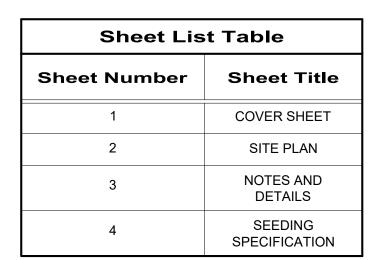
CITY OF RICHMOND HEIGHTS DESAN PARK IMPROVEMENTS -PAVEMENT REMOVAL

CUYAHOGA COUNTY, OHIO







JUNE 2025



LOCATION MAP NOT TO SCALE

UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO

verdantas

CITY OFFICIALS:

COUNCIL-AT-LARGE

WARD COUNCIL

BOBBY JORDAN, PRESIDENT

JUANITA LEWIS

DANIEL J. URSU

ASU MOOK ROBINSON, WARD II CASSANDRA NELSON, WARD III

TRACY JUSTICE, WARD I

BRIAN SILVER, WARD IV TRACEY BLAIR, CLERK OF COUNCIL

BAYYINAH BROOKS, SPECIAL ASSISTANT TO THE MAYOR

CITY ADMINISTRATORS:

NICK LOPARDO. ASSISTANT SERVICE DIRECTOR R. TODD HUNTLAW DIRECTOR TOM DILELLIO FINANCE DIRECTOR RUDOLPH HILLIARD BUILDING COMMISSIONER CALVIN D. WILLIAMS POLICE CHIEF

ENGINEER:

PROJECT SITE:

VERDANTAS LLC 1001 LAKESIDE AVE E, SUITE 1005 CLEVELAND, OHIO 44114

(216) 430-8500 PHONE

JUSTIN HASELTON

THE PROJECT IS LOCATED IN DESAN PARK LOCATED ON TREBISKY ROAD IN RICHMOND HEIGHTS, OHIO.

