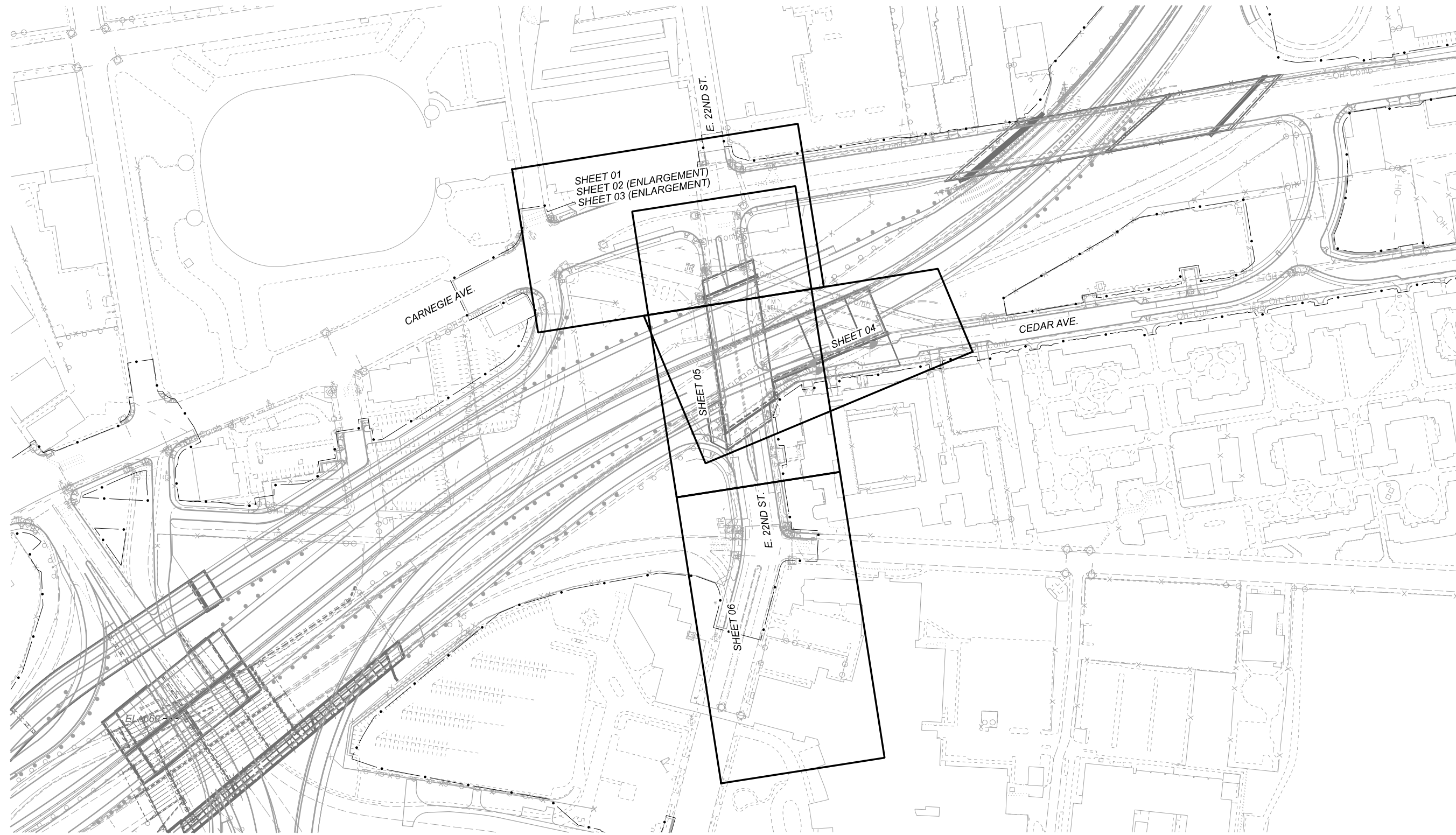
ITEM 609 - CURB, MISC.: LANDSCAPE BED (TYPE A & TYPE B) (CONT.)

HARDWOOD MULCH SHALL BE FINE, DOUBLE SHREDDED ORGANIC HARDWOOD, FREE OF WEED SEEDS, ROOTS, OR ANY OTHER SUBSTANCE NOT CONSISTING OF EITHER HOLE OR BRANCH WOOD AND BARK. THE MULCH SHALL BE UNIFORMLY APPLIED IN FOUR (3) INCH DEPTH IN PLANTING AREAS SHOWN ON PLANS. DO NOT FERTILIZE. CONTRACTOR TO SUBMIT SAMPLE TO PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE D, WITH FILTER, AS PER PLAN

ROCK CHANNEL PROTECTION SHALL BE SANDSTONE MATERIAL ONLY, MATCHING THE GRADATION AND OTHER REQUIREMENTS OF ITEM 601.

DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
REVIEWER	--
PROJECT ID	82382
SHEET	1405
TOTAL	2339



OVERALL HARDSCAPE PLAN

DESIGN AGENCY

Michael Baker
INTERNATIONAL

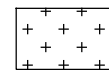
DESIGNER

REVIEWER

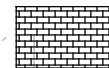
PROJECT ID
82382

SHEET	TOTAL
1406	2339

LEGEND



ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



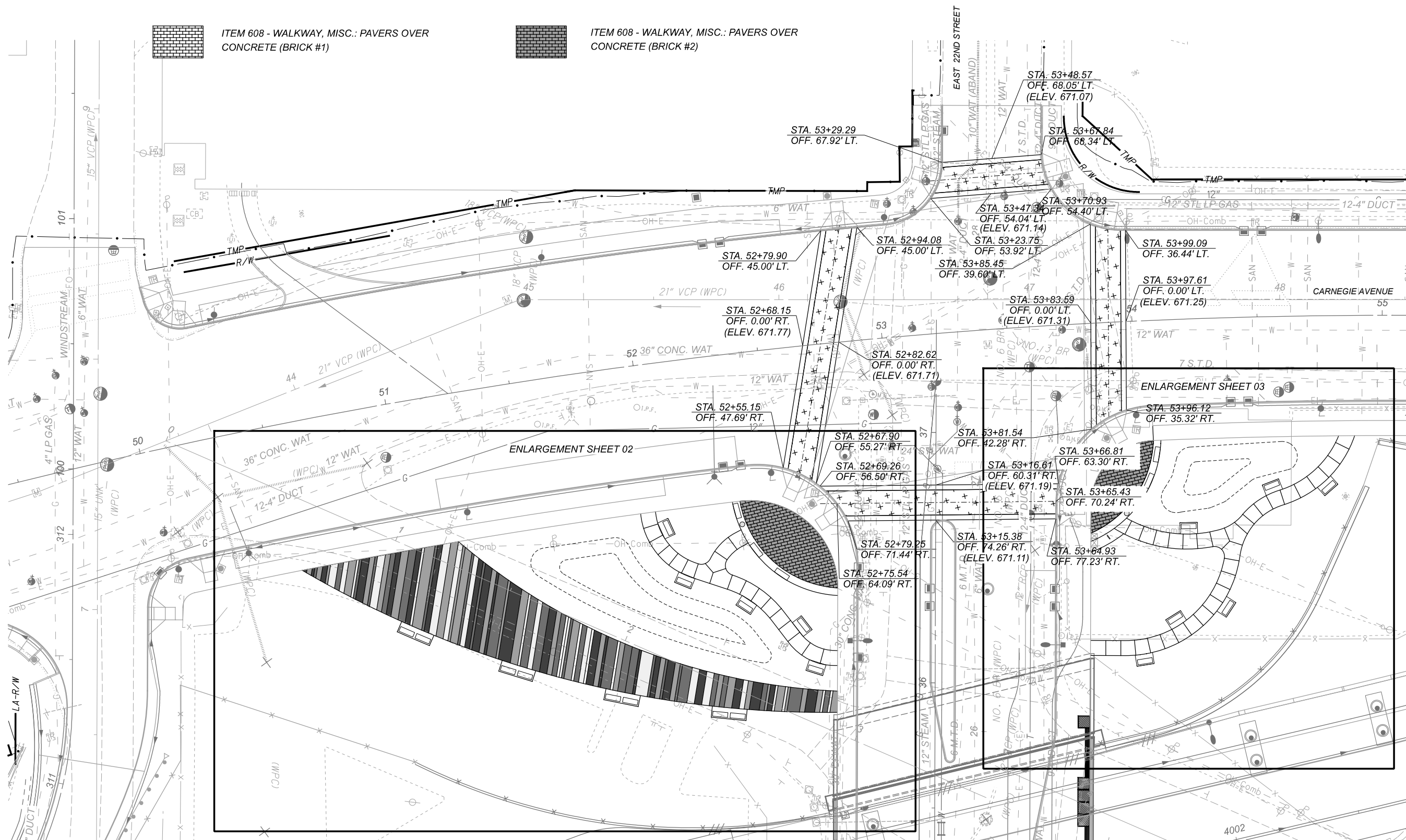
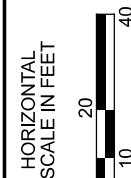
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)



ENLARGEMENT SHEET 02

ENLARGEMENT SHEET 03

MATCHLINE SHEET 05

HARDSCAPE PLAN
SHEET 01

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

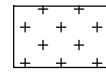
PROJECT ID

82382

SHEET TOTAL

1407 2339

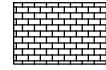
LEGEND



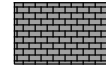
ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



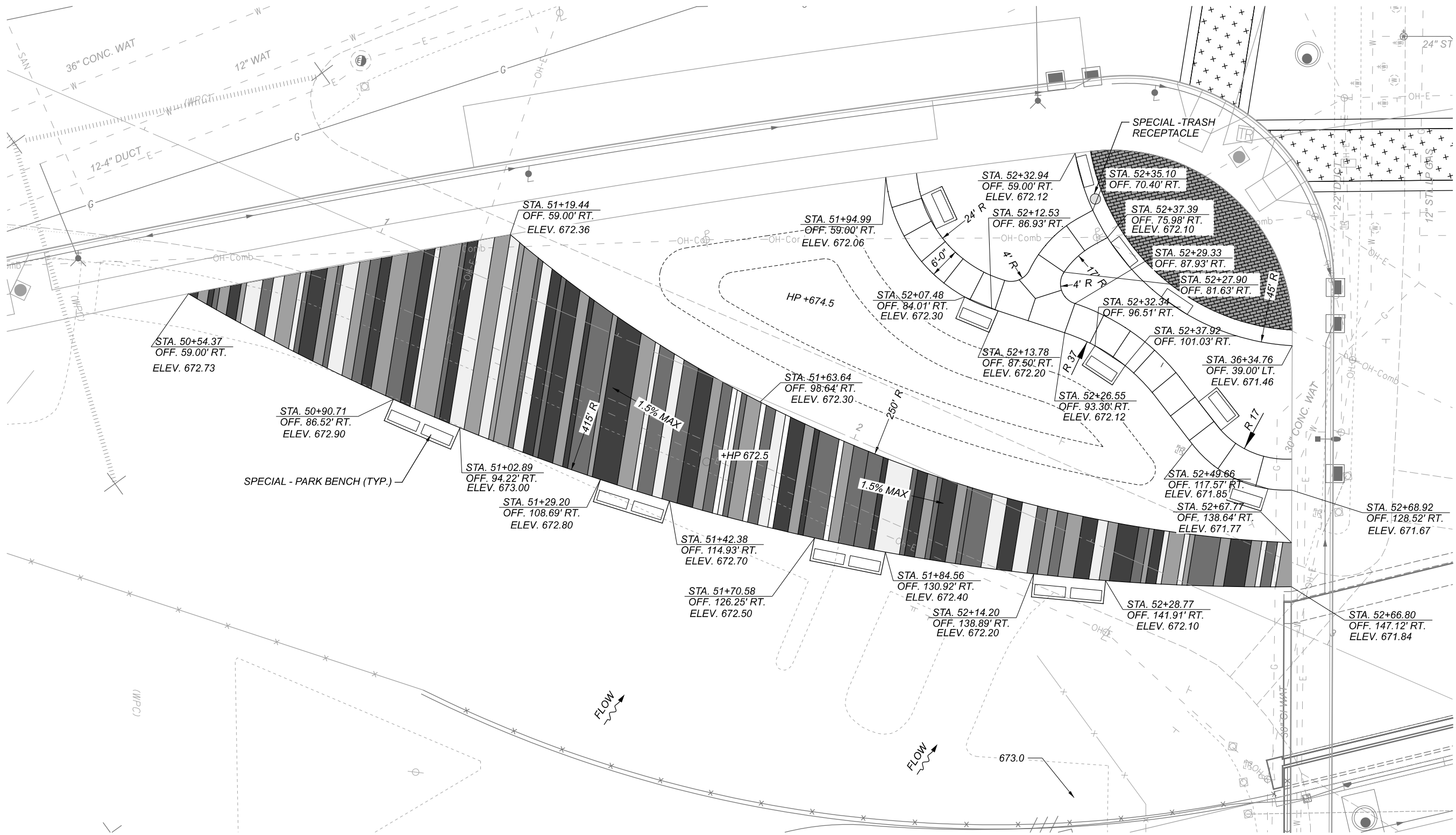
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)



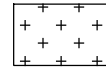
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)



HARDSCAPE ENLARGEMENT
SHEET 02

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1408 2339

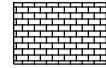
LEGEND



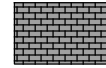
ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



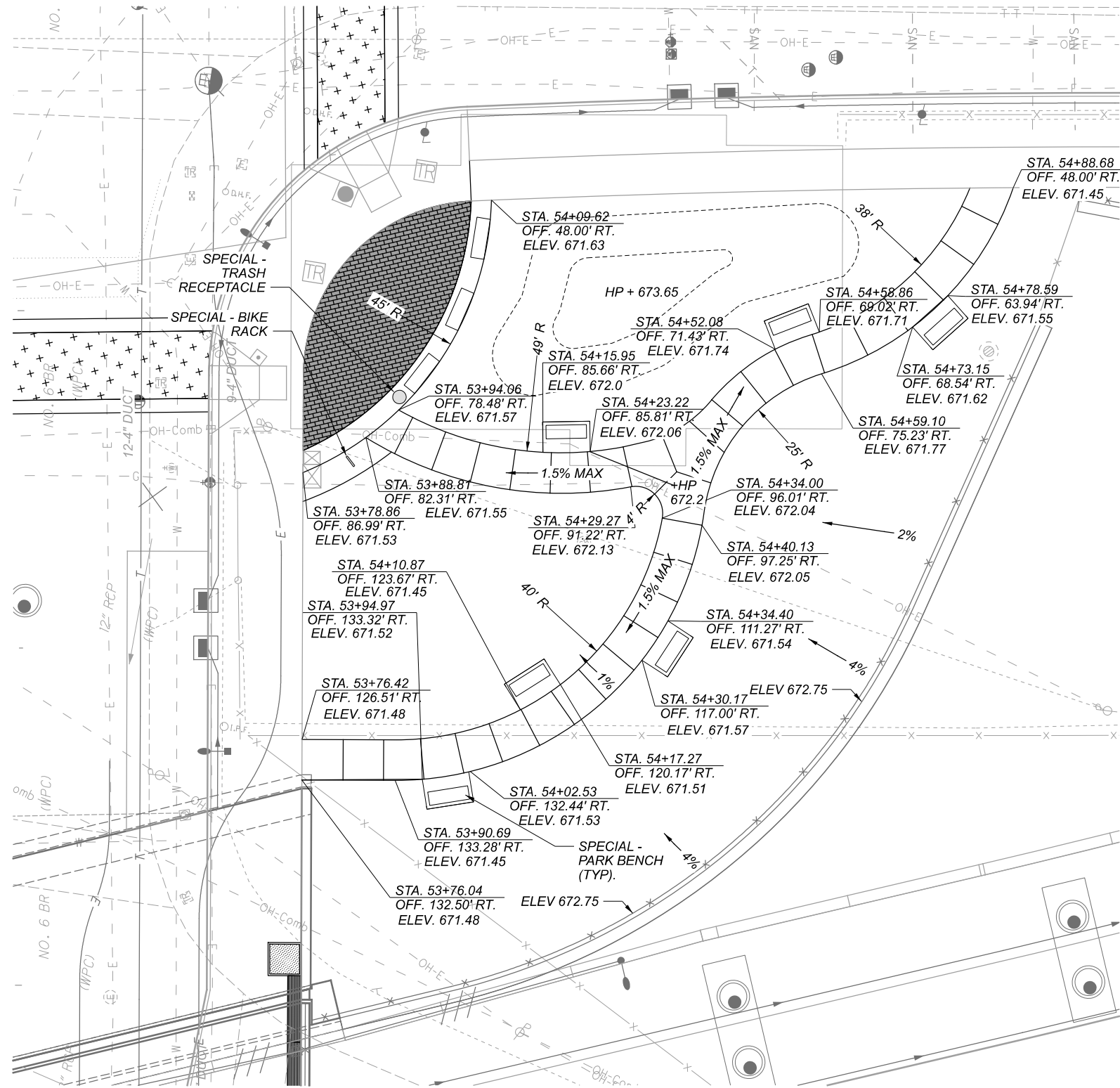
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)



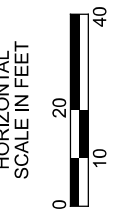
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)



HARDSCAPE ENLARGEMENT
 SHEET 03



DESIGN AGENCY

Michael Baker
 INTERNATIONAL

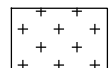
DESIGNER

REVIEWER

PROJECT ID
 82382

SHEET	TOTAL
1409	2339

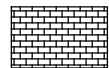
LEGEND



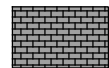
ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



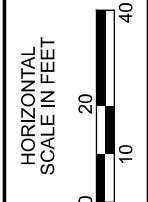
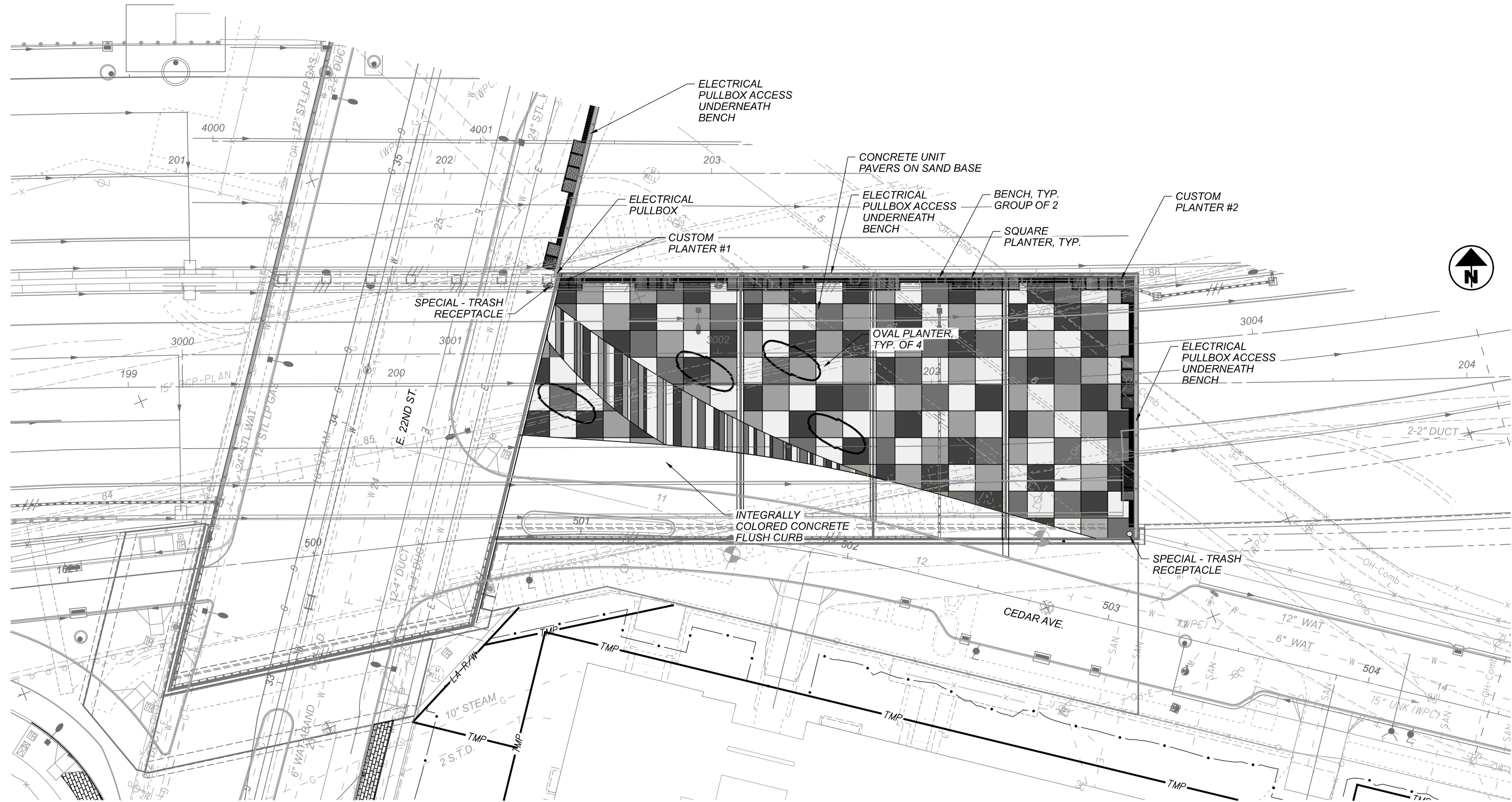
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)