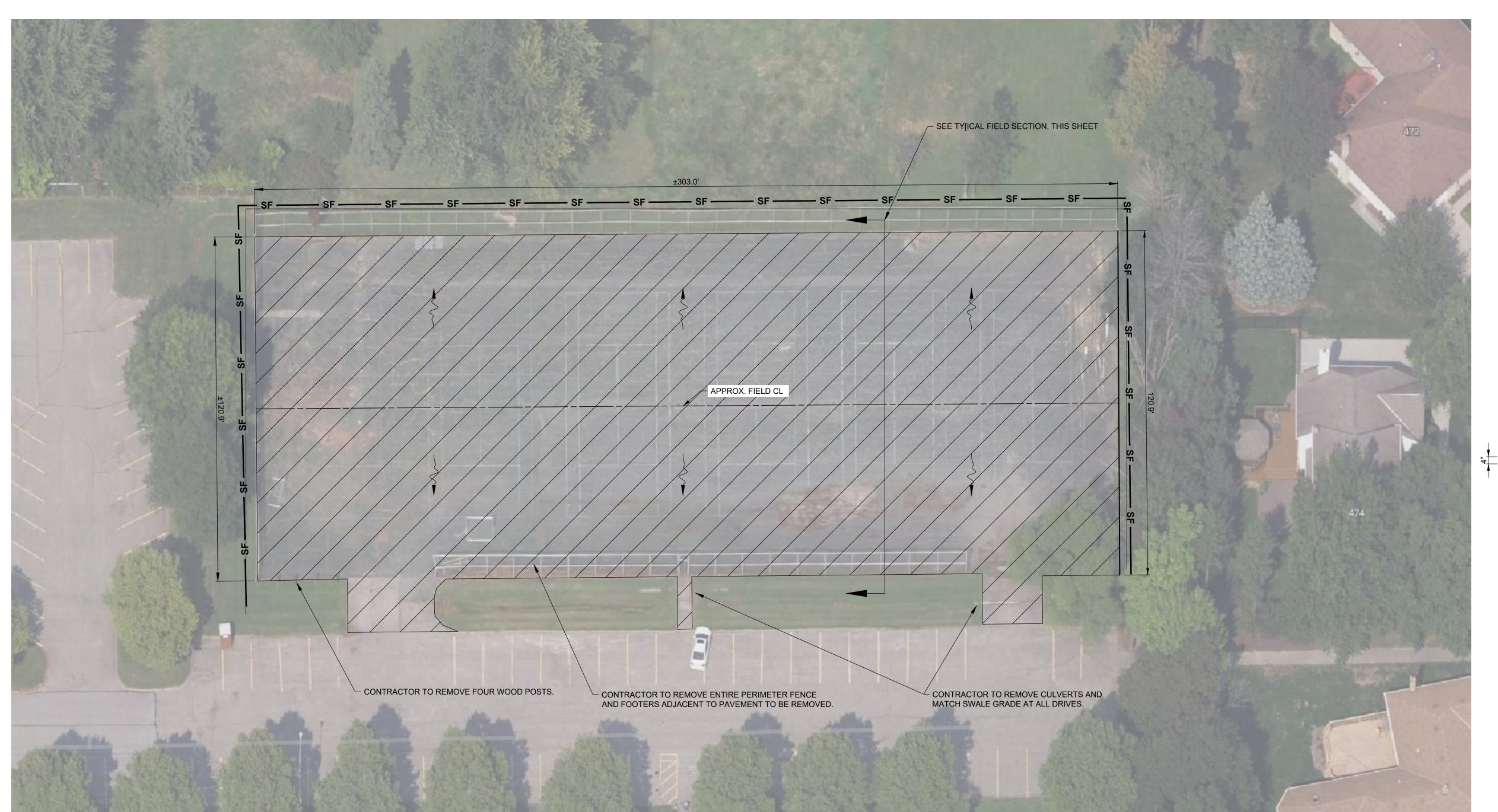


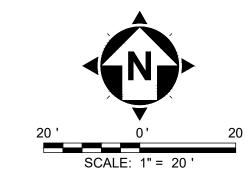
P.E. No. 72378

6/12/2025 DATE

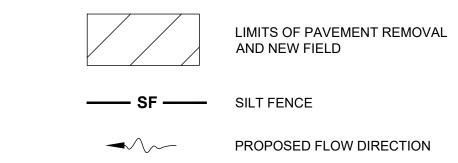
ENGINEER'S PROJECT No. 058.000034685

^{2.} THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.





LEGEND:



PAVEMENT REMOVAL AND FIELD NOTES

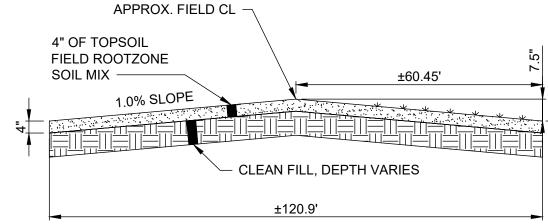
CONTRACTOR TO:

1. REMOVE EXISTING PAVEMENT AND BASE TO EXISTING SUBGRADE.

2. PLACE GENERAL FILL AS NECESSARY TO BRING SUBGRADE TO 4" BELOW PROPOSED GRADE. SEE GRADING NOTES.

3. PROVIDE 4" OF FIELD ROOTZONE SOIL MIX WITH ATHLETIC FIELD SEED MIX, SEE SEEDING SPECIFICATION.

4. PROVIDE A CROWNED FIELD, SEE TYPICAL SECTION, THIS SHEET.



PROPOSED FIELD TYPICAL SECTION NOT TO SCALE

	NO	REVISION	DATE	
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Wordantac				
verdantas				