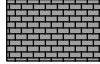


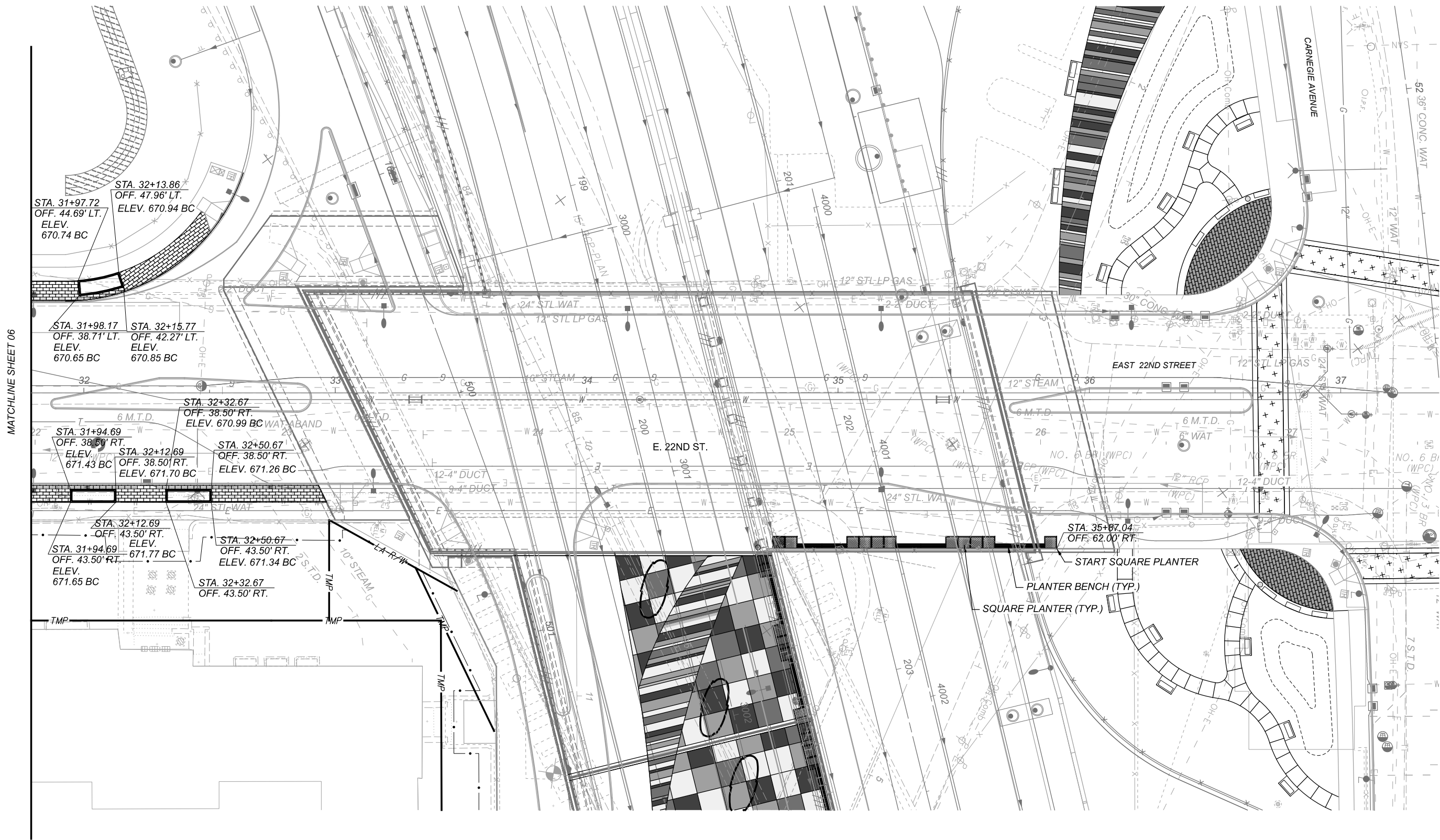
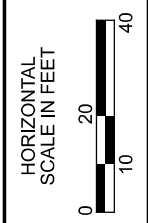
HARDSCAPE ENLARGEMENT
SHEET 04

SEE BRIDGE 16 PLANS FOR DECK ELEVATION AND LAYOUT INFORMATION

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1410 2339

LEGEND

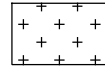
-  ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN
-  ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)
-  ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)
-  ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)



HARDSCAPE PLAN
SHEET 05

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1411 2339

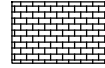
LEGEND



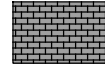
ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



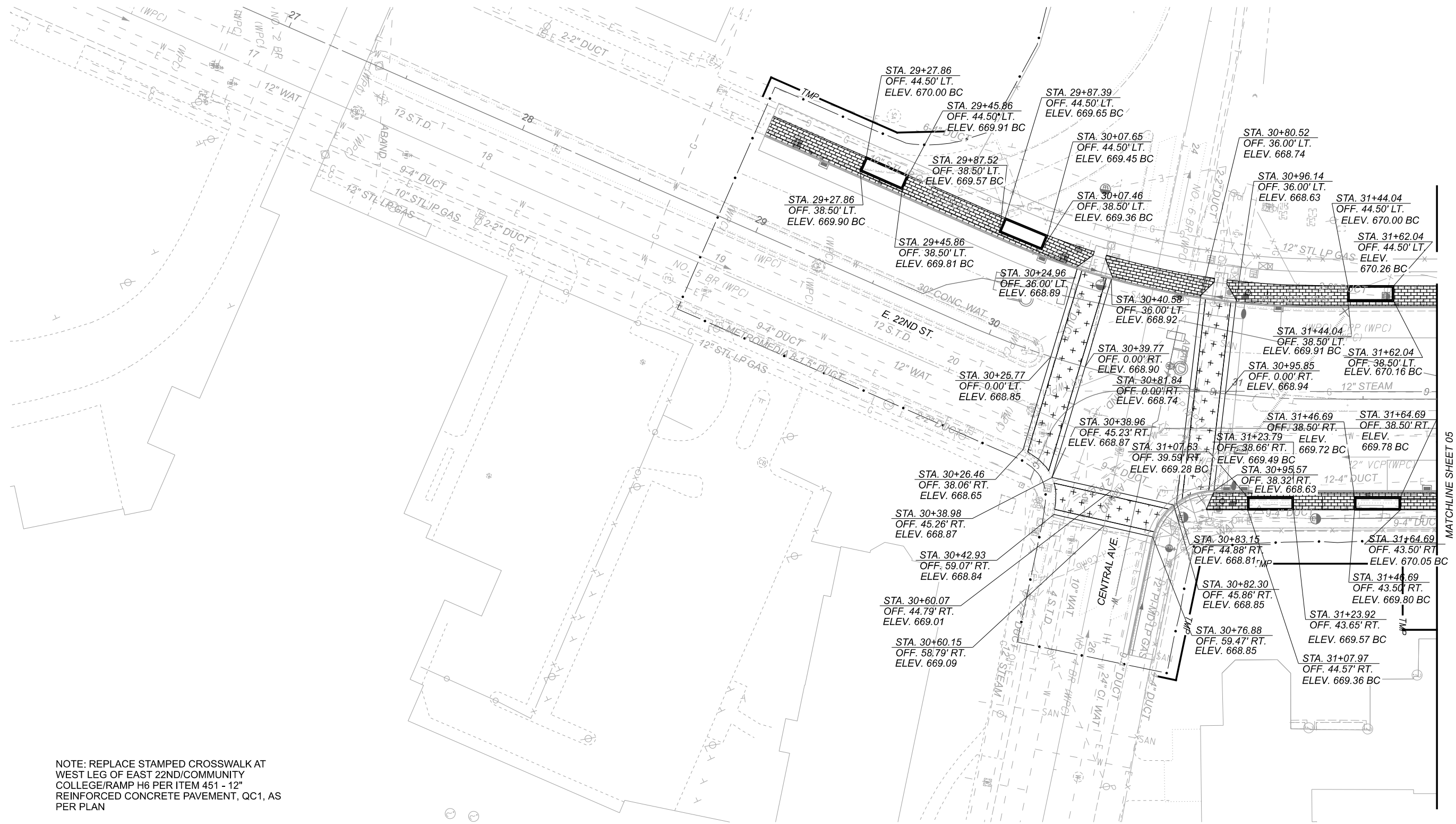
ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (SQUARE #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #1)



ITEM 608 - WALKWAY, MISC.: PAVERS OVER CONCRETE (BRICK #2)



NOTE: REPLACE STAMPED CROSSWALK AT WEST LEG OF EAST 22ND/COMMUNITY COLLEGE/RAMP H6 PER ITEM 451 - 12" REINFORCED CONCRETE PAVEMENT, QC1, AS PER PLAN



HARDSCAPE PLAN
SHEET 06

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

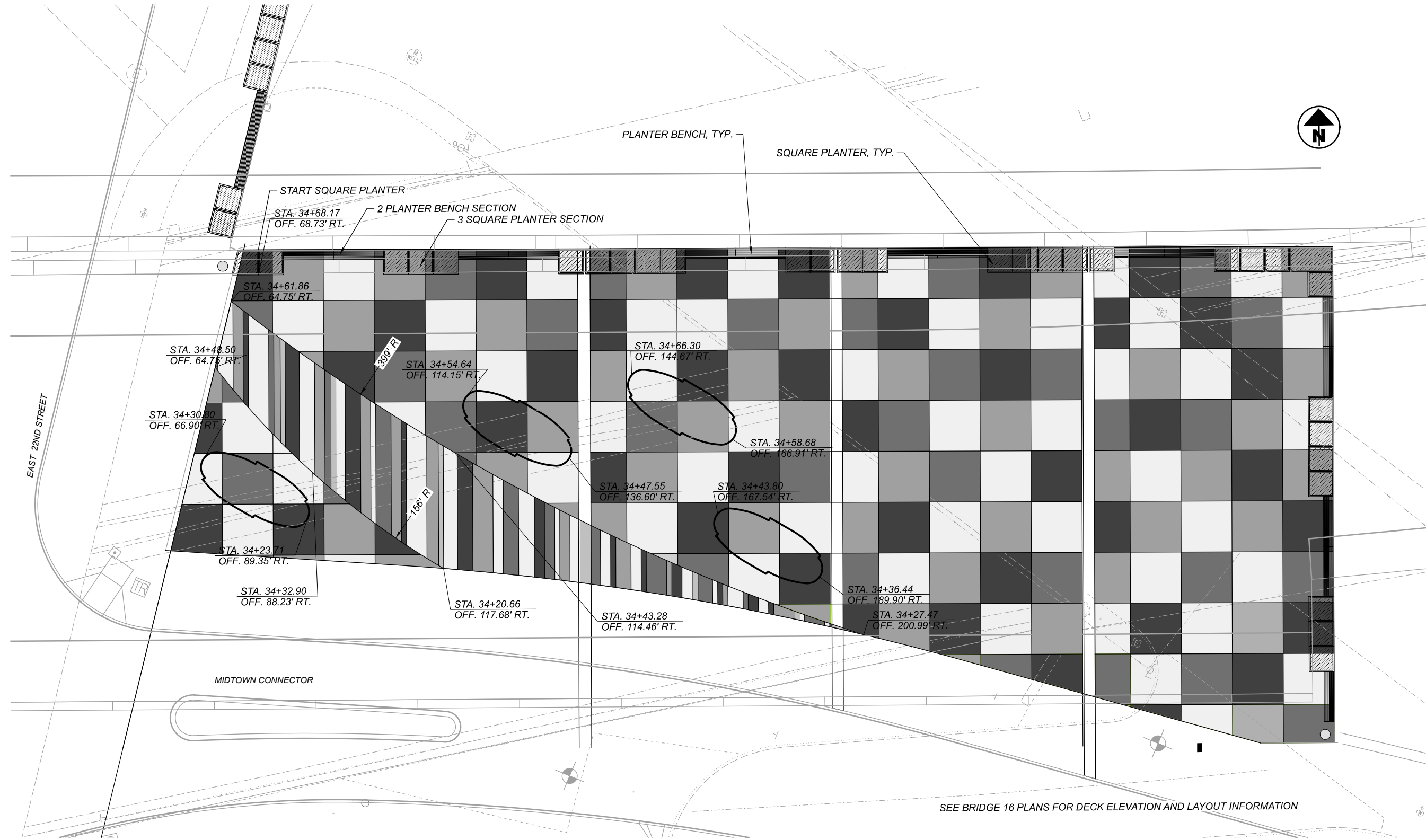
REVIEWER

PROJECT ID

82382

SHEET TOTAL

1412 2339



SEE BRIDGE 16 PLANS FOR DECK ELEVATION AND LAYOUT INFORMATION

DECK HARDSCAPE ENLARGEMENT

DESIGN AGENCY

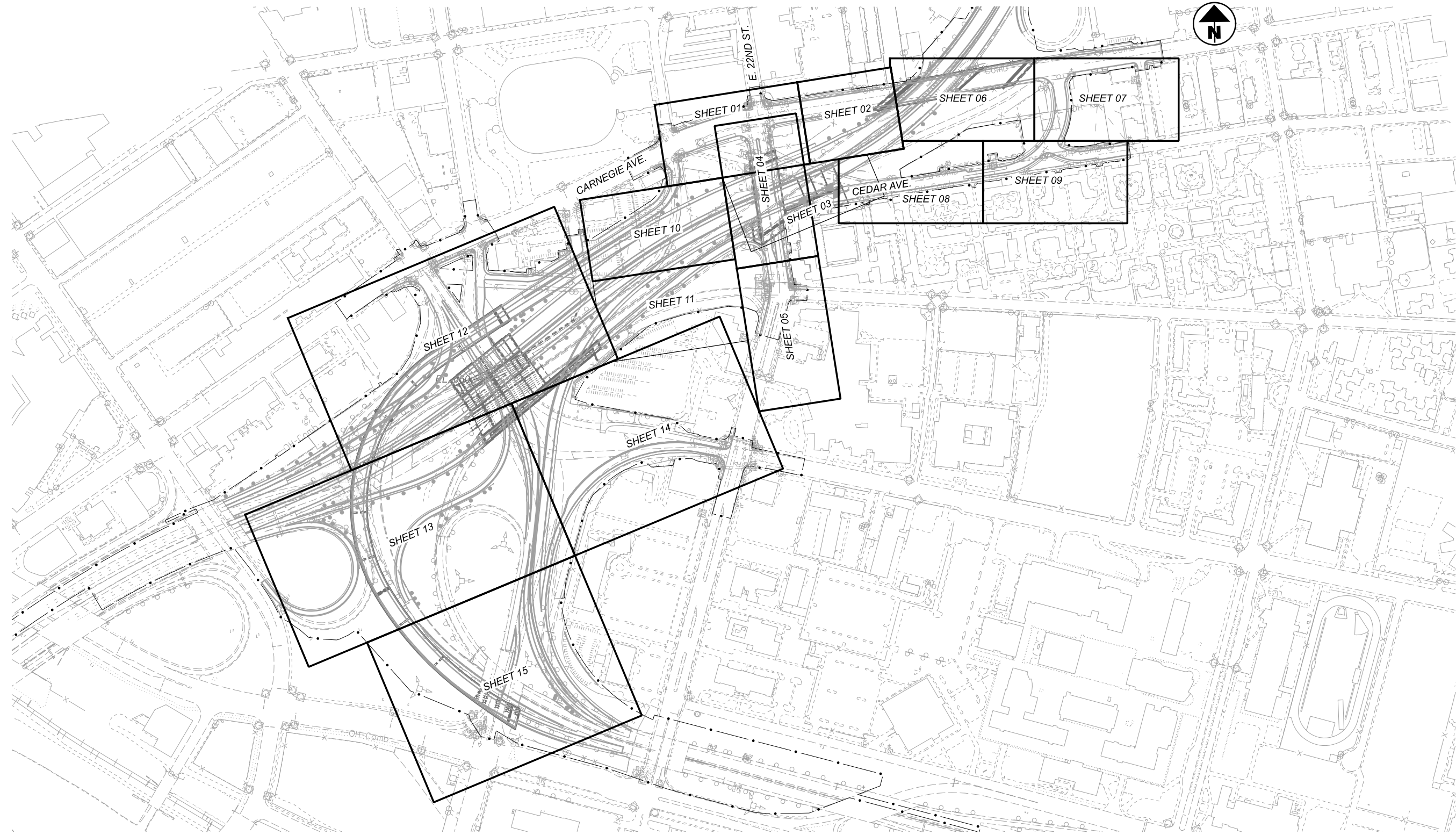
Michael Baker INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET TOTAL
1413 2339



OVERALL LADSCAPE PLAN

DESIGN AGENCY

Michael Baker
INTERNATIONAL

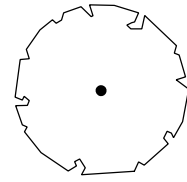
DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1414	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



ITEM 661 - DECIDUOUS TREE (FLOWERING)



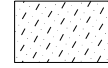
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



ITEM 659 - SEEDING MISC: LAWN SEED MIX

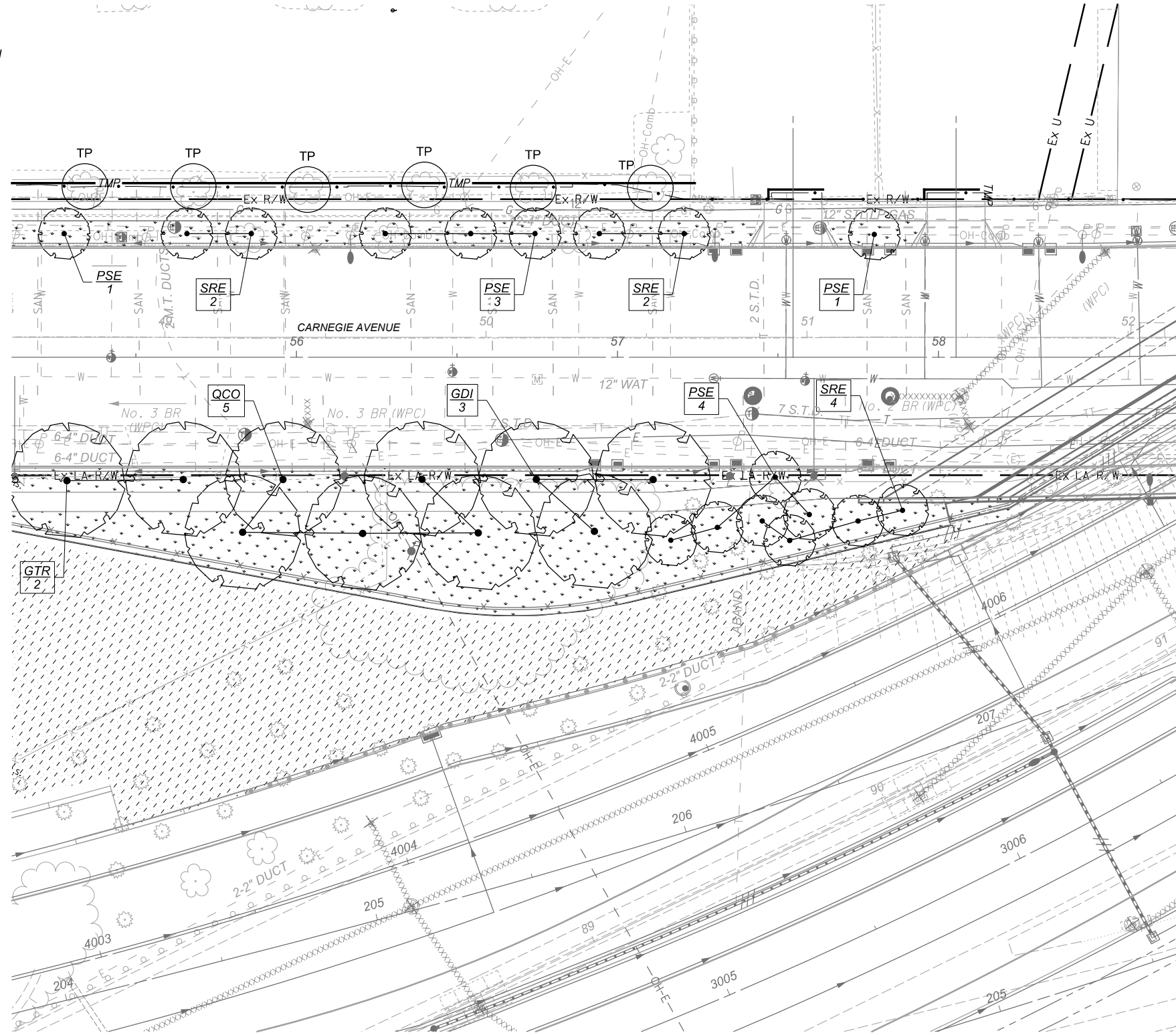


ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

TP



ITEM SPECIAL - TREE PROTECTION



MATCHLINE SHEET 06

NOTES:
 1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



LANDSCAPE PLAN
 SHEET 02

DESIGN AGENCY

Michael Baker
 INTERNATIONAL

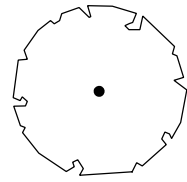
DESIGNER

REVIEWER

PROJECT ID
 82382

SHEET	TOTAL
1416	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



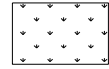
ITEM 661 - DECIDUOUS TREE (FLOWERING)



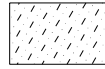
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



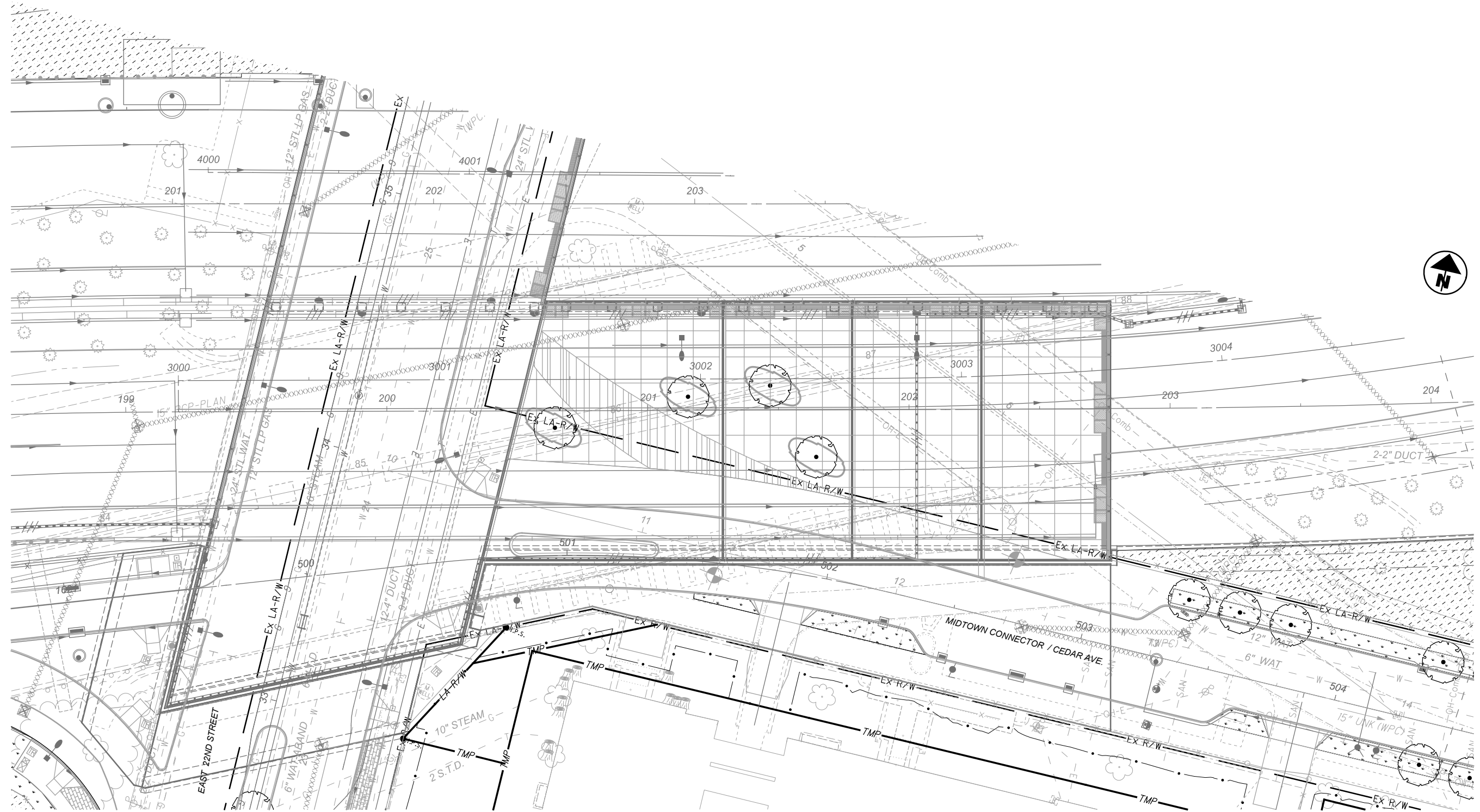
ITEM 659 - SEEDING MISC: LAWN SEED MIX



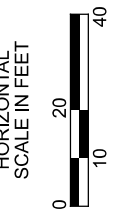
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

- 1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



LANDSCAPE PLAN
SHEET 03



CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPER SIZE: Txl (in.) DATE: 6/23/2022 TIME: 4:09:45 PM USER: Brlan.Clay
 P:\mb-us-pw-bentley.com-us-pw-03\Documents\Cleveland_OH\01_Projects\001_District\82382_400-Engineering\Landscape\Sheets\82382_PP2003.dgn

DESIGN AGENCY

Michael Baker
INTERNATIONAL

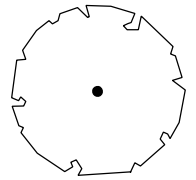
DESIGNER

REVIEWER

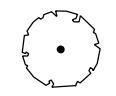
PROJECT ID
82382

SHEET	TOTAL
1417	2339

LEGEND



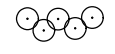
ITEM 661 - DECIDUOUS TREE



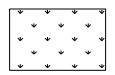
ITEM 661 - DECIDUOUS TREE (FLOWERING)



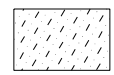
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



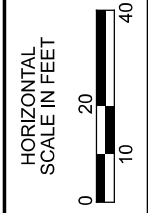
ITEM 659 - SEEDING MISC: LAWN SEED MIX



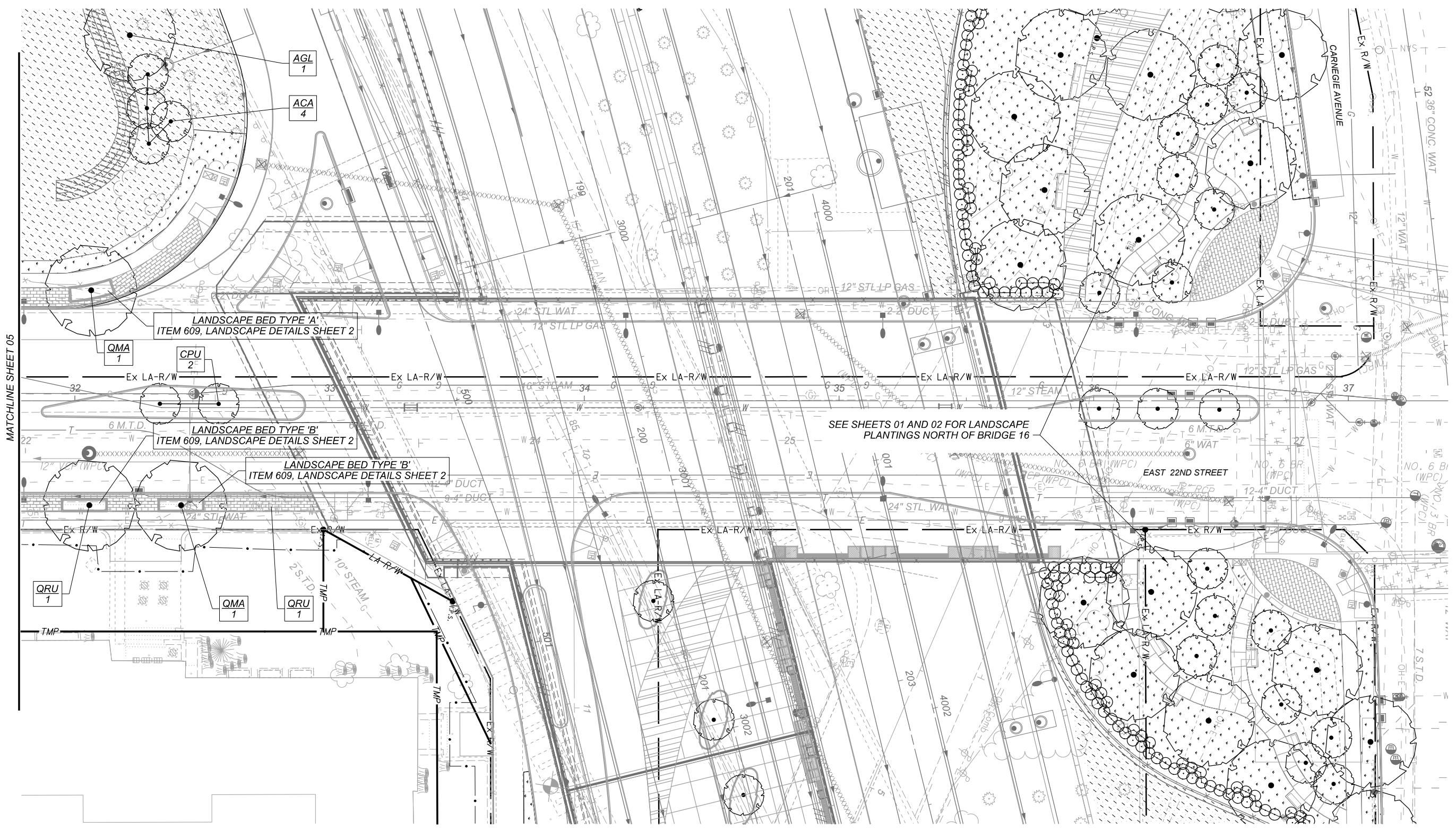
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB
2. FOR LIMITED ACCESS FACILITIES: TREES SHALL BE PLANTED MIN. 30'-0" BACK FROM EDGE OF PAVEMENT WHEN GUARDRAIL IS NOT PRESENT



LANDSCAPE PLAN
SHEET 04



DESIGN AGENCY

Michael Baker
INTERNATIONAL

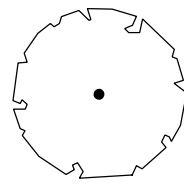
DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1418	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



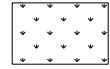
ITEM 661 - DECIDUOUS TREE (FLOWERING)



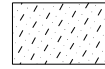
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



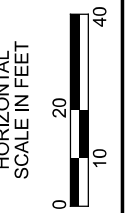
ITEM 659 - SEEDING MISC: LAWN SEED MIX



ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

- 1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



MATCHLINE SHEET 11



MATCHLINE SHEET 04

LANDSCAPE PLAN
SHEET 05

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

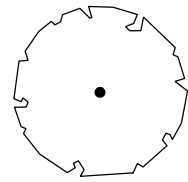
PROJECT ID

82382

SHEET TOTAL

1419 2339

LEGEND



ITEM 661 - DECIDUOUS TREE



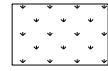
ITEM 661 - DECIDUOUS TREE (FLOWERING)



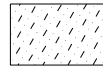
ITEM 661 - EVERGREEN TREE



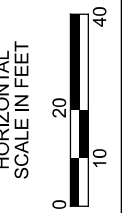
ITEM 661 - DECIDUOUS SHRUBS



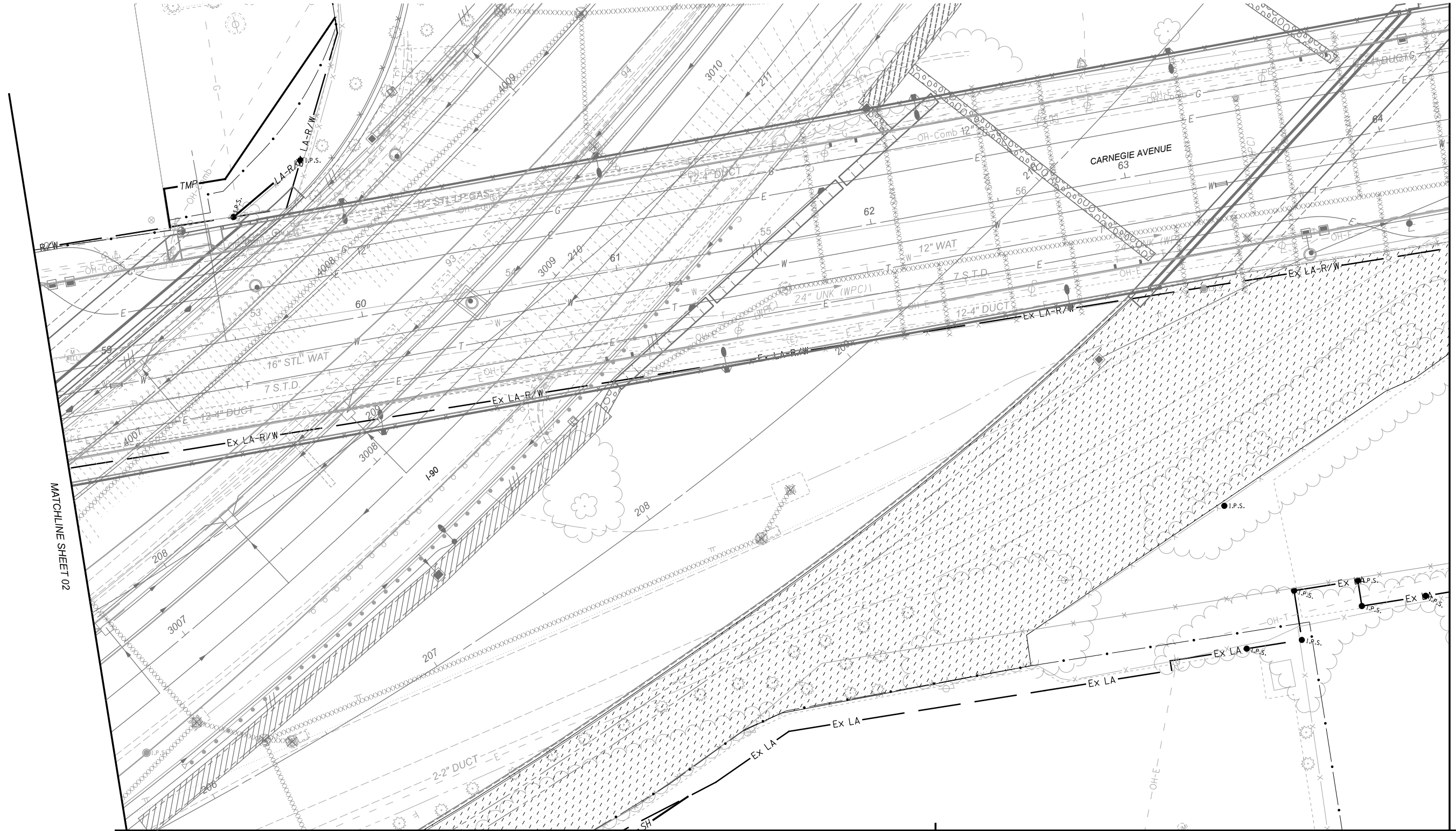
ITEM 659 - SEEDING MISC: LAWN SEED MIX



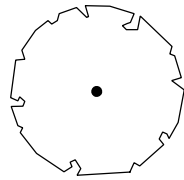
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)



CUY-90-16.28 (CCG3A)
 MODEL: Sheet PAPER:SIZE: Txl (in.) DATE: 6/23/2022 TIME: 4:09:57 PM USER: Brian.Coy
 p:\mb-us-pw\bentley.comb-us-pw-03\Documents\Cleveland_OH\OL_Proj\cts\0001\Distri\ct12_82382_400-Engineering\Landscaping\Sheets\82382_PP2006.dgn



LEGEND



ITEM 661 - DECIDUOUS TREE



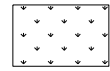
ITEM 661 - DECIDUOUS TREE (FLOWERING)



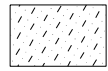
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



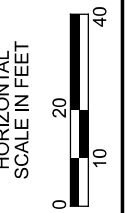
ITEM 659 - SEEDING MISC: LAWN SEED MIX



ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



LANDSCAPE PLAN
SHEET 07

DESIGN AGENCY

Michael Baker
INTERNATIONAL

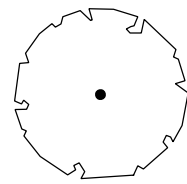
DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1421	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



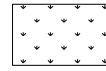
ITEM 661 - DECIDUOUS TREE (FLOWERING)



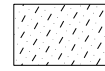
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



ITEM 659 - SEEDING MISC: LAWN SEED MIX



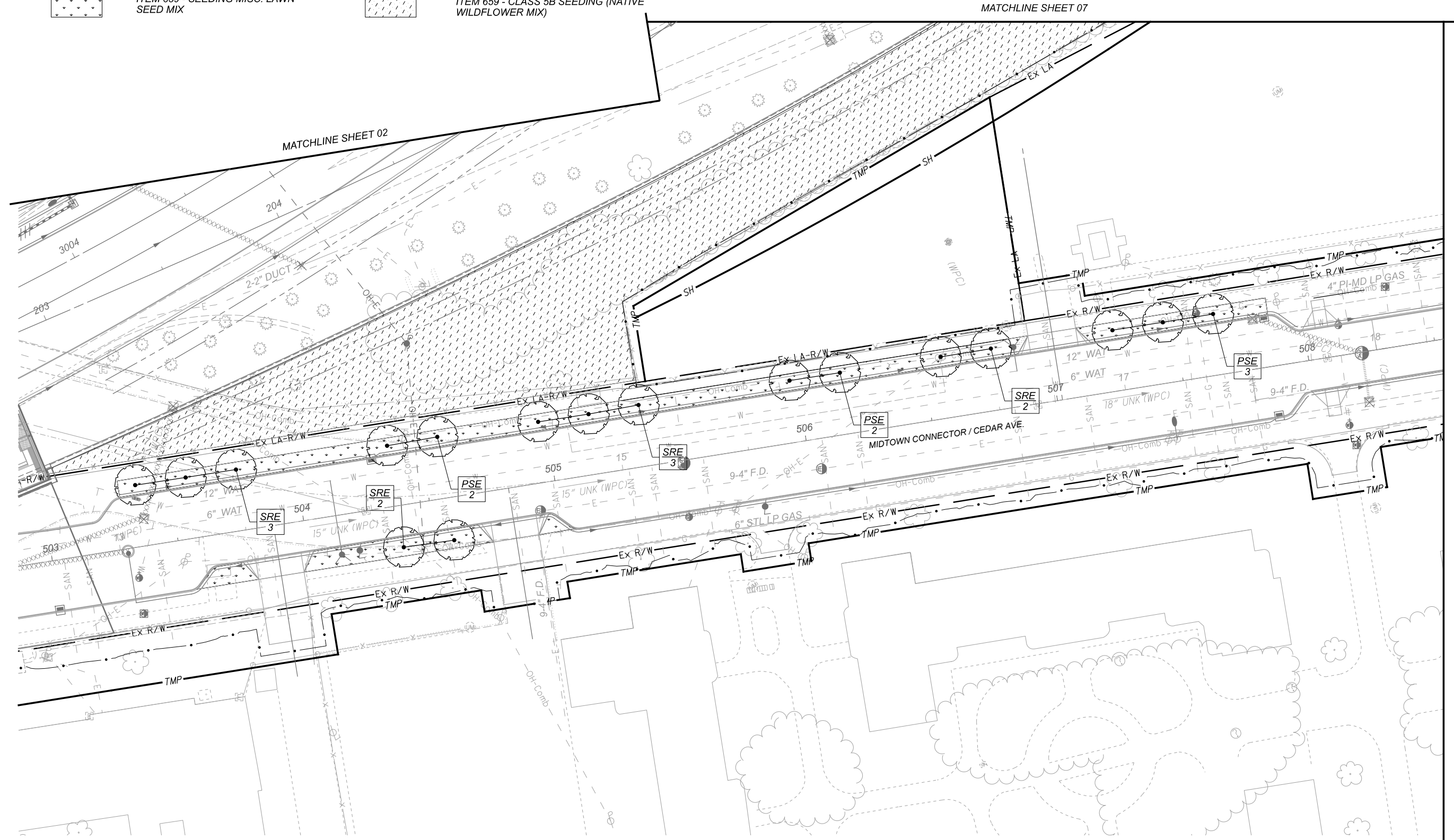
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



LANDSCAPE PLAN
SHEET 08



CUY-90-16.28 (CCG3A)
 MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 6/23/2022 TIME: 4:02:25 PM USER: Brian.Clay
 pw:\mb-us-pw-bentley.comb-us-pw-03\Documents\Cleveland_OH\01_Projects\0001_Districts\82382_400-Engineering_Landscaping_Sheets\82382_PP2008.dgn

DESIGN AGENCY

Michael Baker
INTERNATIONAL

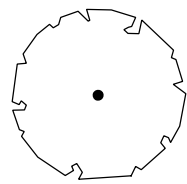
DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1422	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



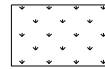
ITEM 661 - DECIDUOUS TREE (FLOWERING)



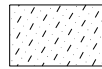
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



ITEM 659 - SEEDING MISC: LAWN SEED MIX



ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB



MATCHLINE SHEET 06

MATCHLINE SHEET 07



CUY-90-16.28 (CCG3A)

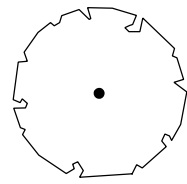
MODEL: Sheet PAPER: 11x17 (in.) DATE: 6/23/2022 TIME: 4:03:38 PM USER: Brlan.Clay
 p:\mb-us-pw\entley.comb-us-pw-03\Documents\Cleveland_OH\01_Projects\0001_District\82382_400-Engineering\Landscape\82382_PP2009.dgn

MATCHLINE SHEET 08

LANDSCAPE PLAN
SHEET 09

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET	1423
TOTAL	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



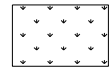
ITEM 661 - DECIDUOUS TREE (FLOWERING)



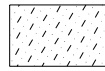
ITEM 661 - EVERGREEN TREE



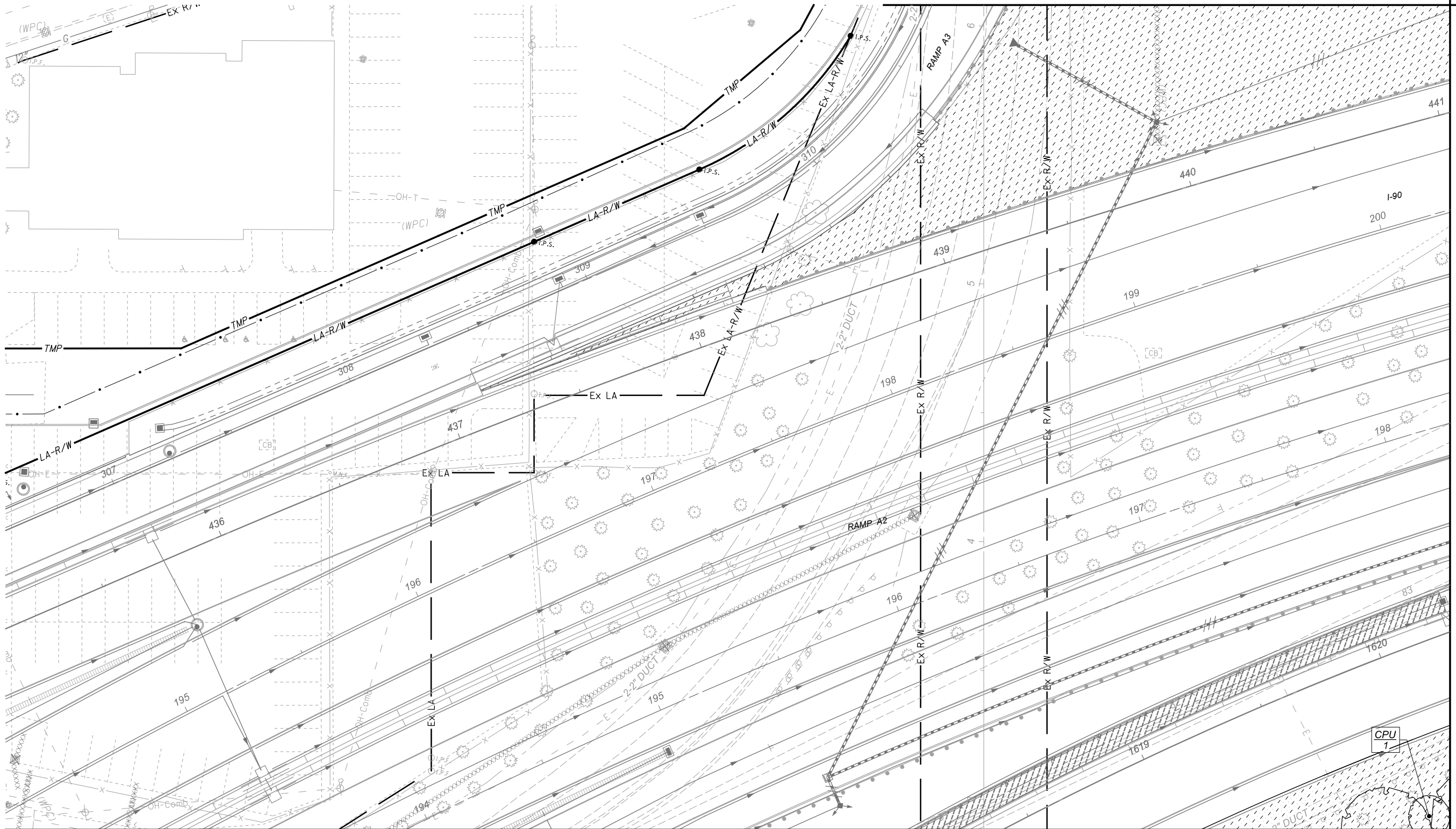
ITEM 661 - DECIDUOUS SHRUBS



ITEM 659 - SEEDING MISC: LAWN SEED MIX



ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)