CITY OF RICHMOND HEIGHTS

DESAN PARK IMPROVEMENTS

CUYAHOGA COUNTY, OHIO

ISSUED FOR:	BID	
ISSUE DATE:	JUNE 2025	
SCALE:	AS SHOWN	
DESIGNED BY:	JRH	
DRAWN BY:	JRH	
CHECKED BY:	WT∨	

GENERAL NOTES

- 1) ALL WORK REQUIRED TO COMPLETE THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS OR THE SPECIFICATIONS/REQUIREMENTS OF THE CITY OF RICHMOND HEIGHTS, EXCEPT AS HEREIN AMENDED. WHERE CONFLICTS OCCUR IN THE ABOVE, THE MOST STRINGENT REQUIREMENTS SHALL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE OWNER OR DESIGN ENGINEER.
- ALL WORK INCLUDING PERMITS REQUIRED FOR REMOVAL, RELOCATION OR NEW CONSTRUCTION FOR PRIVATE OR PUBLIC WORK SHALL BE DONE BY AND AT THE EXPENSE OF THE CONTRACTOR AND INCLUDED IN THE BID PRICES FOR THE
- BEFORE RECEIVING A PERMIT FOR ANY WORK REQUIRING EXCAVATION IN ANY STREET OR PUBLIC ROAD RIGHT-OF-WAY, THE CONTRACTOR SHALL OBTAIN FROM THE PROPER AUTHORITY THE REQUIRED PERMIT FOR SUCH WORK AND SHALL AGREE TO COMPLY WITH ALL REQUIREMENTS OF THE AUTHORITY ISSUING SUCH "ROAD OPENING PERMIT". IF NO "ROAD OPENING PERMIT" IS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, A WRITTEN STATEMENT TO THAT EFFECT MUST BE OBTAINED FROM THE AUTHORITY.
- WHEN SPECIFIED ON THE PLANS OR IN THE SPECIFICATIONS, CONTINGENCY QUANTITIES SHALL BE PERFORMED ONLY UNDER WRITTEN DIRECTION OF THE OWNER. THE CONTRACTOR SHALL NOT ORDER ANY CONTINGENCY MATERIAL OR PERFORM ANY CONTINGENCY WORK UNTIL DIRECTED. THE ACTUAL WORK LOCATION AND QUANTITIES FOR SUCH ITEMS SHALL BE DOCUMENTED BY THE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT STAKING INCLUDING HORIZONTAL AND VERTICAL CONTROL. THE DESIGN ENGINEER MAKES NO REPRESENTATION REGARDING FITNESS FOR ANY PARTICULAR PURPOSE, OR SUITABILITY FOR USE WITH ANY SOFTWARE OR HARDWARE. DUE TO THE EASILY ALTERABLE NATURE OF ELECTRONIC DOCUMENTS, THROUGH EITHER UNINTENTIONAL OR INTENTIONAL MEANS, THE DESIGN ENGINEER DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTY FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND THEREFORE, ACCEPTS NO LIABILITY FOR THE COMPLETENESS, CORRECTNESS OR READABILITY OF THE ELECTRONIC DATA. HARD COPIES (I.E., PRINTS, PAPER COPIES. ETC.) SHALL PREVAIL IN ANY DISPUTE OVER ACCURACY OR SUFFICIENCY OF ELECTRONIC DOCUMENTS.
- ALL WORK IS SUBJECT TO INSPECTION BY THE CITY OR OWNER. THE OWNER RESERVES THE RIGHT TO HALT CONSTRUCTION ACTIVITY FOR NONCONFORMANCE OF PLANS, SPECIFICATIONS OR OTHER APPLICABLE STANDARDS OR REGULATIONS. NO WORK SHALL BE PERFORMED WITHOUT AN AUTHORIZED INSPECTOR PRESENT, UNLESS OTHERWISE APPROVED.
- ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY THE CONTRACTOR BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE COUNTY OR OWNER WITH NO ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, STORM OR SANITARY SYSTEMS RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE. FAILURE BY THE CONTRACTOR TO VERIFY AND/OR DETERMINE EXISTING INFORMATION WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ANY CHANGES NECESSARY TO COMPLETE THE WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES.
- THE CONTRACTOR SHALL SUBMIT A PLAN OF OPERATIONS FOR REVIEW AND APPROVAL BY THE OWNER THAT WILL INDICATE EQUIPMENT STAGING AREAS, STOCKPILE LOCATIONS, CONSTRUCTION TRAILERS AND SANITATION FACILITIES.
- THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS PER APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS INCLUDING OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS. NEITHER THE OWNER NOR THE DESIGN ENGINEER ASSUMES RESPONSIBILITY FOR CONSTRUCTION SAFETY OR THE CONTRACTOR'S OR OTHER PARTIES' COMPLIANCE WITH SAFETY REGULATIONS; SUCH RESPONSIBILITY IS NOT BEING IMPLIED AND SHOULD NOT BE INFERRED.
- APPROPRIATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL. THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY.
- 12) THE CONTRACTOR SHALL STAY WITHIN THE DESIGNATED PROPERTIES, EASEMENTS, RIGHT-OF-WAYS AND WORK AGREEMENTS PROVIDED FOR THE PROJECT AT ALL TIMES. NO MATERIAL SHALL BE STORED NOR ANY WORK PERFORMED ON PRIVATE PROPERTY UNLESS OTHERWISE APPROVED IN WRITING.
- ANY EXISTING ROADWAY, DRIVEWAY, DRIVE CULVERT, LAWN, CURB, SIDEWALK. SIGN, MAILBOX, FENCE, RETAINING WALL, GUARDRAIL, LAWN IRRIGATION SYSTEM COMPONENT, LANDSCAPING ITEM, OR OTHER APPURTENANCE DISTURBED DURING CONSTRUCTION BUT NOT DESIGNATED FOR REMOVAL/REPLACEMENT SHALL BE RESTORED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO DISTURBANCE AND TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL BENCHMARKS, PROPERTY LINE REFERENCES (E.G., PINS, PIPES, MONUMENTS), AND ANY OTHER SURVEY REFERENCE. IN CASE OF DISTURBANCE, THE CONTRACTOR SHALL ENGAGE A REGISTERED SURVEYOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE AND SHALL BE RESPONSIBLE FOR ANY ERRORS THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE. ALL NOTES AND CALCULATIONS USED IN RESETTING OF PROPERTY PINS, MONUMENTS, REFERENCE POINTS, OR ANY OTHER SURVEY REFERENCE SHALL BE STAMPED, SIGNED AND DATED BY THE REGISTERED SURVEYOR AND COPIES PROVIDED TO THE OWNER.
- THE CONTRACTOR SHALL DESIGNATE AND MAINTAIN A PERSON IN RESPONSIBLE CHARGE (SUPERVISOR) WITH A WORKING CELL PHONE AT THE CONSTRUCTION SITE DURING ALL CONSTRUCTION ACTIVITIES.