MATCHLINE SHEET 01

MATCHLINE SHEET 04

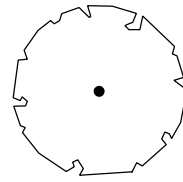
MATCHLINE SHEET 11



LANDSCAPE PLAN
 SHEET 10

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1424 2339

LEGEND



ITEM 661 - DECIDUOUS TREE



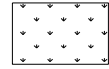
ITEM 661 - DECIDUOUS TREE (FLOWERING)



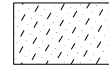
ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUBS



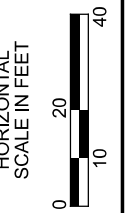
ITEM 659 - SEEDING MISC: LAWN SEED MIX



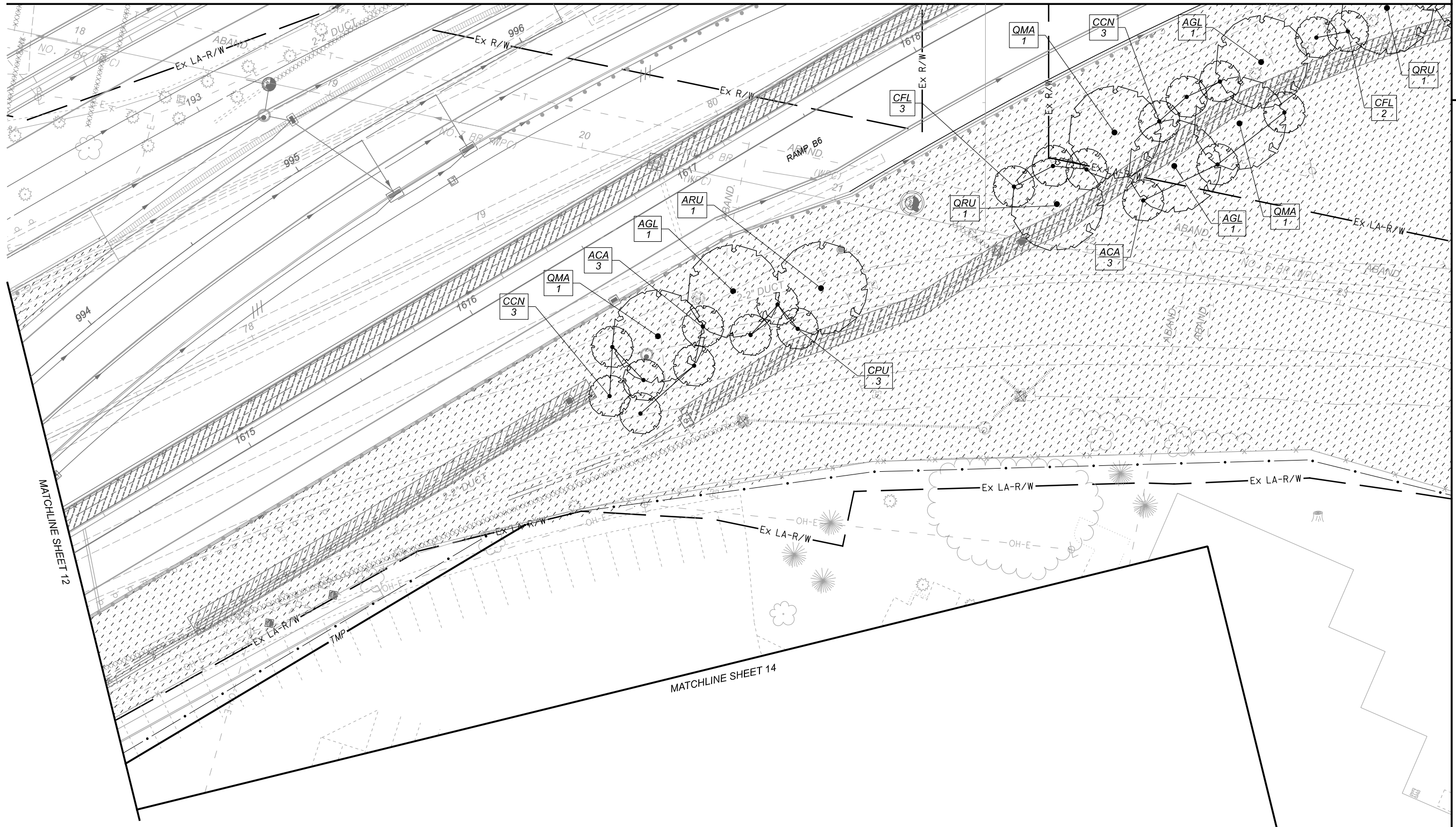
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

1. FOR LIMITED ACCESS FACILITIES: TREES SHALL BE PLANTED MIN. 30'-0" BACK FROM EDGE OF PAVEMENT WHEN GUARDRAIL IS NOT PRESENT



MATCHLINE SHEET 10










CUY-90-16.28 (CCG3A)

MODEL: Sheet PAPER SIZE: 11x17 (in.) DATE: 6/23/2022 TIME: 4:10:05 PM USER: Brien, Clay
 P:\mb-us-pw-bentley.com-us-pw-03\Documents\Cleveland_OH\01_Projects\ODOT\Distric12\82382\400-Engineering\Landscape\Sheets\82382_PP201.dgn

LANDSCAPE PLAN
SHEET 11

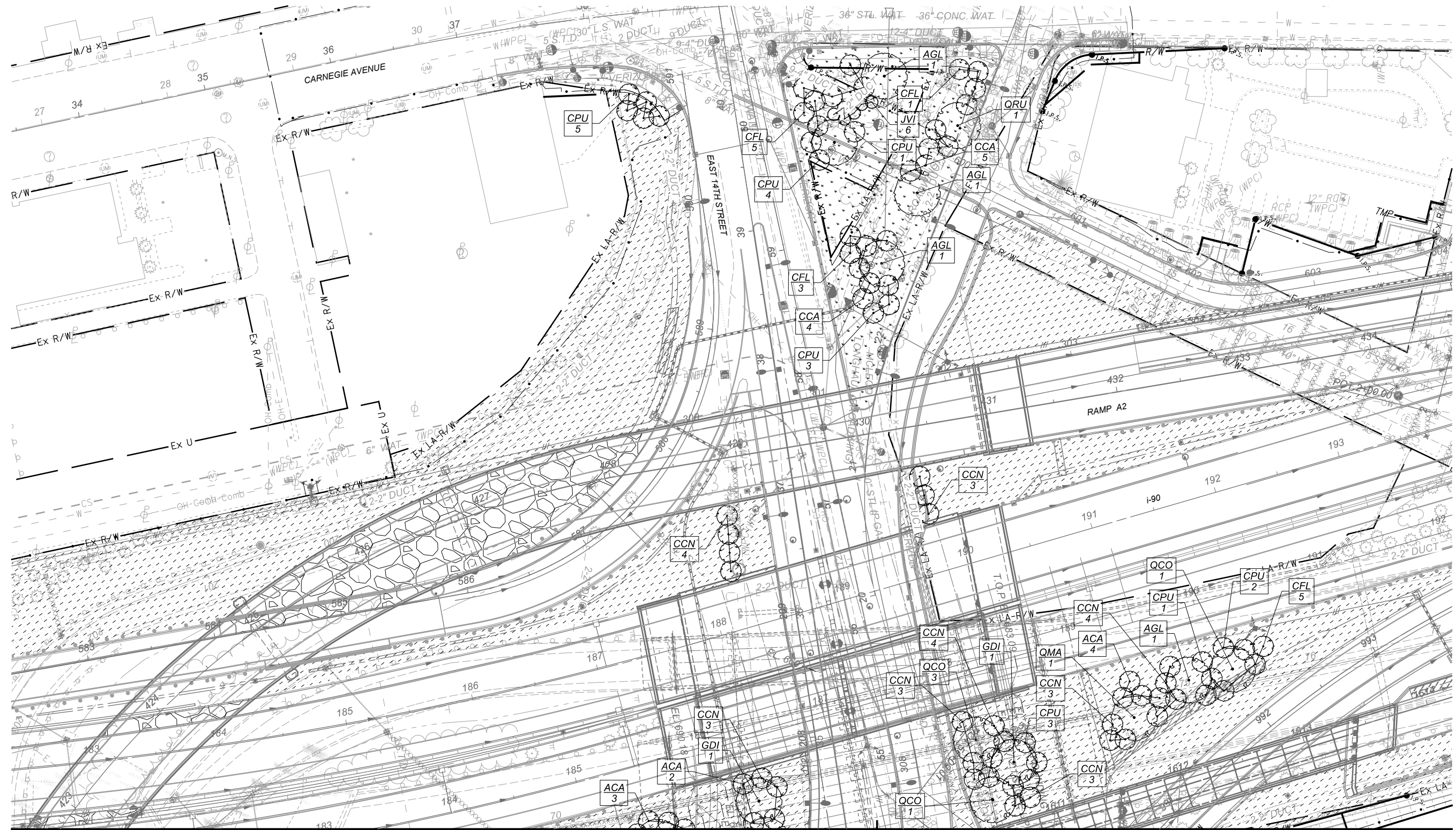
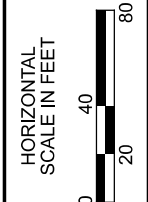
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1425 2339

LEGEND

-  ITEM 661 - DECIDUOUS TREE
-  ITEM 661 - DECIDUOUS TREE (FLOWERING)
-  ITEM 661 - EVERGREEN TREE
-  ITEM 661 - DECIDUOUS SHRUB
-  ITEM 659 - SEEDING MISC: LAWN SEED MIX
-  ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)
-  ITEM 601 - ROCK CHANNEL PROTECTION, TYPE D WITH GEOTEXTILE FABRIC, AS PER PLAN

NOTES:

1. FOR STREETSCAPES: TREES SHALL BE PLANTED A MINIMUM OF 4'-0" FROM BACK OF CURB
2. FOR LIMITED ACCESS FACILITIES: TREES SHALL BE PLANTED MIN. 30'-0" BACK FROM EDGE OF PAVEMENT WHEN GUARDRAIL IS NOT PRESENT



MATCHLINE SHEET 13

MATCHLINE SHEET 14

LANDSCAPE PLAN
SHEET 12

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1426	2339

LEGEND



ITEM 661 - DECIDUOUS TREE



ITEM 661 - DECIDUOUS TREE (FLOWERING)



ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUB



ITEM 659 - SEEDING MISC: LAWN SEED MIX



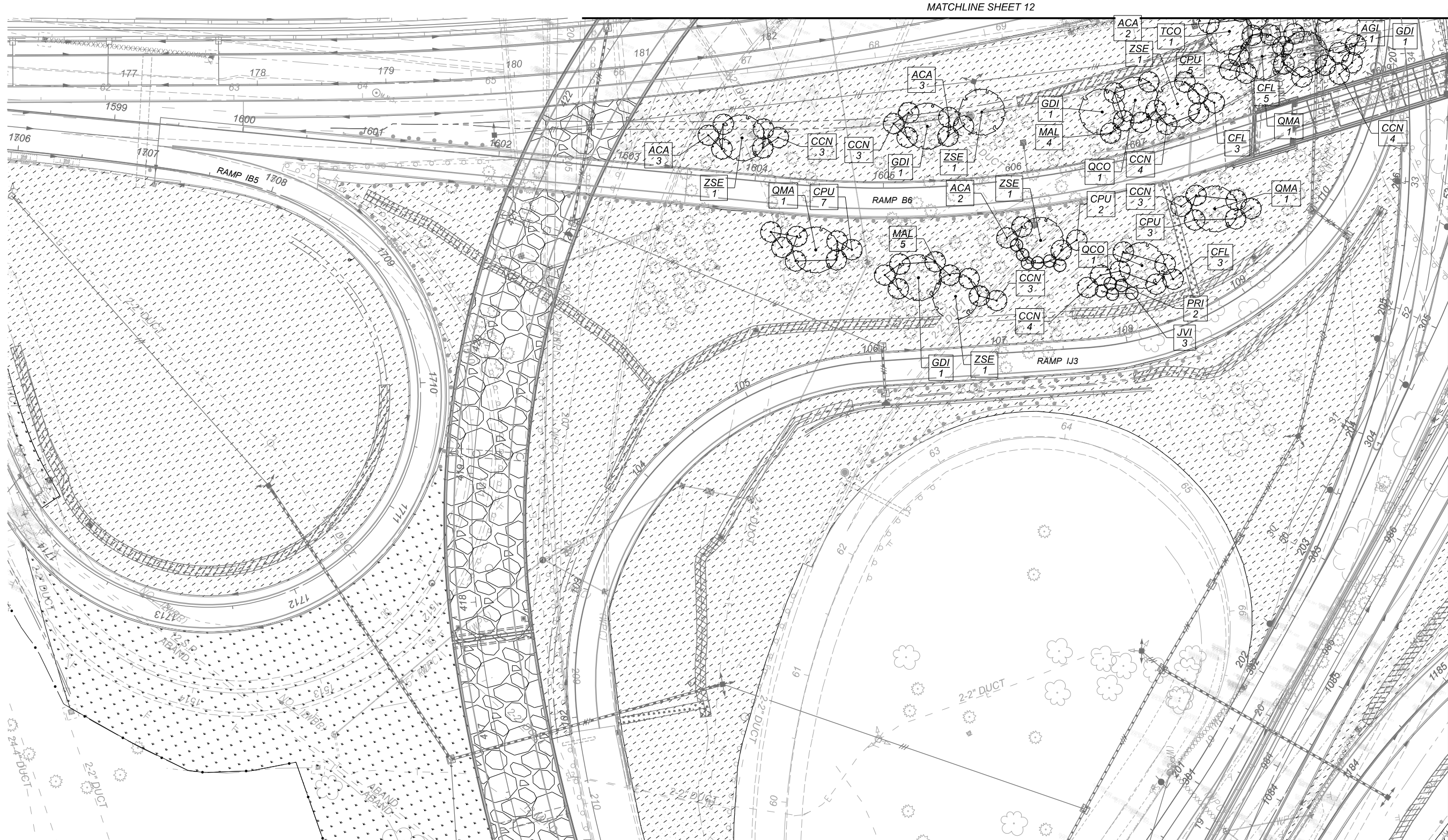
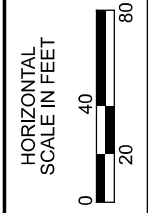
ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)



ITEM 601 - ROCK CHANNEL PROTECTION, TYF D WITH GEOTEXTILE FABRIC, AS PER PLAN

NOTES:

1. FOR LIMITED ACCESS FACILITIES: TREES SHALL BE PLANTED MIN. 30'-0" BACK FROM EDGE OF PAVEMENT WHEN GUARDRAIL IS NOT PRESENT



MATCHLINE SHEET 12

MATCHLINE SHEET 14

MATCHLINE SHEET 15

LANDSCAPE PLAN SHEET 13

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	—
REVIEWER	—
PROJECT ID	82382
SHEET TOTAL	1427 2339

LEGEND



ITEM 661 - DECIDUOUS TREE



ITEM 661 - DECIDUOUS TREE (FLOWERING)



ITEM 661 - EVERGREEN TREE



ITEM 661 - DECIDUOUS SHRUB



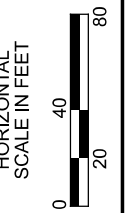
ITEM 659 - SEEDING MISC: LAWN SEED MIX



ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)

NOTES:

- 1. FOR LIMITED ACCESS FACILITIES: TREES SHALL BE PLANTED MIN. 30'-0" BACK FROM EDGE OF PAVEMENT WHEN GUARDRAIL IS NOT PRESENT



LANDSCAPE PLAN
SHEET 14

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER








PROJECT ID

82382

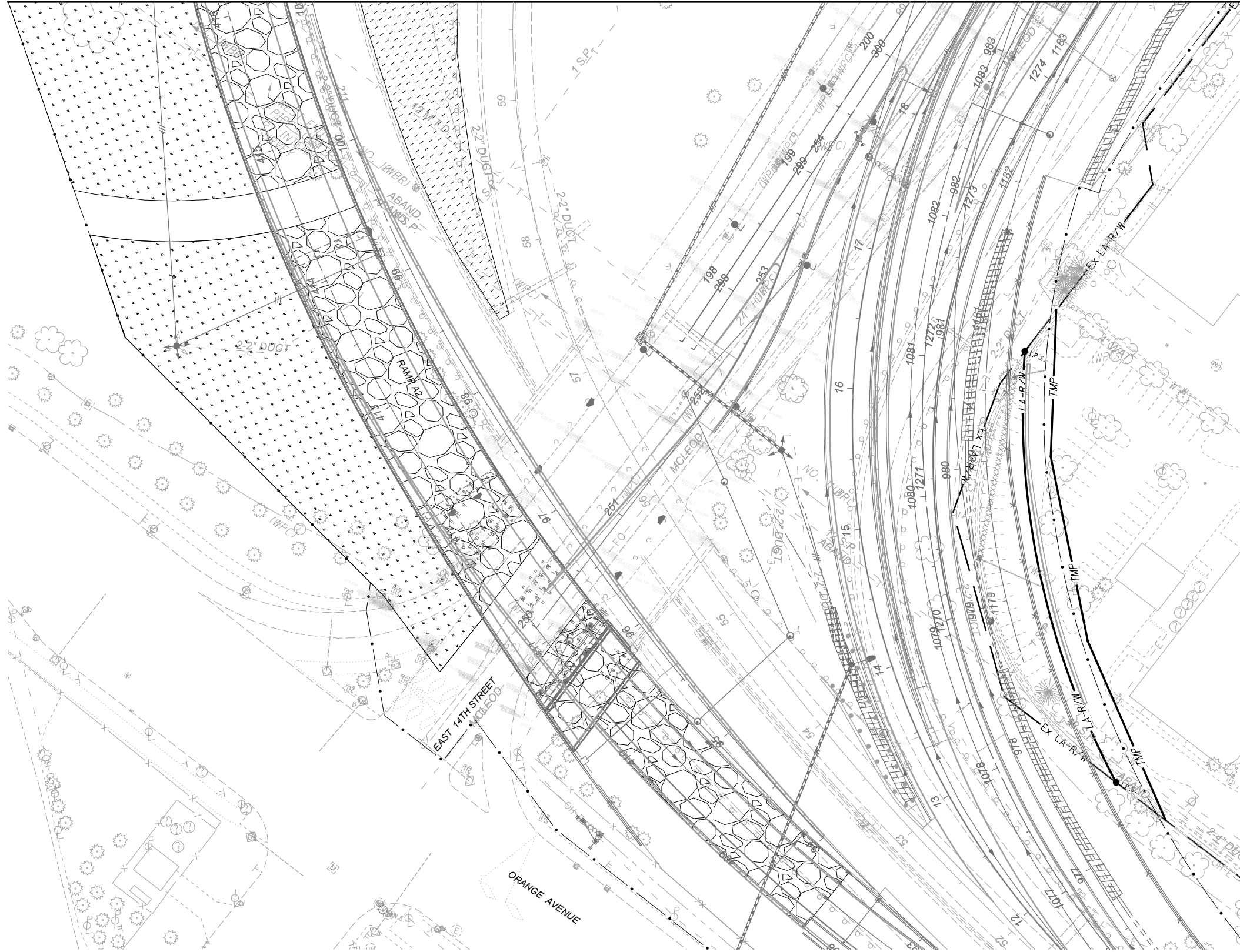
SHEET TOTAL

1428 2339

LEGEND

-  ITEM 661 - DECIDUOUS TREE
-  ITEM 661 - DECIDUOUS TREE (FLOWERING)
-  ITEM 661 - EVERGREEN TREE
-  ITEM 661 - DECIDUOUS SHRUB
-  ITEM 659 - SEEDING MISC: LAWN SEED MIX
-  ITEM 659 - CLASS 5B SEEDING (NATIVE WILDFLOWER MIX)
-  ITEM 601 - ROCK CHANNEL PROTECTION, TYPE D WITH GEOTEXTILE FABRIC, AS PER PLAN

MATCHLINE SHEET 13



LANDSCAPE PLAN
SHEET 15



DESIGN AGENCY

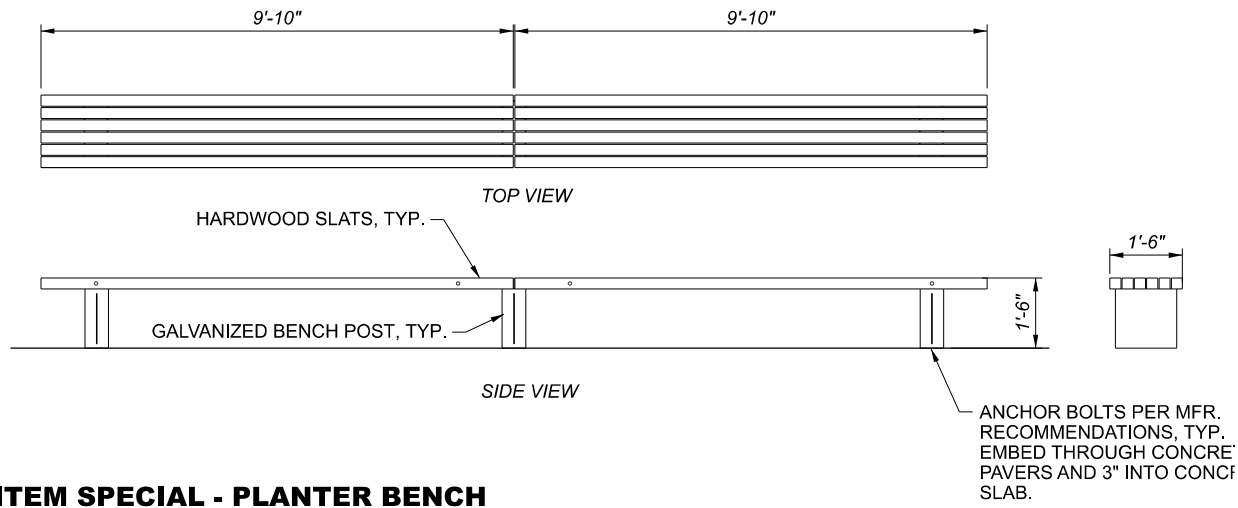
Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