EXISTING CONDITIONS AND DEMOLITION NOTES:

- 1) THE CONTRACTOR MUST CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 AND THE OHIO OIL AND GAS ASSOCIATION (OGPUPS) AT 1-800-925-0988 AT LEAST 48 HOURS, BUT NO MORE THAN 10 WORKING DAYS, BEFORE BEGINNING ANY DIGGING, EXCLUDING SATURDAYS, SUNDAYS AND OTHER LEGAL HOLIDAYS. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WRITTEN REQUIREMENTS OF OUPS AND OGPUPS. THE CONTRACTOR SHALL COORDINATE THE MARKING AND/OR LOCATING TO STAY A MINIMUM OF TWO WORKING DAYS AHEAD OF PLANNED CONSTRUCTION ACTIVITIES.
- CLEARING AND GRUBBING SHALL BE PERFORMED WHERE EARTHWORK IS REQUIRED. THIS WORK SHALL INCLUDE CLEARING, GRUBBING, SCALPING, TREE AND STUMP REMOVAL, AND THE REMOVAL AND DISPOSAL OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF WORK.
- THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIAL, DEMOLISHED MATERIALS AND WASTE MATERIALS INCLUDING TREES, STUMPS, BRUSH, TRASH AND DEBRIS, FROM THE PROJECT LIMITS AND LEGALLY DISPOSE OF OFF-SITE.
- PAVEMENT TO BE REMOVED SHALL BE SAWCUT AND REMOVED FULL DEPTH AT LIMITS OR EXISTING JOINTS AS SHOWN IN THE PLANS. ADDITIONAL SAWCUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE EXISTING PAVEMENT, BUT THERE WILL BE NO EXTRA PAYMENT. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE PAVEMENT TO REMAIN. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL SAWCUTS, REMOVE THE DAMAGED AREAS AND REPAIR AS NECESSARY WITH NO ADDITIONAL COMPENSATION.

GRADING NOTES:

THE CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS AND OTHER FACILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING OPERATIONS.

THE INTENT OF THIS PROJECT IS TO UTILIZE ALL USEABLE MATERIALS EFFICIENTLY. ACTUAL FIELD CONDITIONS MAY REQUIRE DECISIONS ON MATERIAL HANDLING AND USAGE. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING AND MAINTAINING SITE CONDITIONS.

DO NOT STOCKPILE SOIL MATERIALS NEAR THE EDGE OF EXCAVATIONS OR WITHIN DRIP LINES OF TREES TO REMAIN.

THE CONTRACTOR SHALL PERFORM EXCAVATION AND EMBANKMENT OPERATIONS AS NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS AND ACHIEVE THE FINISHED GRADES SHOWN ON THE PLANS.

IT IS THE INTENT TO PROVIDE POSITIVE DRAINAGE TO STORM WATER COLLECTION POINTS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE DESIGN ENGINEER FOR RESOLUTION.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE FINE GRADED TO A SMOOTH, UNIFORM SURFACE WITH LOOSE, UNIFORMLY FINE TEXTURE INCLUDING REMOVAL OF ALL STONES GREATER THAN 1/2", STICKS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATTER USING ROCKHOUND LANDSCAPE RAKE EQUIPMENT.

GENERAL FILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY OF STANDARD PROCTOR WITH MOISTURE CONTENT ADJUSTED TO +3/-3% OF OPTIMUM.

THE CONTRACTOR SHALL ESTABLISH A SMOOTH ACCEPTABLE LAWN INCLUDING SOIL CONDITIONING, WATERING, MULCHING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING AND RESEEDING AS NEEDED.

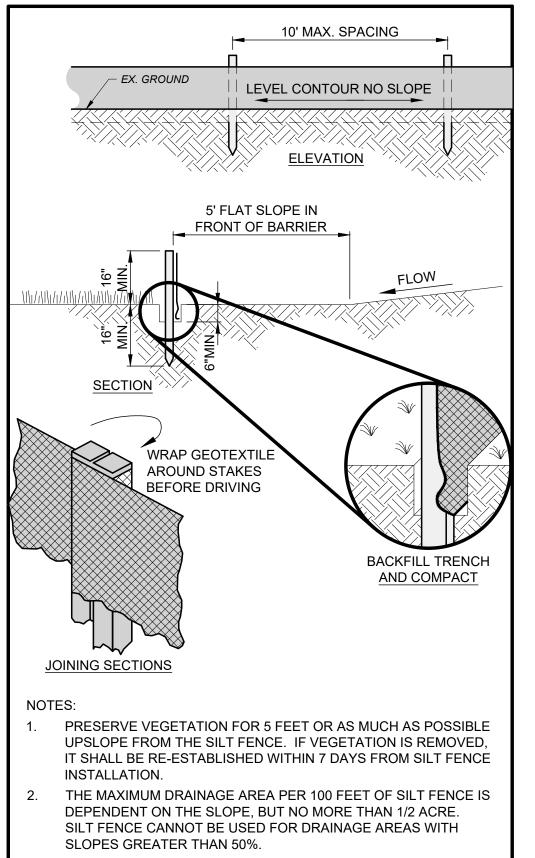
EROSION & SEDIMENT CONTROL NOTES:

STABILIZATION OF DISTURBED AREAS SHALL, AT A MINIMUM, BE INITIATED WITHIN THE TIME FRAMES IN THE FOLLOWING TABLES:

	PERMANENT S	PERMANENT STABILIZATION		
PE	AREA REQUIRING RMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS		
1	AREAS TO LIE DORMANT 1 YEAR OR MORE.	WITHIN 7 DAYS OF MOST RECENT DISTURBANCE.		
A SL	AREAS WITHIN 50 FEET OF IRFACE WATER OF THE IE (*) AND AT FINAL GRADE.	WITHIN 2 DAYS OF REACHING FINAL GRADE.		
ОТН	ER AREAS AT FINAL GRADE.	WITHIN 7 DAYS OF REACHING FINAL GRADE.		

TEMPORARY STABILIZATION			
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS		
ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE (*) AND NOT AT FINAL GRADE.	WITHIN 2 DAYS OF MOST RECENT DISTURBANCE IF TO REMAIN IDLE MORE THAN 14 DAYS.		
ANY DISTURBED AREAS TO BE DORMANT FOR MORE THAN 14 DAYS, BUT LESS THAN 1 YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE (*).	WITHIN 7 DAYS OF MOST RECENT DISTURBANCE. FOR RESIDENTIAL SUBDIVISION, DISTURBED AREAS MUST BE STABILIZED AT LEAST 7 DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR INDIVIDUAL LOT(S).		
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER.	PRIOR TO ONSET OF WINTER WEATHER.		