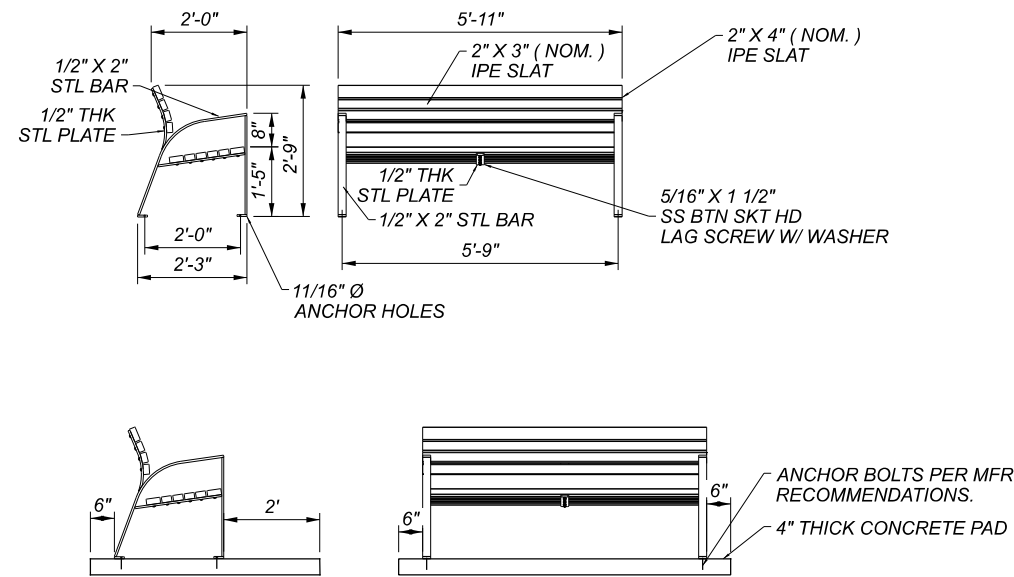
PROJECT ID
82382

SHEET	TOTAL
1429	2339



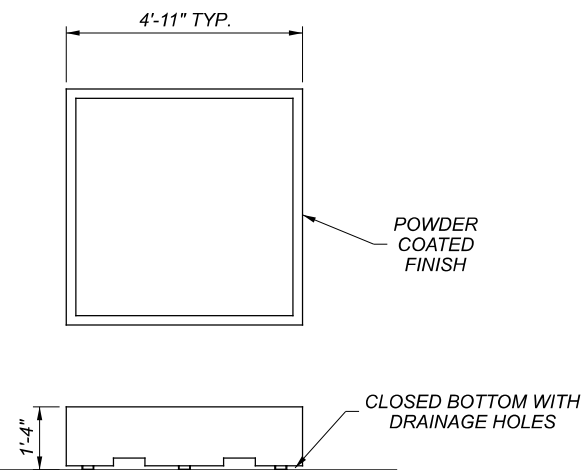
ITEM SPECIAL - PLANTER BENCH

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



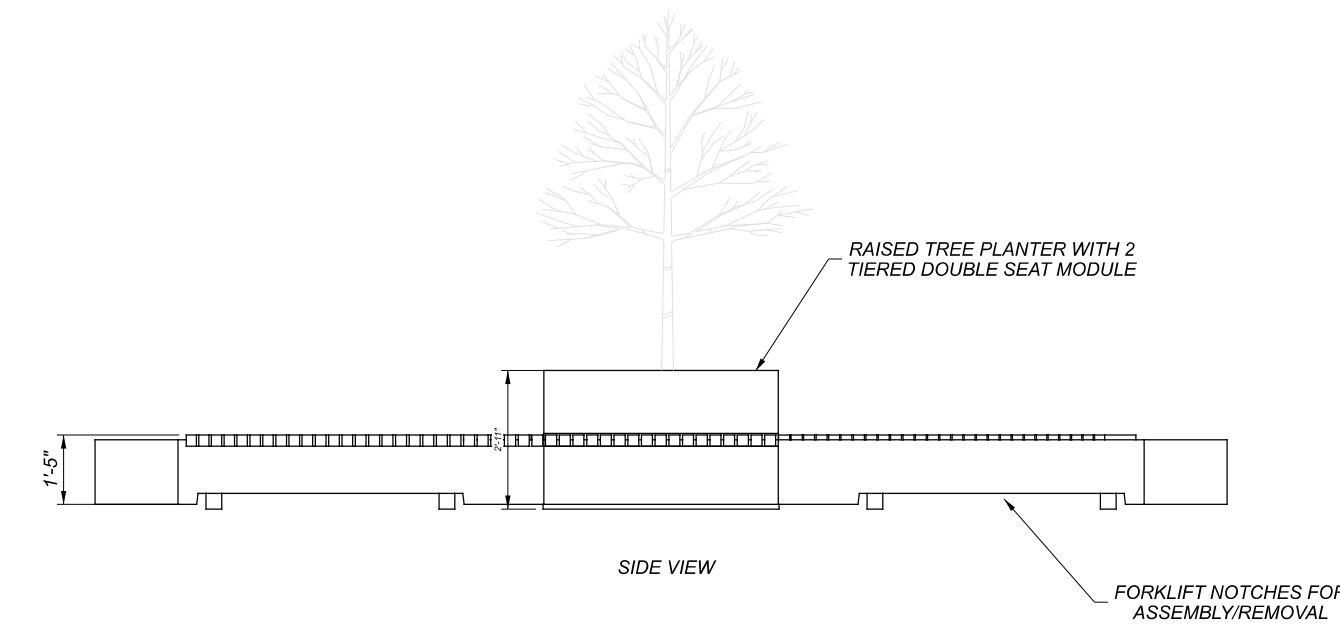
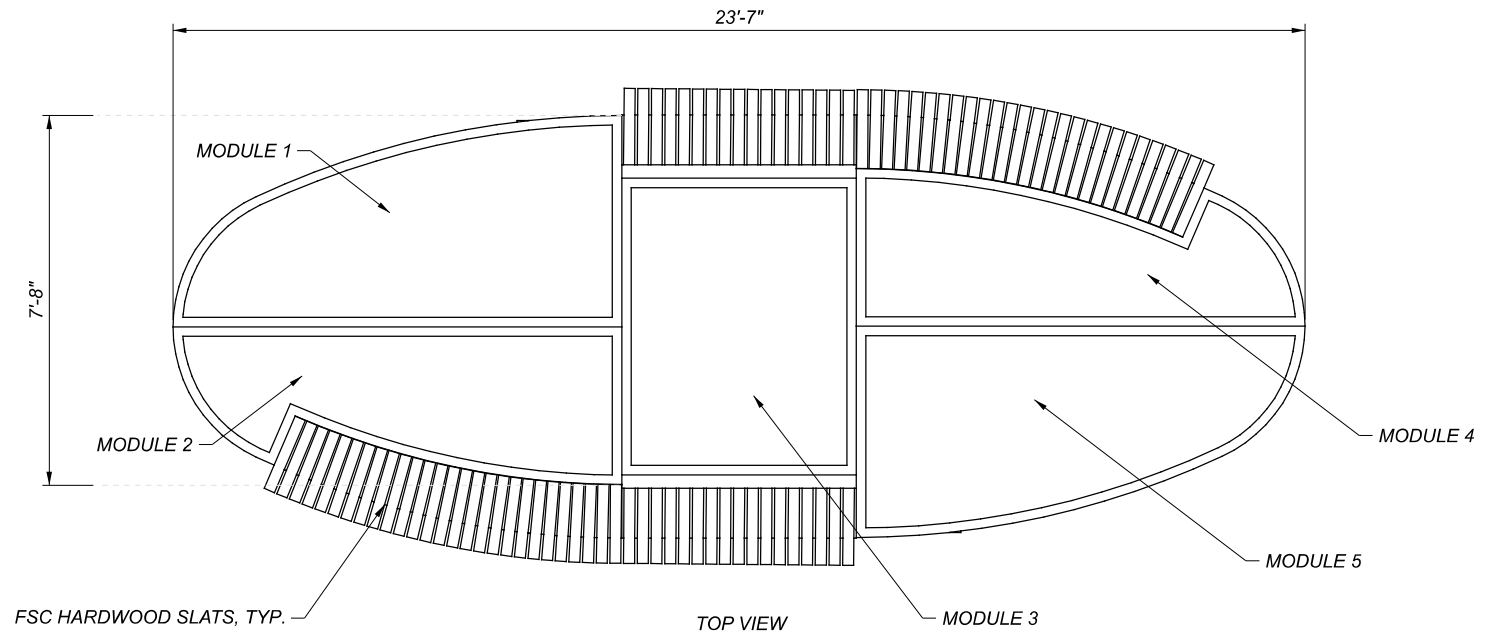
ITEM SPECIAL - PARK BENCH

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



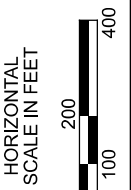
ITEM SPECIAL - SQUARE PLANTER

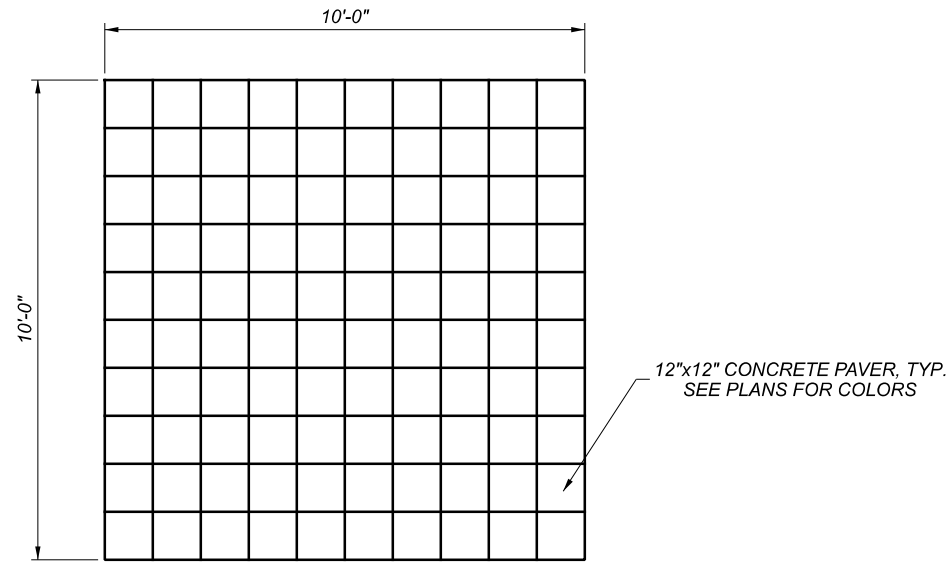
SCALE: 1/2" = 1'-0"



ITEM SPECIAL - OVAL PLANTER BENCH

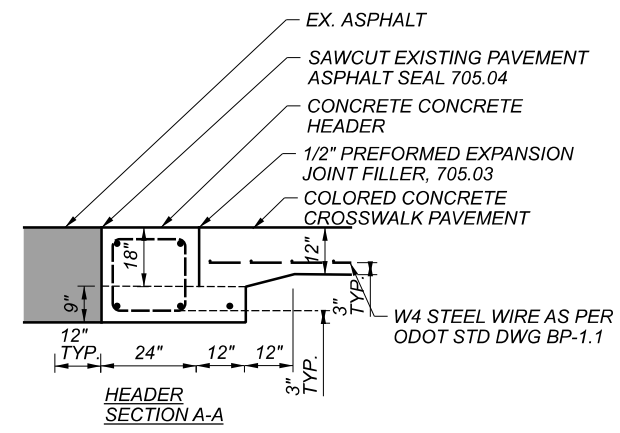
SCALE: 1/2" = 1'-0"



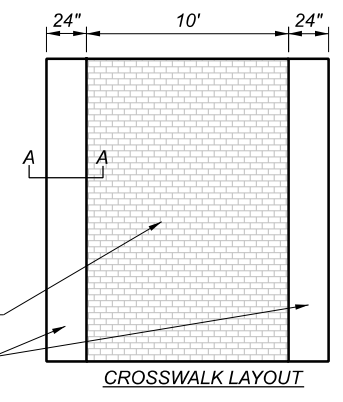
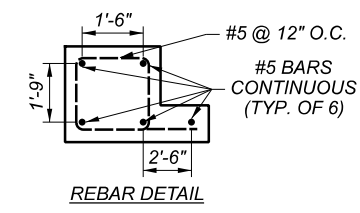


ITEM 608 - PAVERS OVER CONCRETE (SQUARE)

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

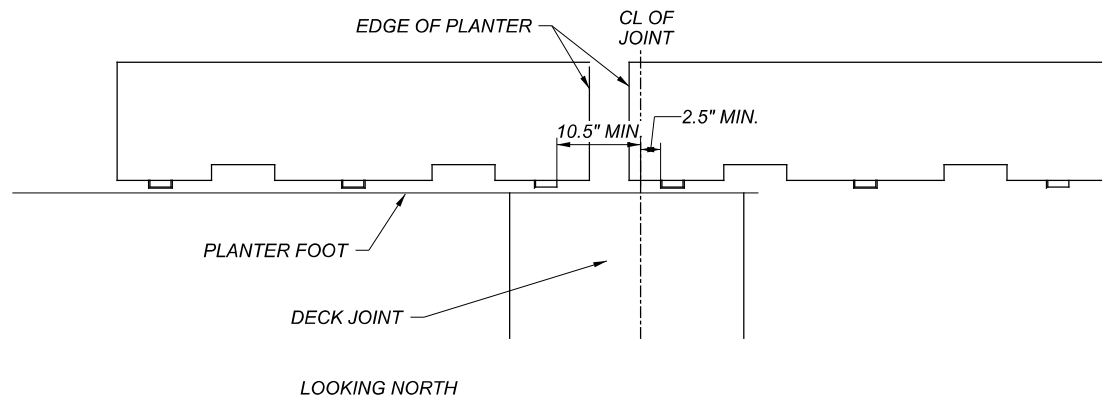


- CROSSWALK NOTES:**
 1. ALL REINFORCING STEEL AND TIES ARE TO BE EPOXY COATED
 2. THE CONCRETE HEADER SHALL BE A SEPARATE POUR FROM THE COLORED CONCRETE PAVEMENT



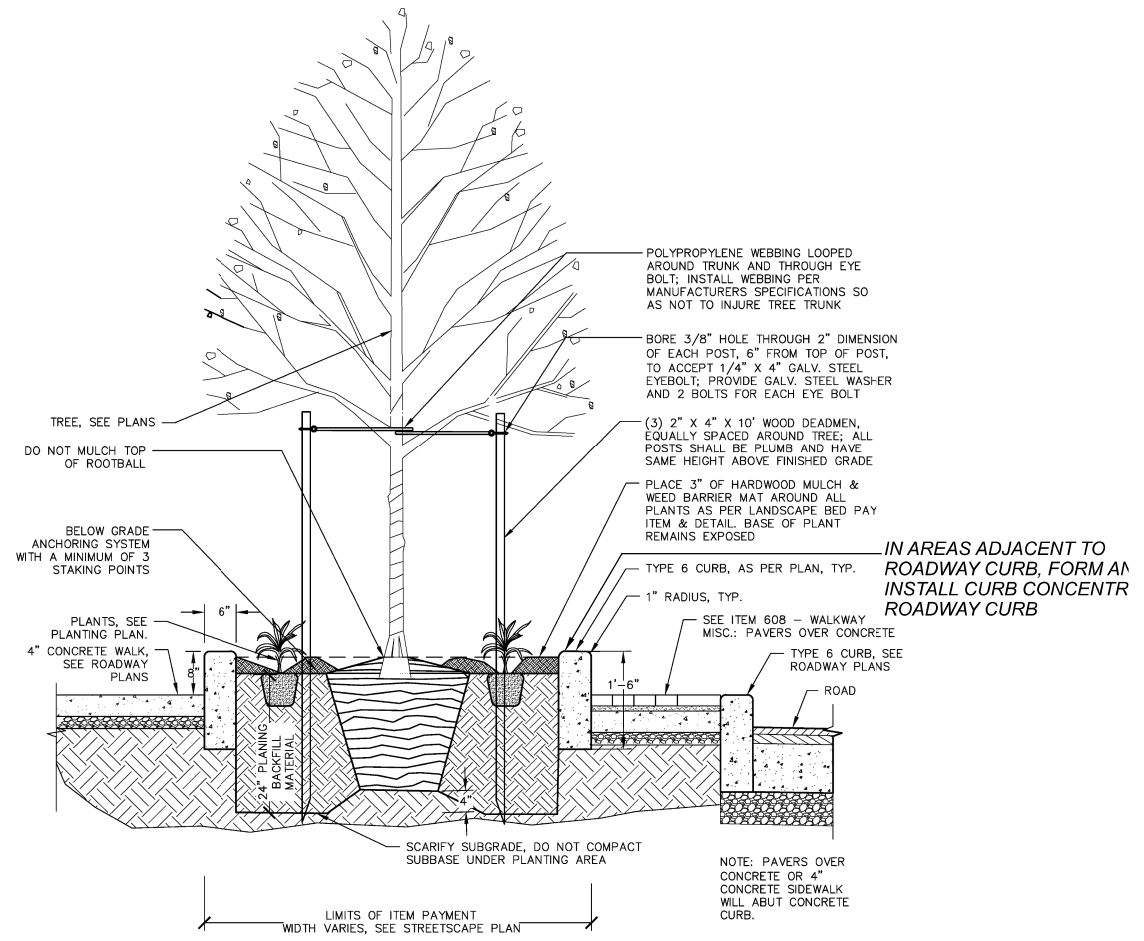
ITEM 451 - REINFORCED CONCRETE, MISC.: CONCRETE CROSSWALK - INTEGRALLY COLORED

SCALE: NTS



SQUARE PLANTER OVER DECK JOINT

SCALE: 1"=1'-0"



CURBED PLANTER

SCALE: NTS



DESIGN AGENCY

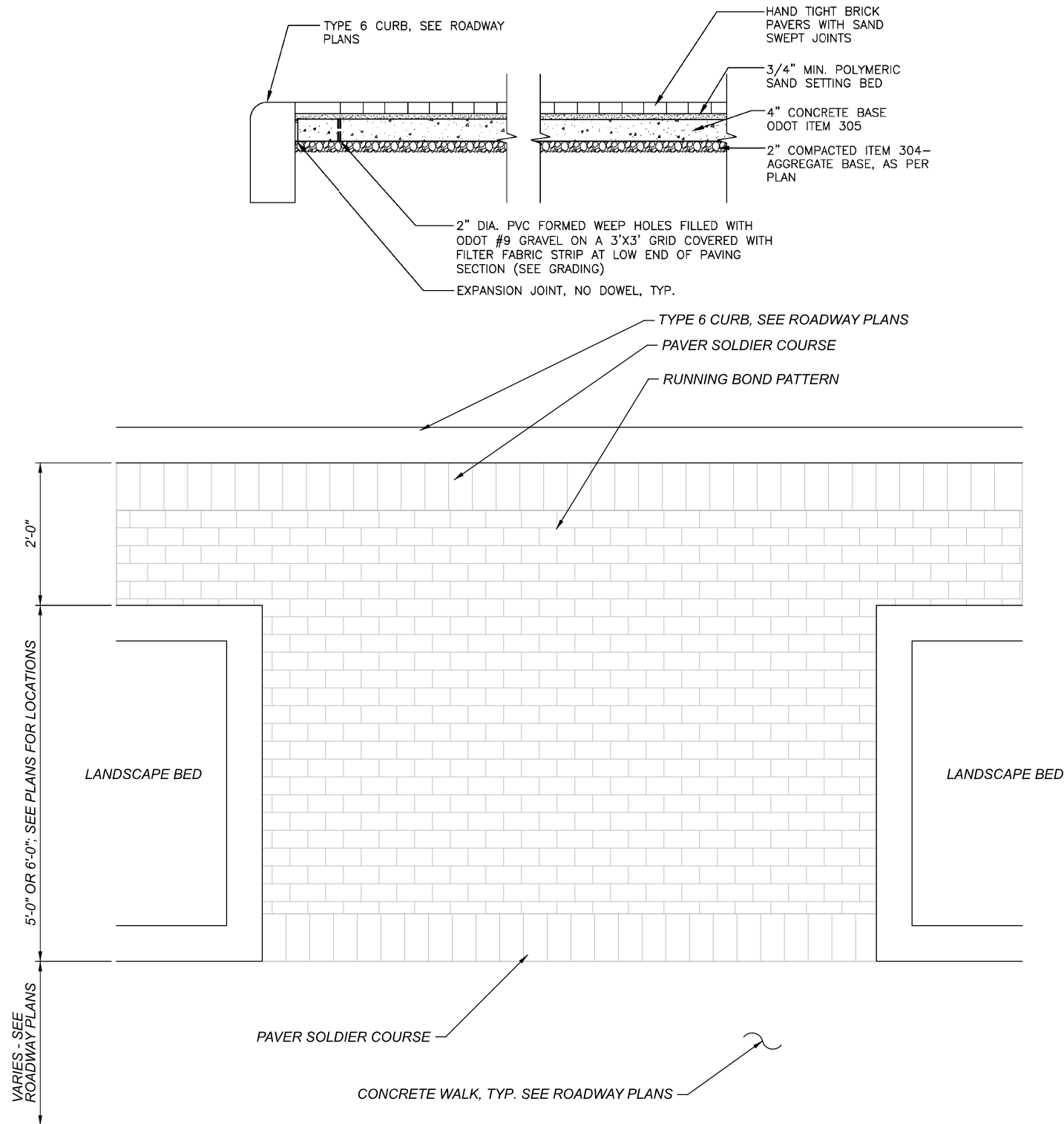
Michael Baker INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
 82382

SHEET TOTAL
 1431 2339

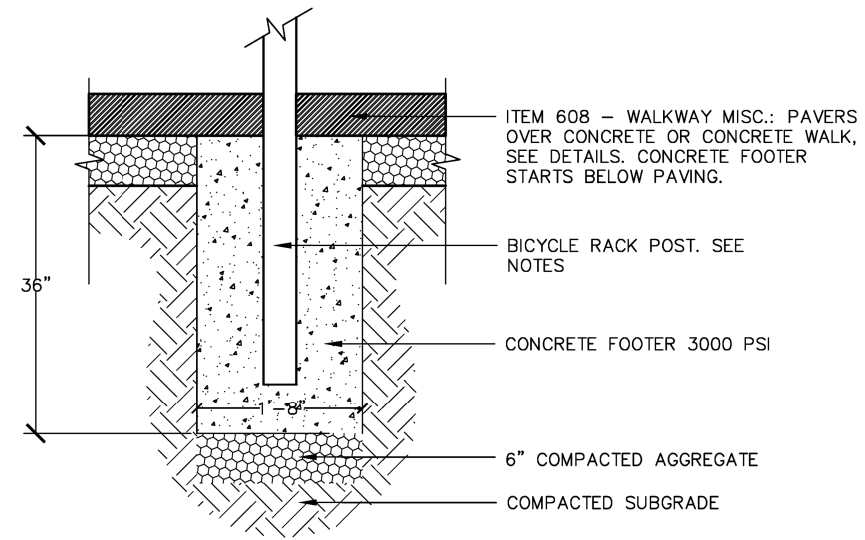
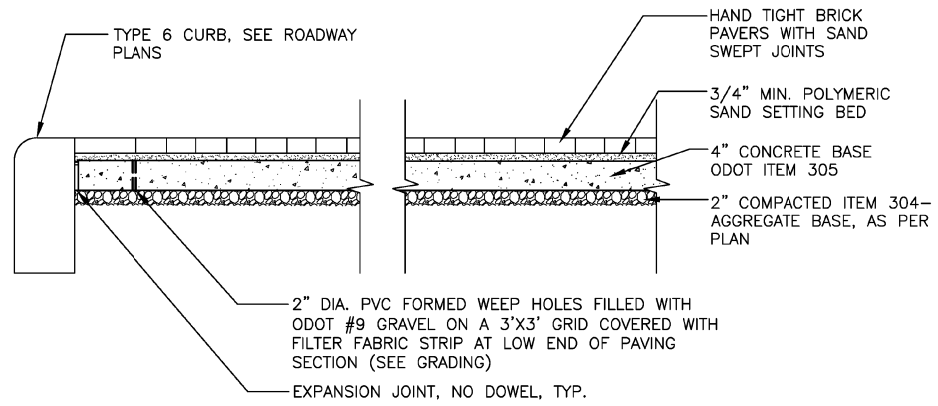


NOTES:

1. SEE STREETScape PLANS AND DETAILS FOR PAVER TYPE & PATTERN LAYOUTS
2. CONSTRUCTION JOINTS PLACED EVERY 10'X10' MIN. EXPANSION JOINTS PLACED EVERY 30'X30' MIN., HOWEVER, JOINTS SHALL BE FIELD ADJUSTED SO FULL BRICKS ARE USED
3. CONCRETE COLLAR SHALL BE PLACED AROUND ALL UTILITIES INCLUDING LIGHT POLES, GAS, WATER VALVES, AND PULL BOXES.
4. ALL ABOVE DETAILS ARE INCIDENTAL TO ITEM 608 WALKWAY, MISC: PAVERS OVER CONCRETE.

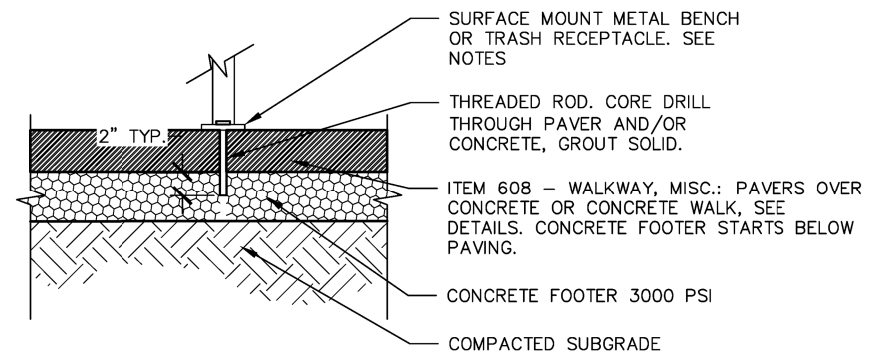
WALKWAY, MISC.: PAVERS OVER CONCRETE

SCALE: NTS



ITEM SPECIAL - BICYCLE RACK (ANCHORING DETAIL)

SCALE: NTS



NOTE:

1. CENTER BENCH LEG OR TRASH RECEPTACLE ANCHORING POINT AND DRILL LOCATION 1" OFFSET TO PAVER EDGES TO REDUCE PAVER CRACKING.
2. SIZE THREADED RODS ACCORDING TO PRODUCT AND DEPTH OF ANCHORING.

SURFACE MOUNTING DETAIL FOR TRASH RECEPTACLE AND MISC: PARK BENCH

SCALE: NTS



DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

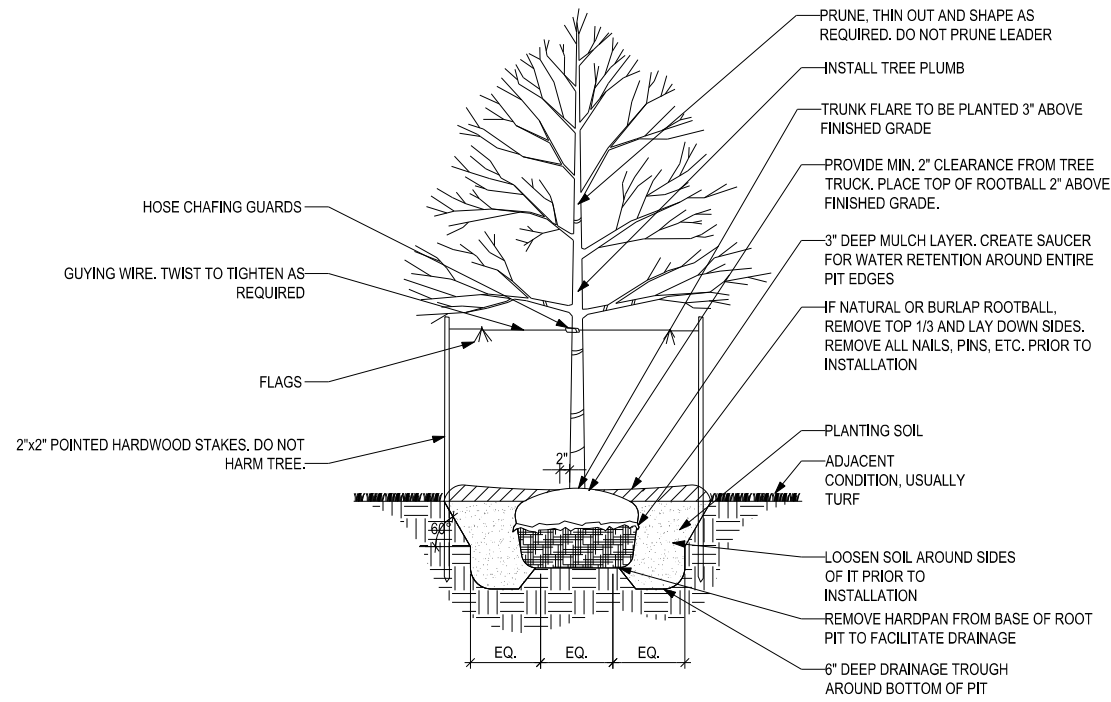
REVIEWER

PROJECT ID

82382

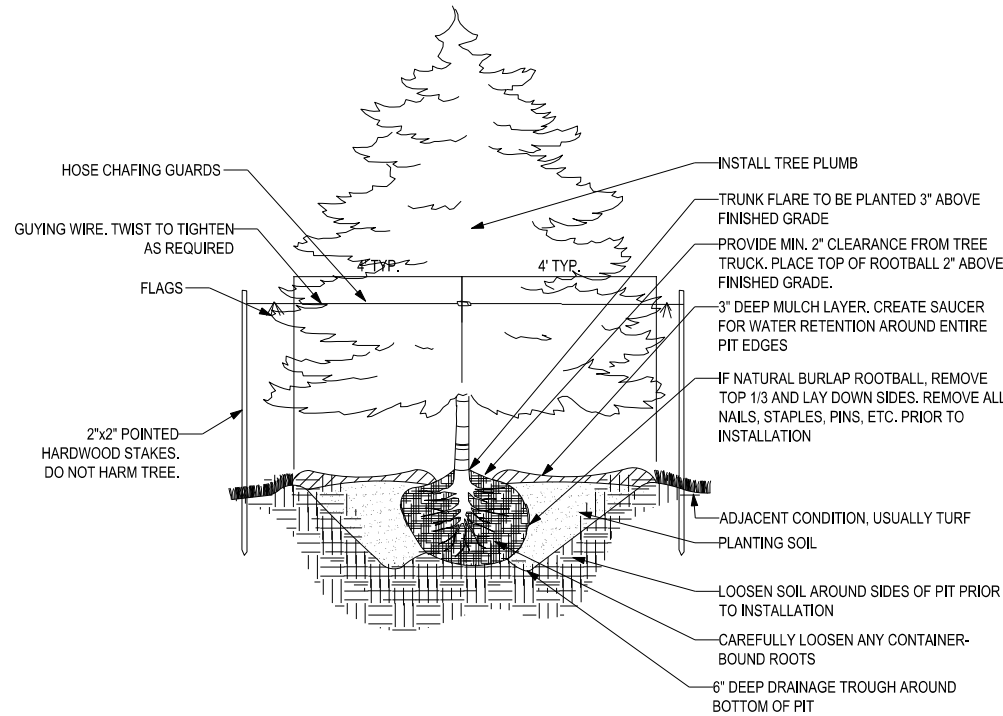
SHEET TOTAL

1432 2339



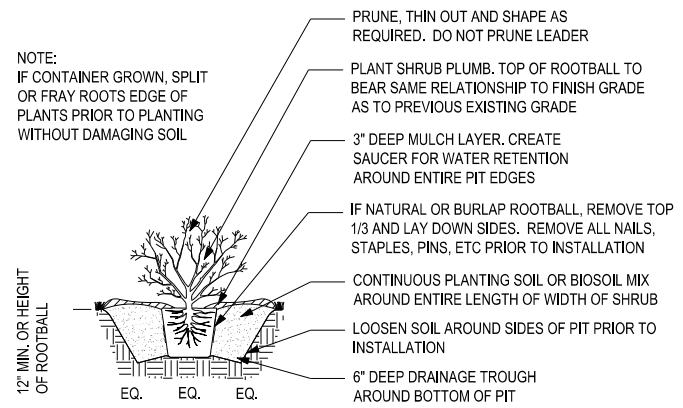
ITEM 661 - EVERGREEN TREE PLANTING

SCALE: NTS



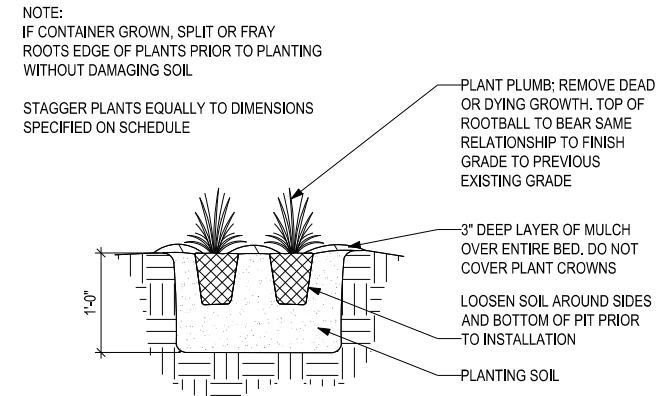
ITEM 661 - EVERGREEN TREE PLANTING

SCALE: NTS



ITEM 661 - SHRUB PLANTING

SCALE: NTS



ITEM 661 - PERENNIAL AND ORNAMENTAL GRASS PLANTING

SCALE: NTS

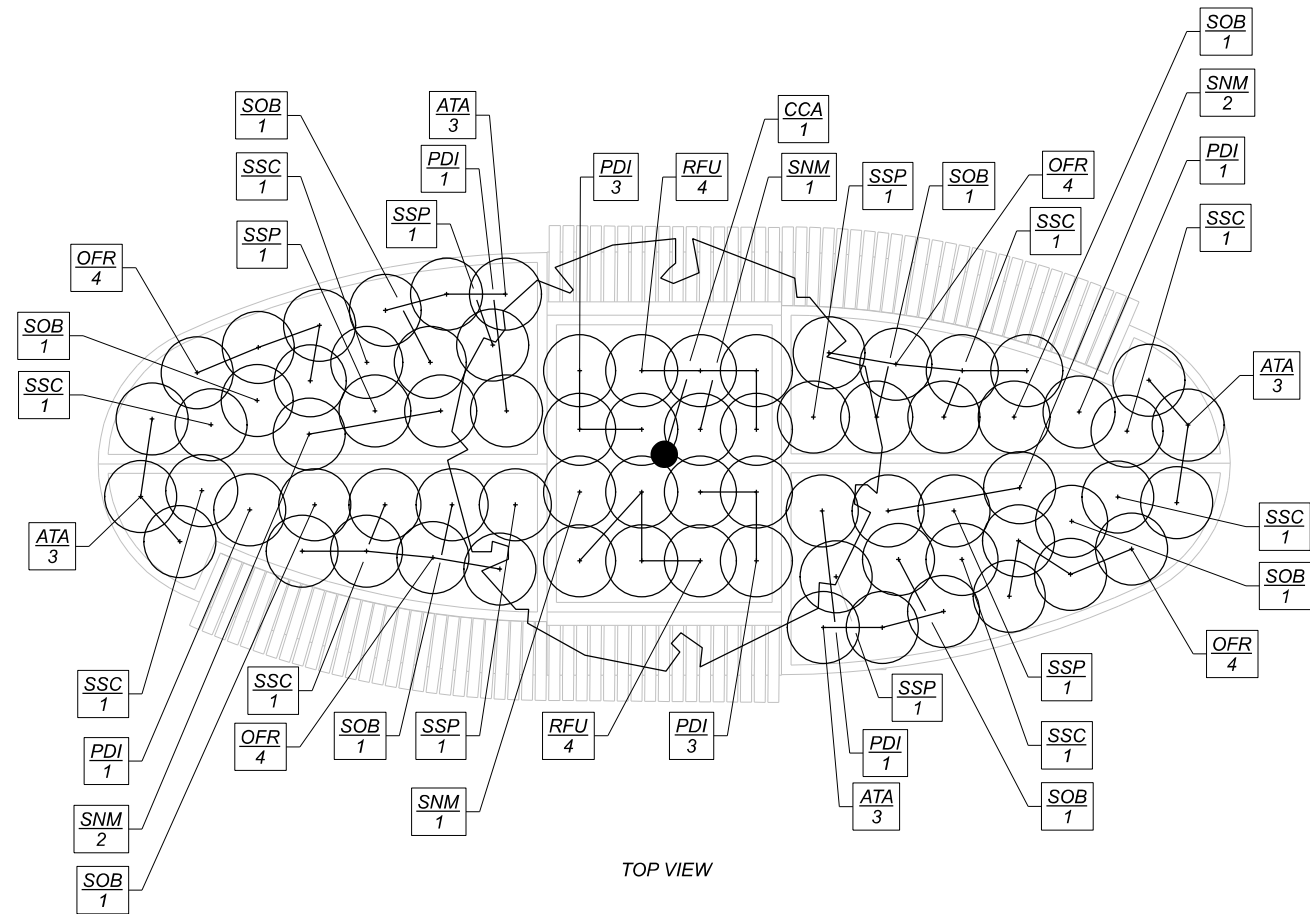
DECIDUOUS TREES						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
9	ARS	<i>Acer rubrum</i> 'Somerset'	Somerset Red Maple	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
13	AGL	<i>Aesculus glabra</i>	Ohio Buckeye	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
0	BNI	<i>Betula nigra</i> 'Dura Heat'	Dura Heat River Birch	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
9	GTR	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Honeylocust	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
12	GDI	<i>Gymnocladus dioica</i> 'Stately Manor'	Kentucky Coffeetree	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
7	POC	<i>Platanus occidentalis</i>	American Sycamore	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
22	QCO	<i>Quercus coccinea</i>	Scarlet Oak	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
11	QMA	<i>Quercus macrocarpa</i>	Bur Oak	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
8	QRU	<i>Quercus rubra</i>	Red Oak	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
1	TCO	<i>Tilia cordata</i>	Littleleaf Linden	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
10	ZSE	<i>Zelkova serrata</i> 'Green Vase'	Green Vase Zelkova	2.5" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen

FLOWERING TREES						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
35	ACA	<i>Amelanchier canadensis</i> 'Autumn Brilliance'	Autumn Brilliance Serviceberry	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
15	CCA	<i>Carpinus caroliniana</i>	Musclewood	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
85	CCN	<i>Cercis canadensis</i>	Eastern Redbud	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
50	CFL	<i>Cornus florida</i>	Flowering Dogwood	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
56	CPU	<i>Crataegus punctata</i> 'Ohio Pioneer'	Ohio Pioneer Hawthorn	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
12	MAL	<i>Malus</i> sp.	Crabapple sp.	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
0	CPE	<i>Parrotia persica</i> 'Vanessa'	Persian Ironwood	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
25	PSE	<i>Prunus serrulata</i> 'Kwanzan'	Kwanzan Flowering Cherry	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen
25	SRE	<i>Syringa reticulata</i> 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2" cal	as shown	B&B, full uniform crown, symmetrical branching, full specimen

EVERGREEN TREES						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
73	JVI	<i>Juniperus virginiana</i> 'Canaertii'	Eastern Redcedar	6' ht.	as shown	B&B, full uniform crown, symmetrical branching, full specimen
53	PRI	<i>Pinus rigida</i>	Pitch Pine	6' ht.	as shown	B&B, full uniform crown, symmetrical branching, full specimen

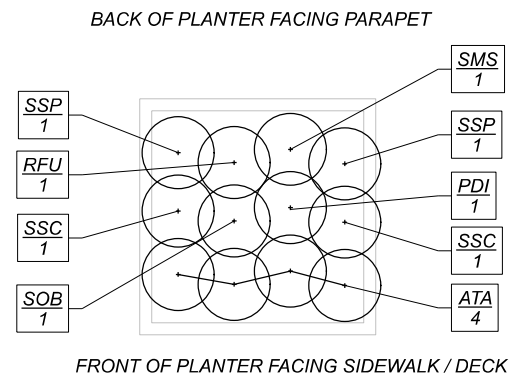
SHRUBS						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
58	MPE	<i>Myrica pensylvanica</i>	Northern Bayberry	3 gal.	as shown	Healthy, vigorous, well-rooted & established
43	RAR	<i>Rhus aromatica</i>	Fragrant Sumac	3 gal.	as shown	Healthy, vigorous, well-rooted & established
50	VDE	<i>Viburnum dentatum</i>	Southern Arrowwood	3 gal.	as shown	Healthy, vigorous, well-rooted & established

HERBACEOUS PLANTS						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
216	ATA	<i>Amsonia tabernaemontana</i> 'Blue Ice'	Eastern Bluestar	1 gal.	18" OC	Specimen Quality, Full
120	CA	<i>Calamagrostis x acutiflora</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	1 gal.	18" OC	Specimen Quality, Full
64	OFR	<i>Oenothera fruticosa</i>	Sundrops	1 gal.	18" OC	Specimen Quality, Full
74	RFU	<i>Rudbeckia fulgida</i> 'Little Goldstar'	Orange Coneflower	1 gal.	18" OC	Specimen Quality, Full
80	RFM	<i>Rudbeckia fulgida</i> 'Goldsturm'	Orange Coneflower	1 gal.	18" OC	Specimen Quality, Full
24	SNM	<i>Salvia nemorosa</i> 'May Knight'	May Knight Salvia	1 gal.	18" OC	Specimen Quality, Full
42	SMS	<i>Salvia nemorosa</i> 'Spring King'	Spring King Salvia	1 gal.	18" OC	Specimen Quality, Full
116	SSC	<i>Schizachyrium scaparium</i> 'Standing Ovation'	Little Bluestem	1 gal.	18" OC	Specimen Quality, Full
108	SSP	<i>Solidago speciosa</i>	Showy Goldenrod	1 gal.	18" OC	Specimen Quality, Full
96	SN	<i>Symphiotrichum novae-anglaeae</i> 'Purple Dome'	New York Aster	1 gal.	18" OC	Specimen Quality, Full
74	SOB	<i>Symphiotrichum oblongifolia</i> 'Raydon's Favorite'	Aromatic Aster	1 gal.	18" OC	Specimen Quality, Full
82	PDI	<i>Penstemon digitalis</i> 'Husker Red'	Foxglove Beardtongue	1 gal.	18" OC	Specimen Quality, Full



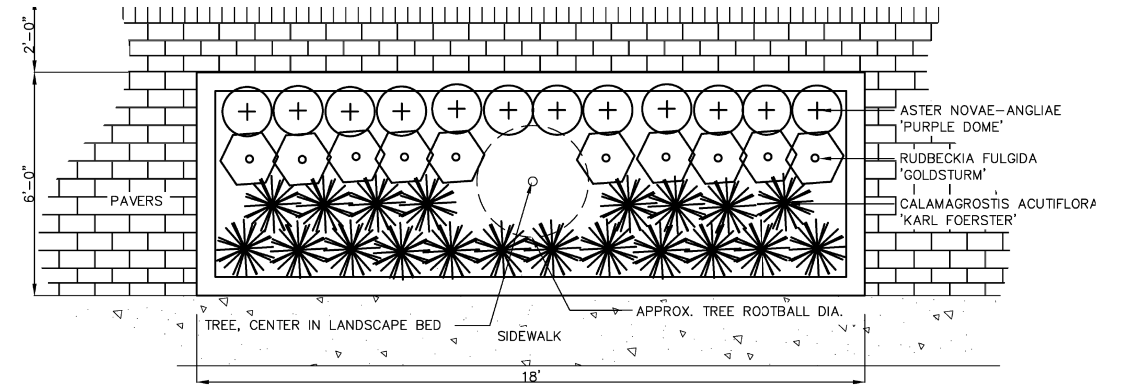
OVAL PLANTER BENCH PLANTING PLAN

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



SQUARE PLANTER PLANTING PLAN

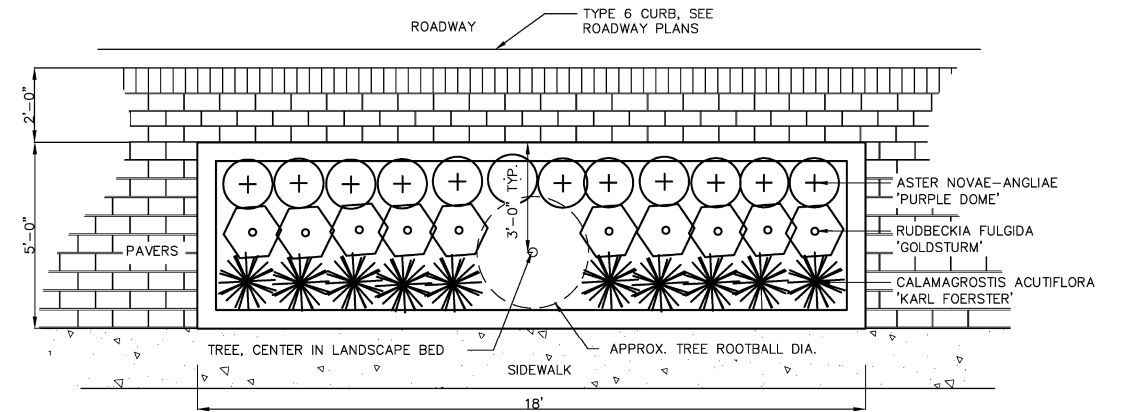
SCALE: 1/2" = 1'-0"



6' WIDTH LANDSCAPE BED (TYPE A)

LANDSCAPE BED TYPE 'A' PLANT LIST

QTY	SYM	SCIENTIFIC NAME	COMMON NAME	SIZE	COND	COMMENTS
Perennials						
10	RF	Rudbeckia fulgida 'goldsturm'	Goldsturm Blackeyed Susan	#2	Cont.	
12	SN	Aster novae-angliae 'Purple Dome'	Purple Dome Aster	#2	Cont.	
Grasses						
20	CA	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#2	Cont.	