- (*) SURFACE WATERS OF THE STATE INCLUDE WETLANDS, STREAMS, LAKES, PONDS, MARSHES, WATERCOURSES, WELLS, SPRINGS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS, AND OTHER ACCUMULATIONS OF WATER, SURFACE AND UNDERGROUND, NATURAL OR ARTIFICIAL.
- INLET PROTECTION AND SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING
- SEDIMENT PONDS, TEMPORARILY MODIFIED PERMANENT PONDS AND PERIMETER SEDIMENT BARRIERS MUST BE INSTALLED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF CLEARING AND GRUBBING, AND CONTINUE TO FUNCTION UNTIL ALL DISTURBED UPLAND AREAS ARE STABILIZED.
- SEDIMENT CONTROLS MUST POND RUNOFF TO BE CONSIDERED FUNCTIONAL.
- SEDIMENT-LADEN TRENCH OR GROUND WATER MUST PASS THROUGH A SEDIMENT-SETTLING POND OR BE DEWATERED IN-PLACE USING A SUMP PIT, FILTER BAG OR OTHER COMPARABLE METHOD PRIOR TO DISCHARGE FROM THE SITE. TRENCH AND GROUND WATER FREE FROM SEDIMENT OR OTHER POLLUTANTS MAY BE DISCHARGED WITHOUT TREATMENT, PROVIDED THIS WATER DOES NOT BECOME POLLUTANT-LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.
- SEDIMENT BARRIERS SHALL NOT EXCEED THEIR DESIGN CAPACITIES INSTALLING SEDIMENT BARRIERS IN PARALLEL SERIES DOES NOT INCREASE THE DESIGN CAPACITY.
- SETTLED MATERIAL SHALL BE DISPOSED IN A LOCATION WHERE IT WILL NOT BE CARRIED OFF-SITE OR INTO A STORM SEWER BY RAINFALL.
- SOIL STOCKPILES SHALL BE RINGED WITH SILT FENCE ALONG THE BOTTOM FOOTPRINT. IF THE STOCKPILE WILL BE INACTIVE FOR 14 DAYS OR MORE, THE SURFACE SHALL BE SEEDED OR STABILIZED WITHIN 7 DAYS OF LAST DISTURBANCE.



- SILT FENCE MAY ONLY PASS RUNOFF AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, THEN CHANGE THE LAYOUT OF THE SILT FENCE, REMOVE ACCUMULATED SEDIMENT OR INSTALL OTHER PRACTICES.
- SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS. VERIFICATION FABRIC IS SECURELY ATTACHED TO FENCE POSTS, AND VERIFICATION FENCE POSTS ARE FIRMLY IN THE GROUND. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED 1/3 THE FENCE HEIGHT.

SILT FENCE DETAIL

SCALE: NONE

NO verdantas

REVISION DATE

CITY OF RICHMOND HEIGHTS

DESAN PARK IMPROVEMENTS

CUYAHOGA COUNTY, OHIO

ISSUED FOR: ISSUE DATE: JUNE 2025 SCALE: AS SHOWN **DESIGNED BY** JRH DRAWN BY: WTV CHECKED BY:

241785 DISCIPLINE CIVIL **NOTES AND DETIALS** SHEET NAME

GENERAL - 00 SERIES

PROJECT NO.

D-1

SECTION 329219 - SEEDING

PART 1 _ GENERAL

1.1 SUMMARY

- INSTALLATION OF SEEDED AREAS SHALL BE TO THE EXTENT SHOWN ON CONTRACT DRAWINGS AND SHALL INCLUDE SUPPLYING ALL SEED, TOPSOIL, SOIL CONDITIONING MATERIALS, MULCHING MATERIALS AND WATERING, AND THE INCORPORATION OF THESE MATERIALS INTO THE WORK AS
- A. THE CONTRACTOR SHALL PLACE TOPSOIL AT THE DEPTHS SPECIFIED IN THOSE AREAS REQUIRING SEEDING. TOPSOIL SHALL BE FURNISHED BY THE CONTRACTOR.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR THE FOLLOWING:

- PROVIDE COPIES OF SOILS TESTS FOR BOTH NEW TOPSOIL (PROVIDED) AND ONSITE TOPSOIL FOR REVIEW AND APPROVAL. THIS APPLIES TO ALL AREAS THAT REQUIRE SEEDING, INCLUDING RECONDITIONED AREAS.
- 2. PROVIDE LOCATION OF PROPERTIES FROM WHICH TOPSOIL IS TO BE OBTAINED, NAMES AND ADDRESSES OF OWNERS, DEPTH TO BE STRIPPED, AND CROPS GROWN IN THÉ PAST 2
- 3. PROVIDE THE NAME OF THE SEED SUPPLIER, NAME AND PHONE NUMBER, LIST OF THE SEED, INCLUDING VARIETIES OF SEED, LABELS, AND AN ANALYSIS OF THE SEED FOR REVIEW, 4 WEEKS PRIOR TO THE START OF SEEDING.
- 4. PROVIDE SOIL AMENDMENTS INFORMATION BASED ON SOILS TEST REQUIREMENTS.
- 5. HYDROSEED MIXTURE, MULCH AND APPLICATION RATES PRIOR TO PERFORMING THE