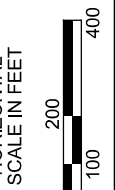
5' WIDTH LANDSCAPE BED (TYPE B)

LANDSCAPE BED TYPE 'B' PLANT LIST

QTY	SYM	SCIENTIFIC NAME	COMMON NAME	SIZE	COND	COMMENTS
Perennials						
10	RF	Rudbeckia fulgida 'goldsturm'	Goldsturm Blackeyed Susan	#2	Cont.	
12	SN	Aster novae-angliae 'Purple Dome'	Purple Dome Aster	#2	Cont.	
Grasses						
10	CA	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#2	Cont.	

ITEM 609 - CURB MISC.: LANDSCAPE BED TYPE A & B

SCALE: NTS



**LANDSCAPE DETAILS
SHEET 02**

DESIGN AGENCY

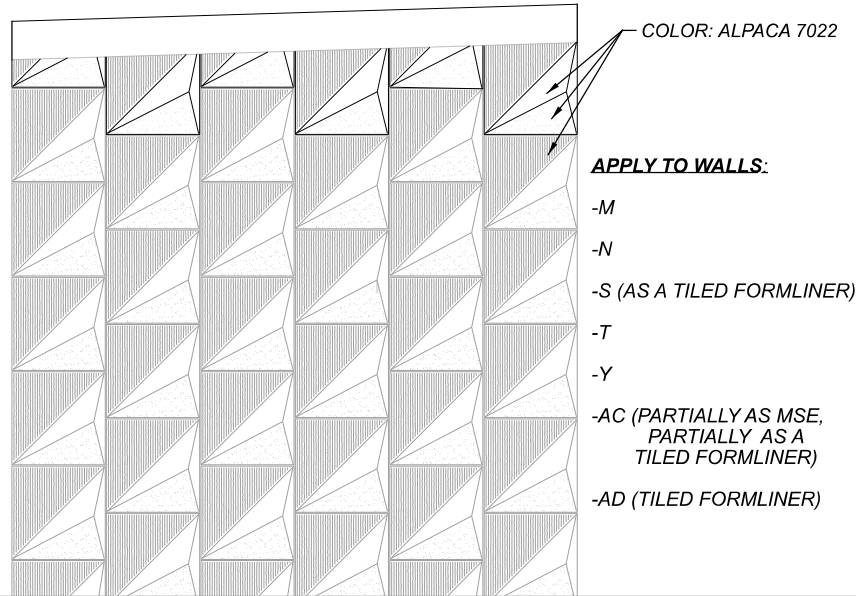
**Michael Baker
INTERNATIONAL**

DESIGNER

REVIEWER

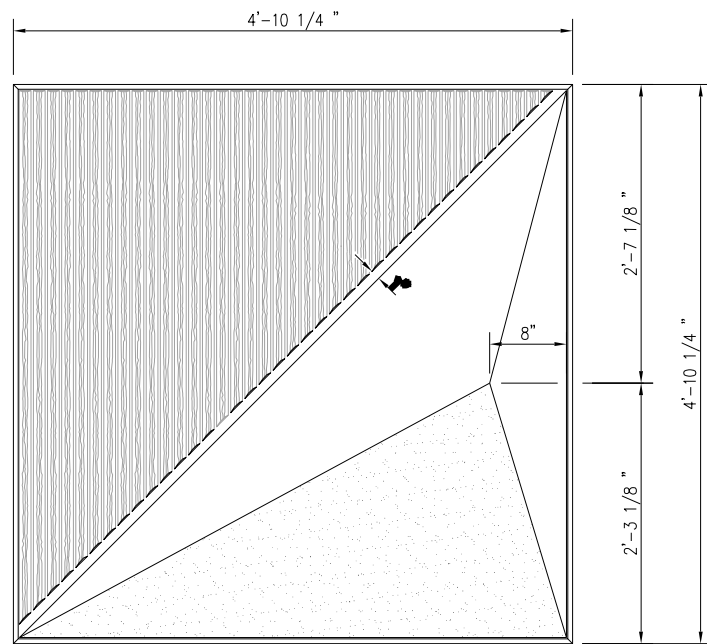
PROJECT ID
82382

SHEET TOTAL
1434 2339



PROPOSED REINFORCED EARTH WALL WITH RAISED PRISM ARCHITECTURAL TREATMENT

SCALE: NTS

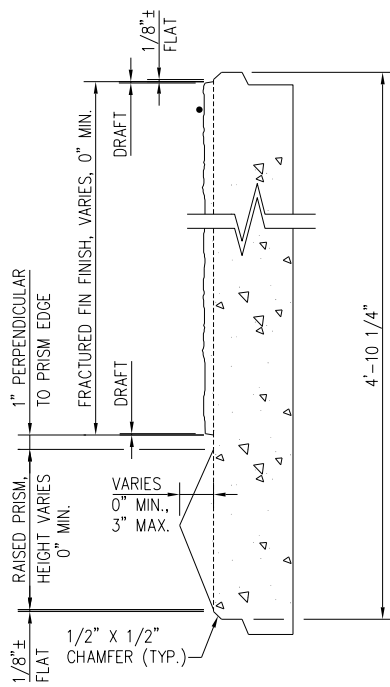


TYPICAL PRISM PANEL DETAIL

SCALE: NTS

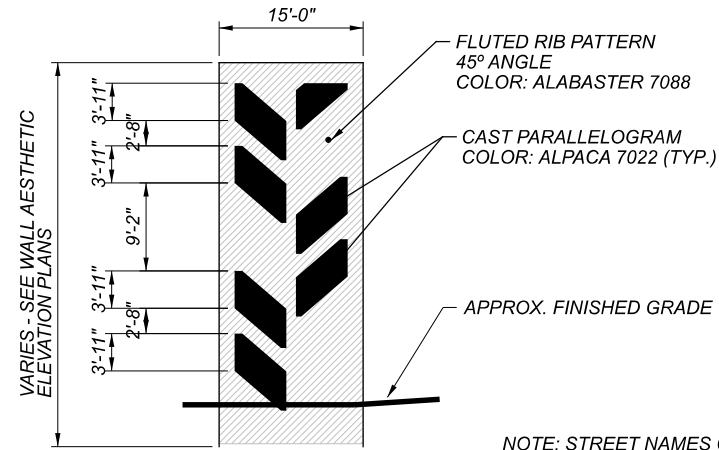


REPRESENTS PLAIN FINISH AREA WITH SHADOW ON UNDERSIDE



VERTICAL PRISM PANEL SECTION

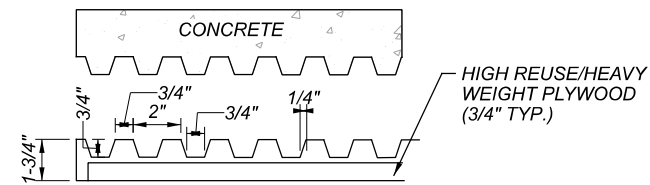
SCALE: NTS



NOTE: STREET NAMES CAST INTO WALLS SHALL BE 4" DEEP REVEALS, COLOR ALPACA 7022

TYPICAL RETAINING WALL PANEL AESTHETIC: ELEVATION

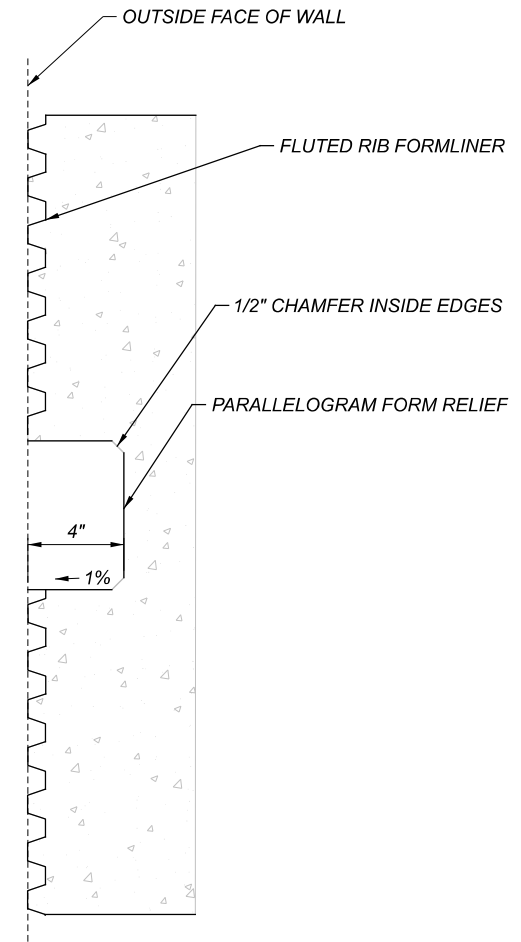
SCALE: NTS



REPRESENTATIONAL PATTERN LAYOUT SHOWN. LAYOUT MADE UP OF MULTIPLE LINER MODULES

FLUTED RIB PATTERN FORMLINER SECTION

SCALE: 3"=1'-0"



PARALLELOGRAM PATTERN SECTION

SCALE: 3"=1'-0"



DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER

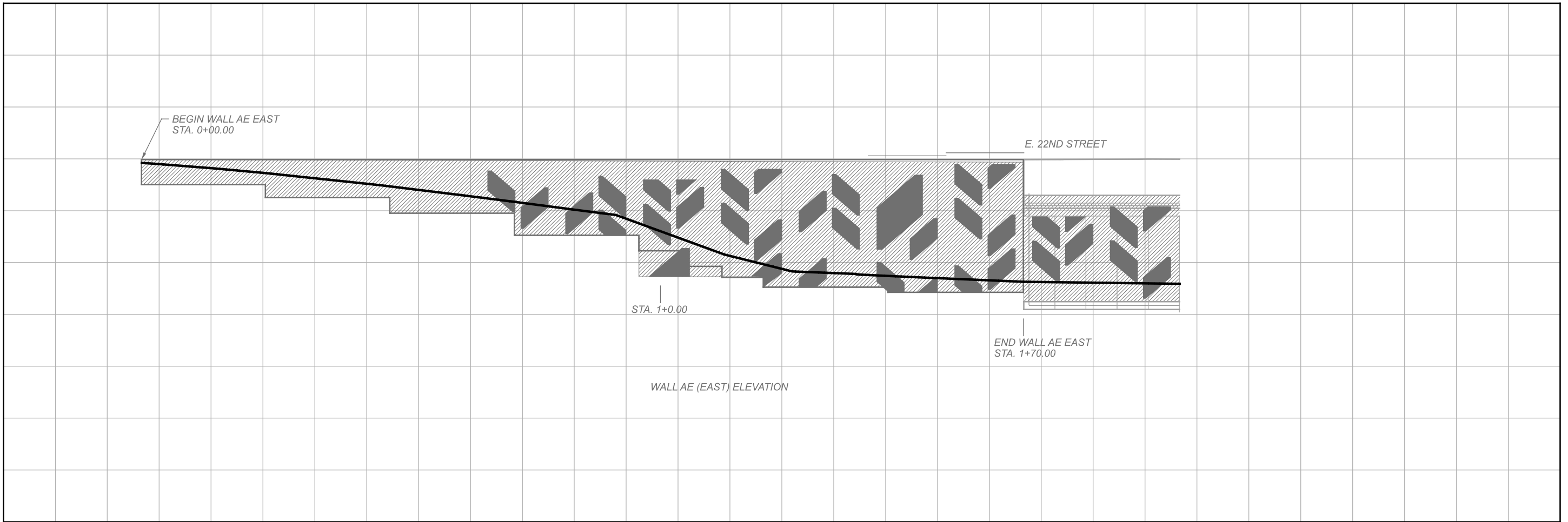
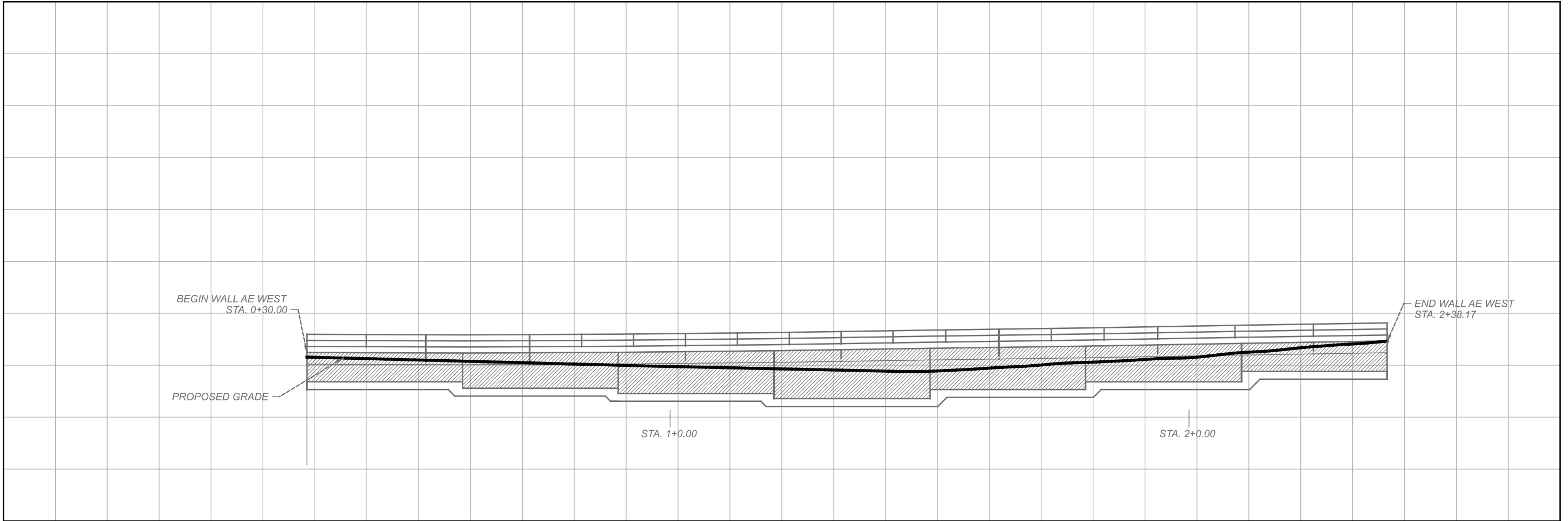
REVIEWER

PROJECT ID

82382

SHEET TOTAL

1435 2339



WALL AESTHETIC ELEVATION
WALL AE (WEST & EAST)

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

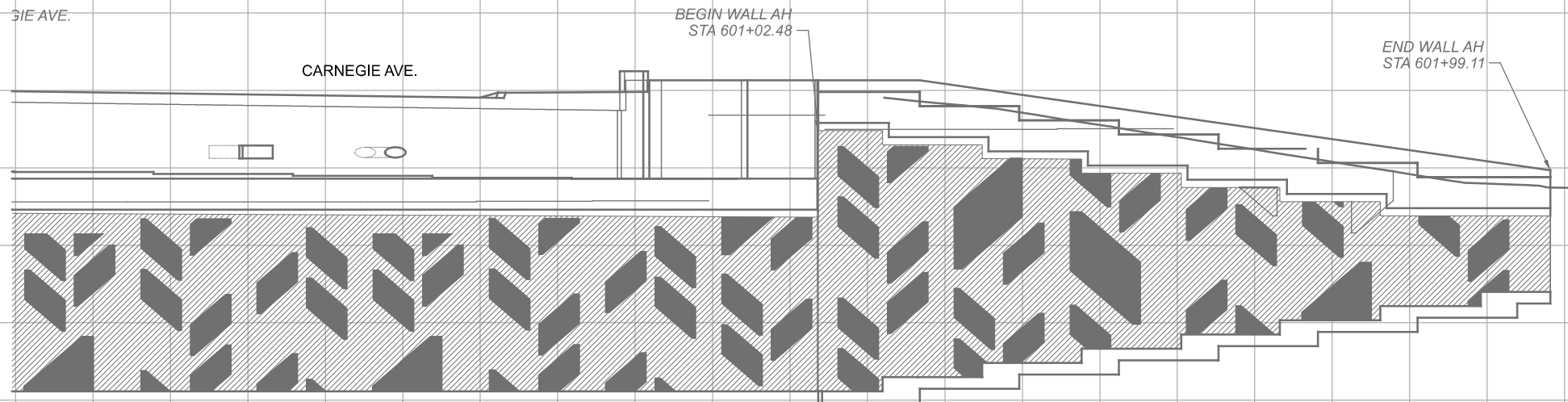
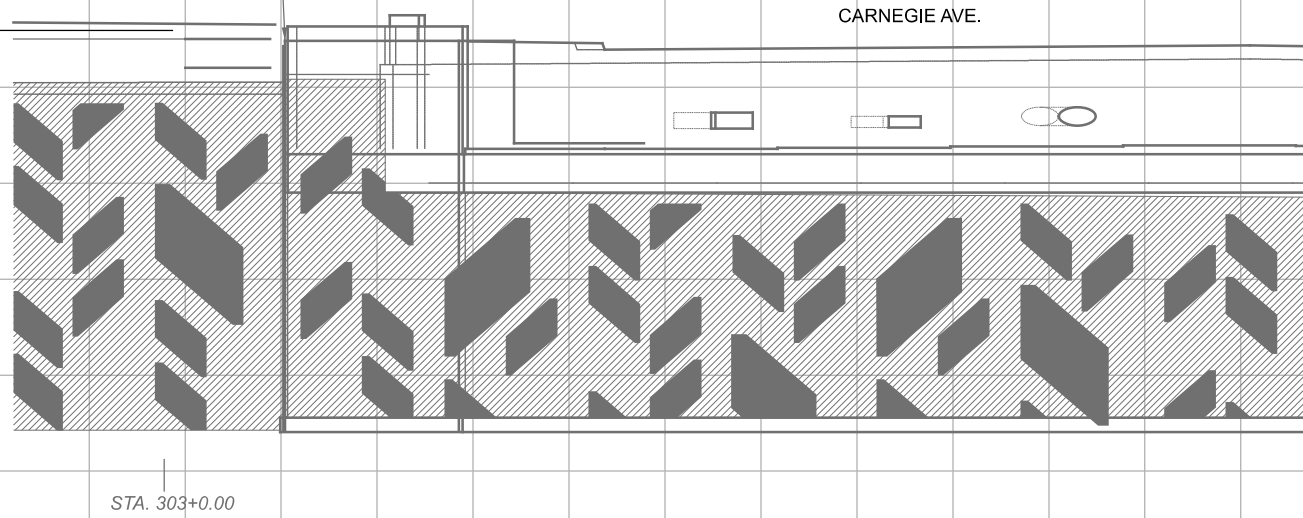
REVIEWER

PROJECT ID

82382

SHEET TOTAL

1436 2339



WALL AESTHETIC ELEVATION
WALL AF (WEST) AND WALL AH

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

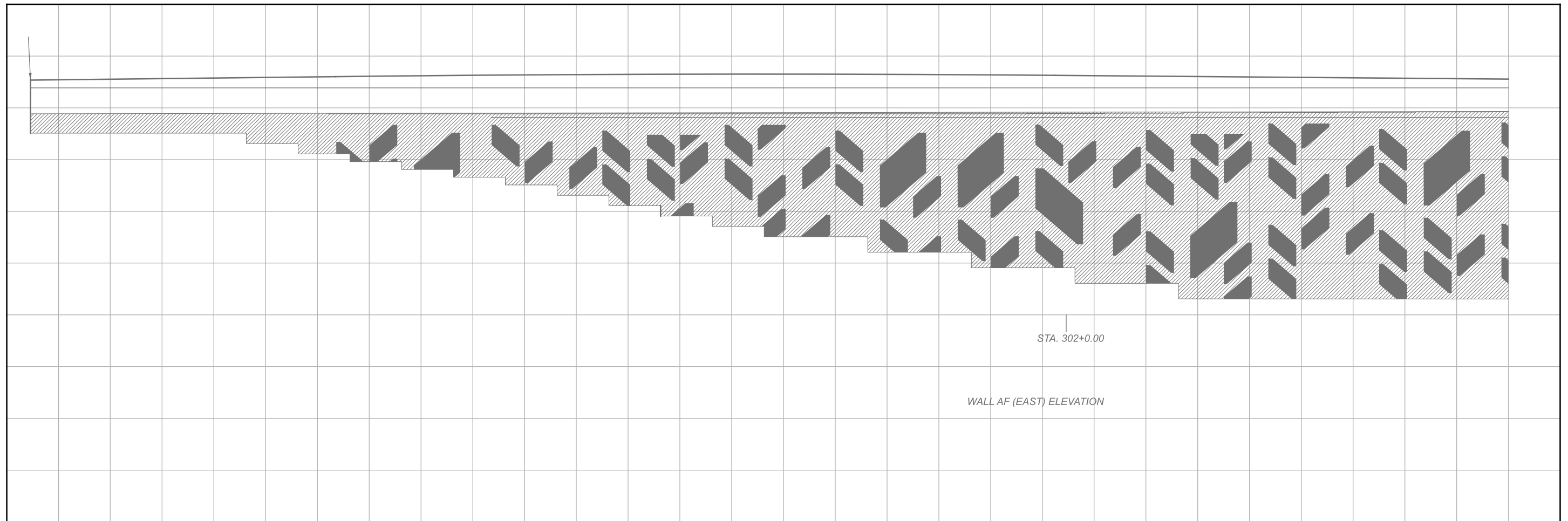
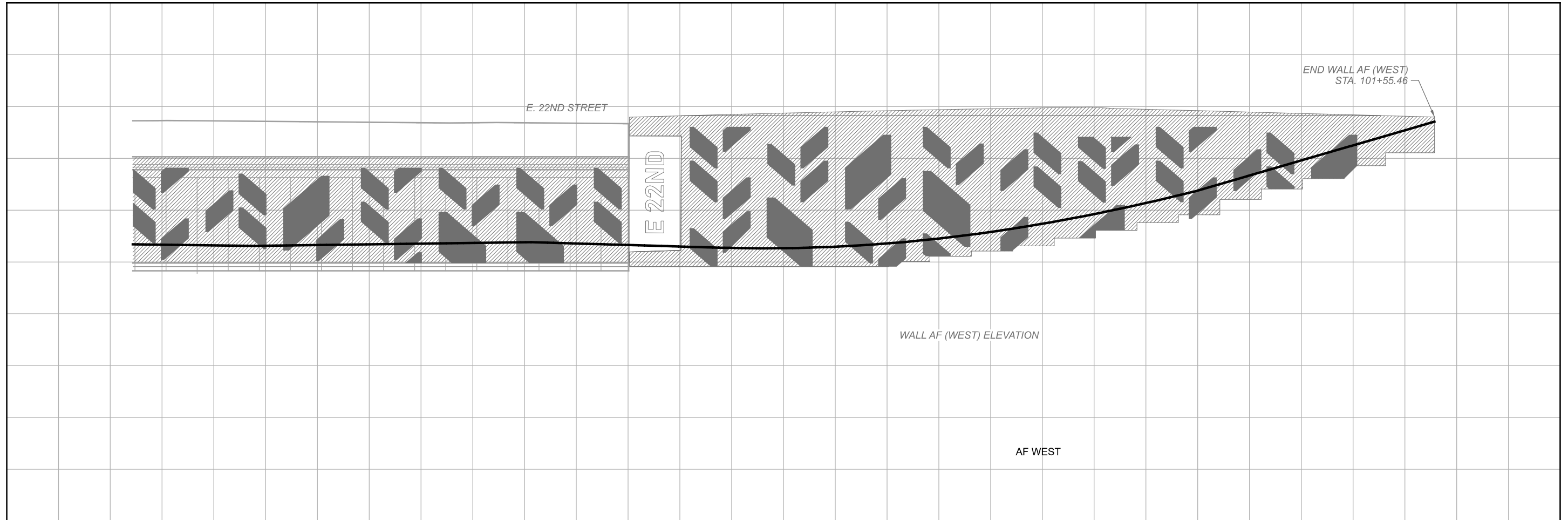
REVIEWER

PROJECT ID

82382

SHEET TOTAL

1437 2339



WALL AESTHETIC ELEVATION
WALL AF (WEST) AND WALL AF (EAST)

DESIGN AGENCY

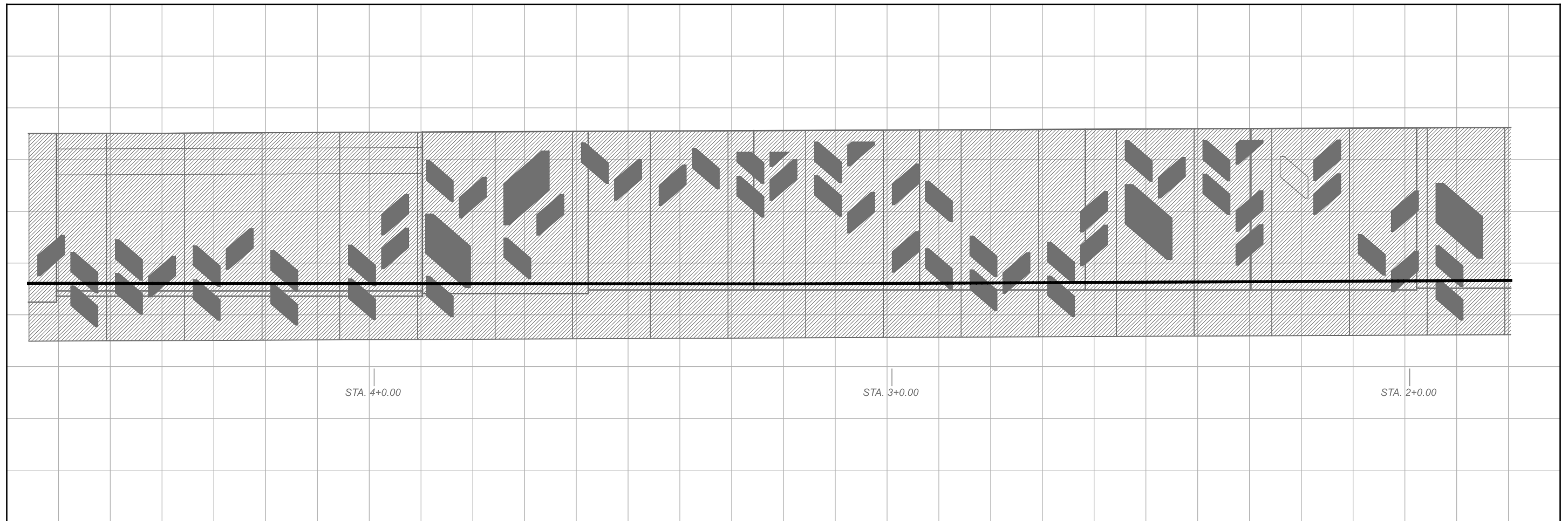
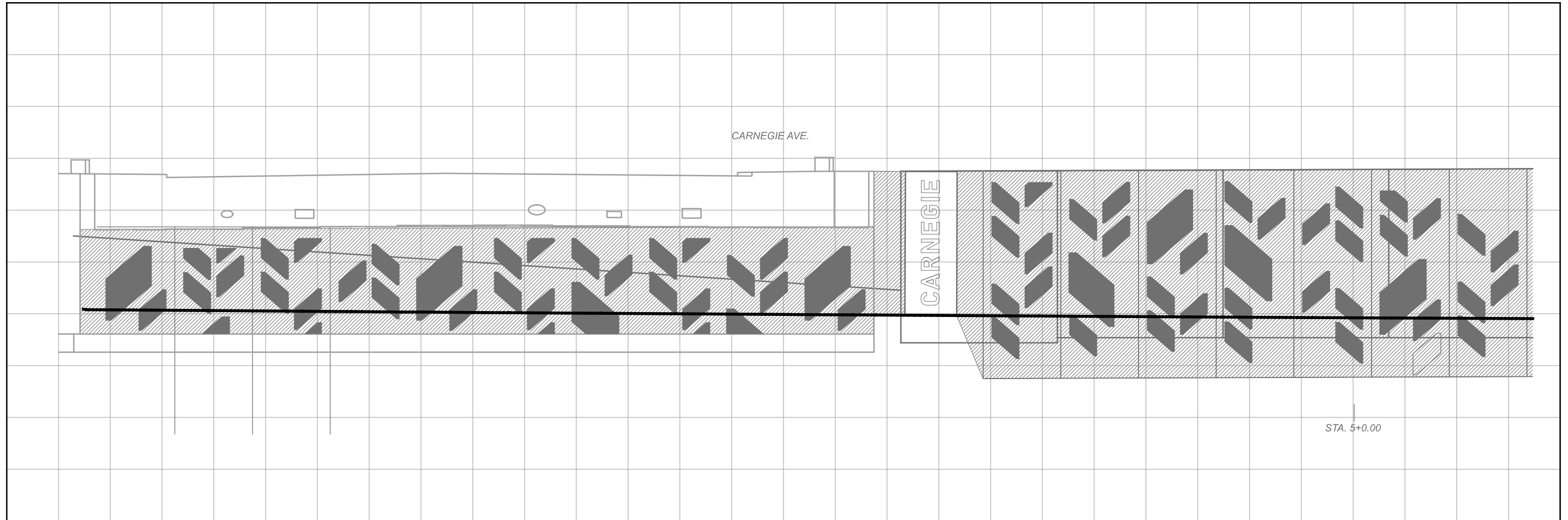
Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET TOTAL
1438 2339



WALL AESTHETIC ELEVATION
WALL AG

DESIGN AGENCY

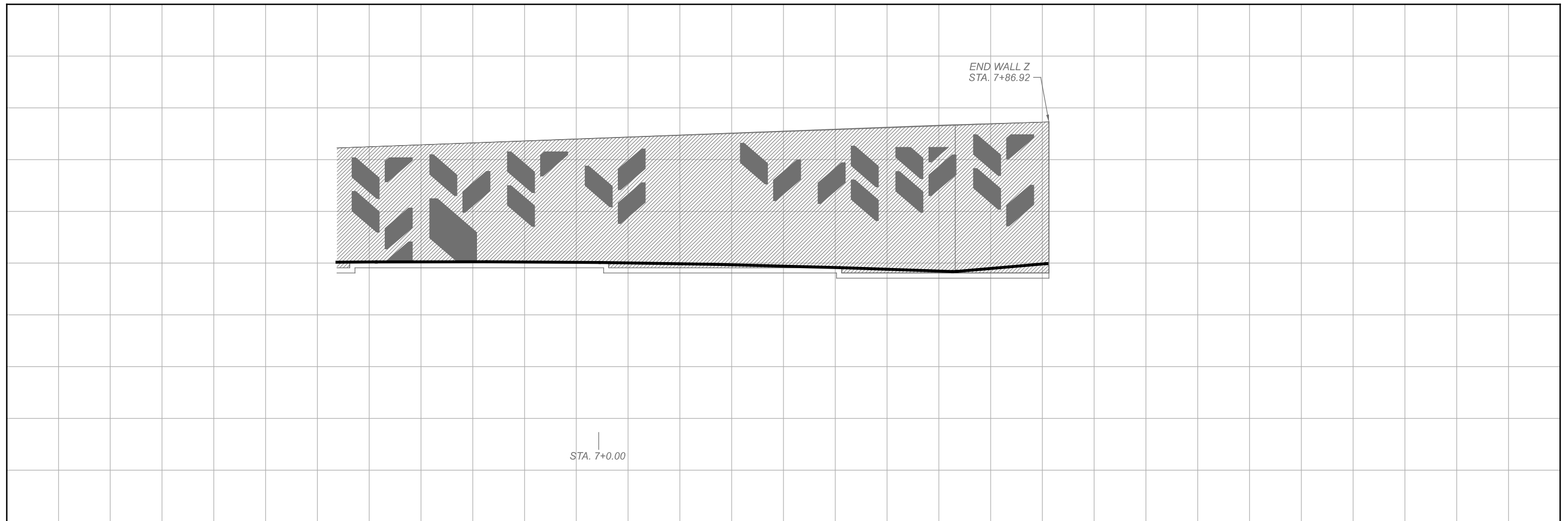
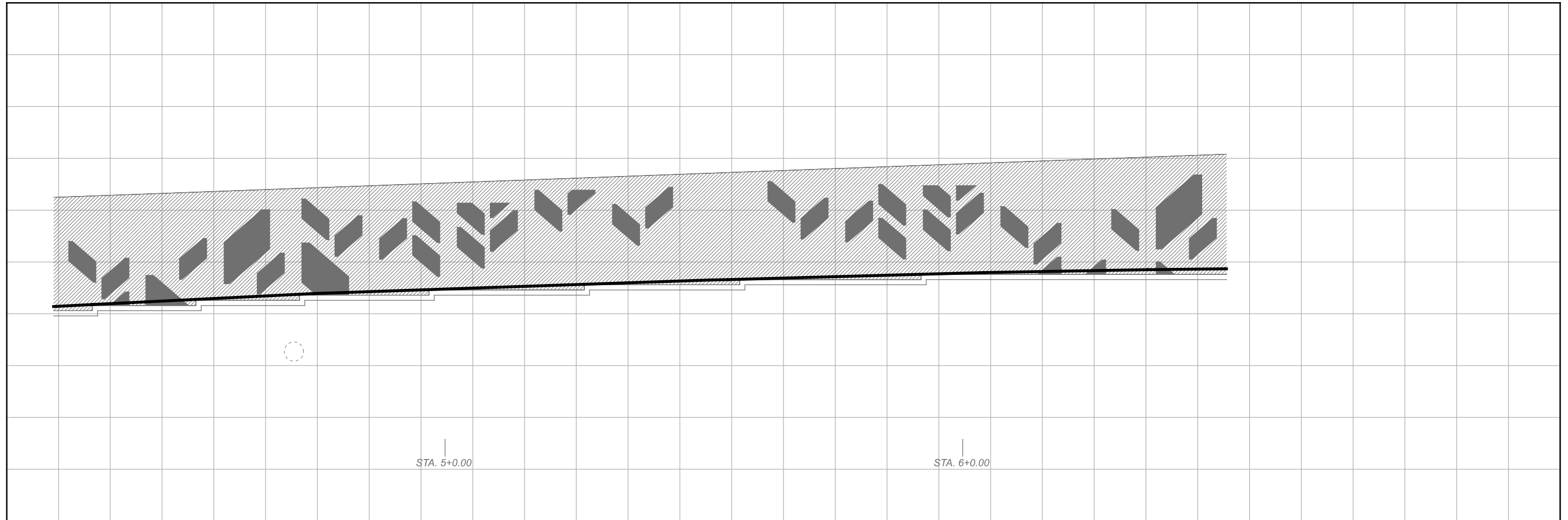
Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1439	2339



WALL AESTHETIC ELEVATION
WALL AG

DESIGN AGENCY

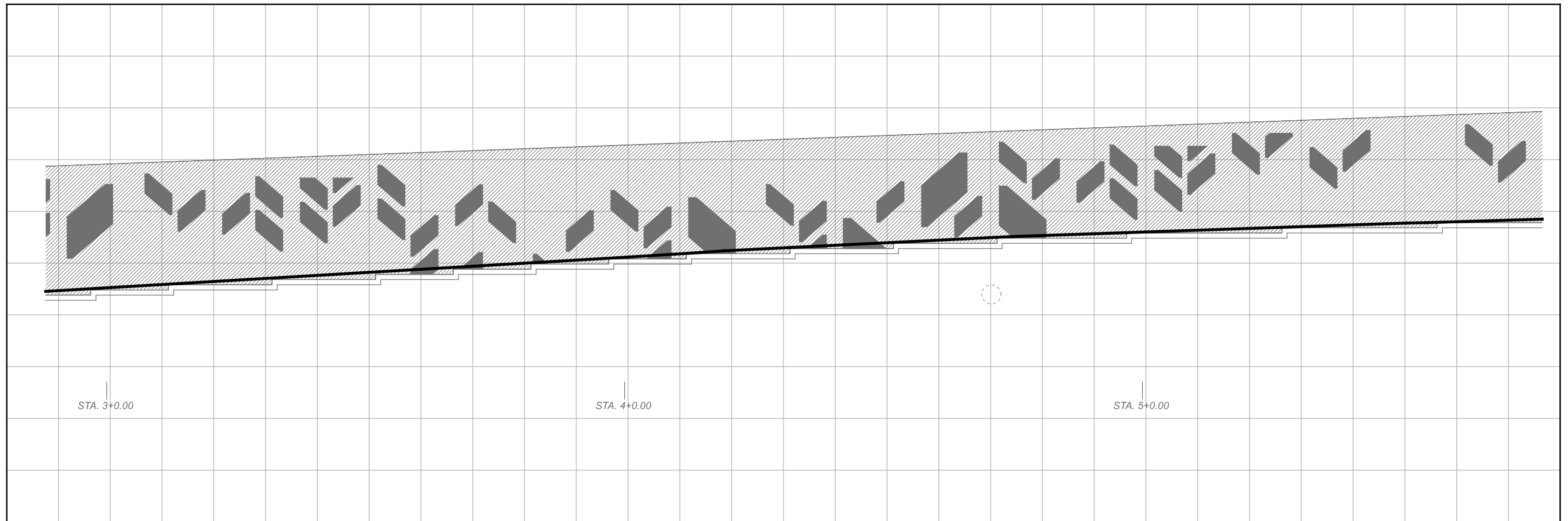
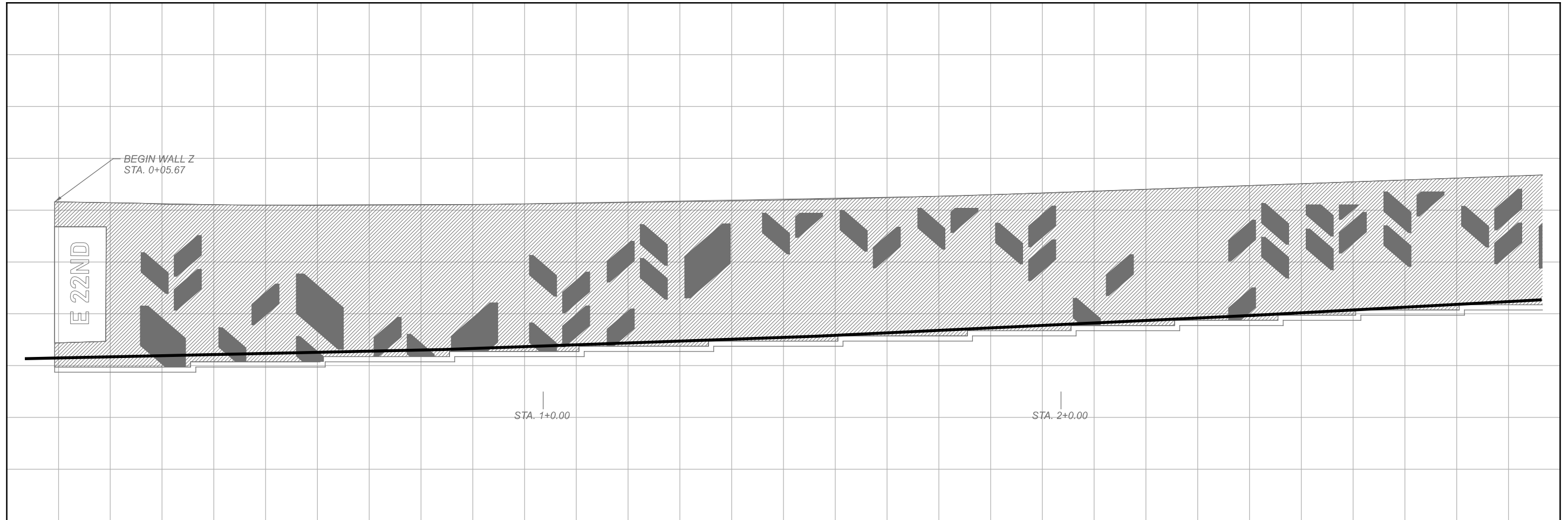
Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1440	2339



WALL AESTHETIC ELEVATION
WALL Z

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

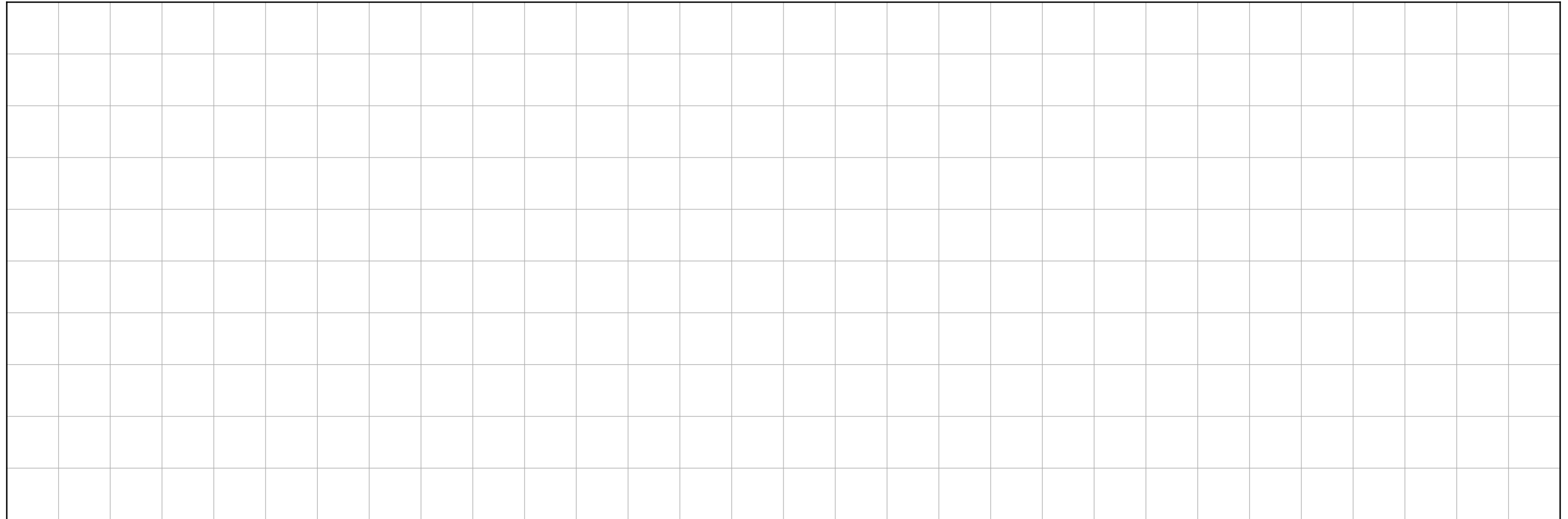
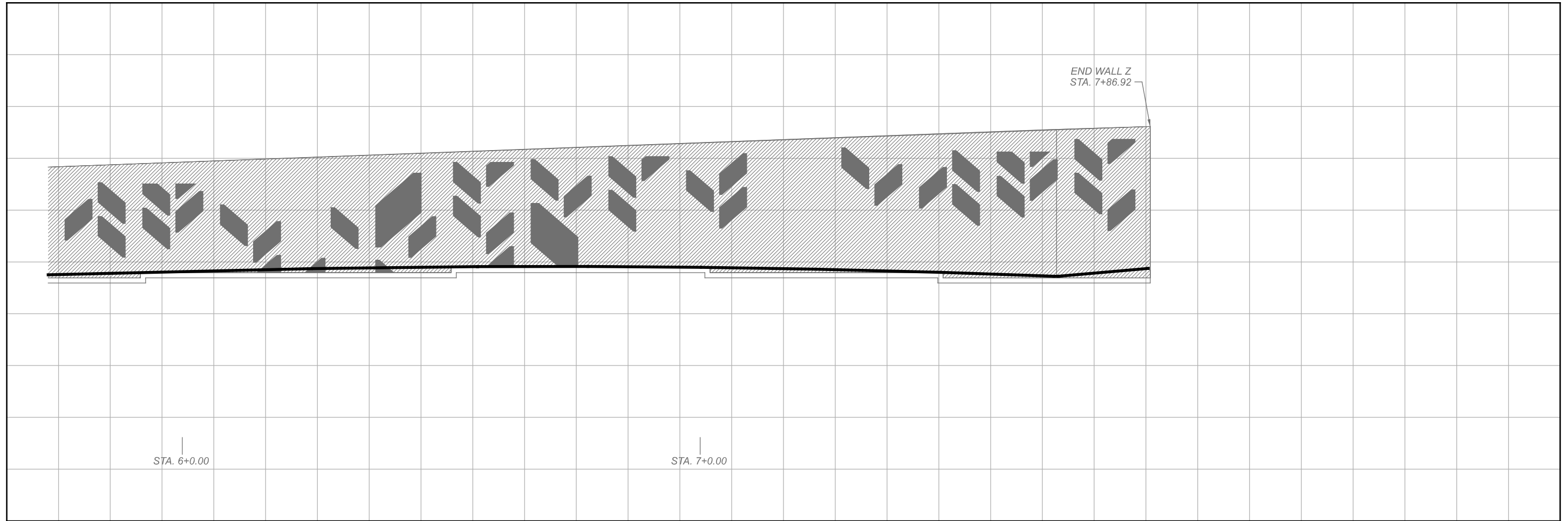
REVIEWER

PROJECT ID

82382

SHEET TOTAL

1441 2339



WALL AESTHETIC ELEVATION
WALL Z

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER

REVIEWER

PROJECT ID
82382

SHEET	TOTAL
1442	2339