1.3 QUALITY ASSURANCE

- A. ANY SUBCONTRACTED RESTORATION WORK SHALL BE PERFORMED BY A QUALIFIED FIRM SPECIALIZING IN LANDSCAPE WORK.
- THE CONTRACTOR SHALL HAVE A SOILS TEST DONE AT HIS EXPENSE AND ANALYZED BY A STATE APPROVED TESTING AGENCY. SOIL TESTS SHALL BE DONE ON BOTH THE TOPSOIL STOCKPILED FROM THE SITE AND NEW TOPSOIL BROUGHT TO THE SITE. A MINIMUM OF TWO (2) TESTS SHALL BE DONE. THE TESTS SHALL INCLUDE PERCENT ORGANIC MATTER, PH, BUFFER PH, PHOSPHORUS, EXCHANGEABLE POTASSIUM, CALCIUM, MAGNESIUM, CATION EXCHANGE CAPACITY AND PERCENT BASE SATURATION WITH RECOMMENDATIONS FOR NITROGEN, PHOSPHATE, POTASH, MAGNESIUM AND LIME BASED ON PLANT TYPE AND USE.
- B. SEED: ALL SEED SPECIFIED SHALL MEET O.D.O.T. SPECIFICATIONS AS TO THE PERCENTAGE PURITY, WEED SEED, AND GERMINATION. ALL SEED SHALL BE APPROVED BY THE STATE OF OHIO, DEPARTMENT OF AGRICULTURE, JONISION OF PLANT INDUSTRY, AND SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.
- D. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.

1.4 PROJECT CONDITIONS

- B. UTILITIES: DETERMINE LOCATION OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES
- C. EXCAVATION: WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, SUCH CONDITIONS SHALL BE RECORDED BY THE CONTRACTOR BEFORE PLANTING, WITH APPROVAL FROM THE OWNER'S REPRESENTATIVE.
- D. SOIL STABILIZATION: THE CONTRACTOR SHALL PROVIDE PERMANENT OR TEMPORARY SOIL STABILIZATION TO DENUDED AREAS WITHIN FIFTEEN (15) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. ANY SUCH AREA WHICH WILL NOT BE REGRADED FOR LONGER THAN FIFTEEN (15) DAYS SHALL ALSO BE STABILIZED. SOIL STABILIZATION INCLUDES ANY MEASURES WHICH PROTECT THE SOIL FROM THE EROSIVE FORCES OF RAINDROP IMPACT AND FLOWING WATER. APPLICATIONS INCLUDE SEEDING AND/OR MULCHING, OR THE USE OF OTHER EROSION TURNOL MEASURES AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IF NECESSARY, THE CONTRACTOR SHALL COORDINATE SOIL STABILIZATION PRACTICES WITH THE LOCAL SOIL AND WATER CONSERVATION DISTRICT.
- D. SPRING SOWN WORK SHALL BE INSTALLED BETWEEN APRIL 1ST AND MAY 30TH AND FALL SOWN WORK SHALL BE INSTALLED BETWEEN SEPTEMBER 1ST AND OCTOBER 15TH. NO PERMANENT SEEDING SHALL TAKE PLACE BETWEEN MAY 30TH AND SEPTEMBER 1ST AND BETWEEN OCTOBER 15TH AND APRIL 1ST. THE DATES FOR SEEDING MAY BE CHANGED AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE.

PART 2 _ PRODUCTS

2.1 TOPSOIL

A. LAWN TOPSOIL

- 1. SHALL BE FURNISHED BY THE CONTRACTOR. STOCKPILED MATERIAL, IF ANY, SHALL BE UTILIZED PRIOR TO OBTAINING ADDITIONAL TOPSOIL.
- STONES LARGER THAN ½" IN ANY DIMENSION AND ANY OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
- 3. NEW TOPSOIL SHALL BE OBTAINED ONLY FROM NATURALLY WELL DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4". DO NOT OBTAIN FROM BOGS OR
- 4. SOIL AMENDMENTS SHALL BE ADDED ACCORDING TO THE SOILS TEST REQUIREMENTS. AMENDMENTS CAN INCLUDE, BUT ARE NOT LIMITED TO FERTILIZER, LIME, COMPOST, SAND, AND ORGANIC MATTER. ORGANIC MATTER SHALL CONSIST OF COMPOSTED LEAVES OR OTHER APPROVED MATERIAL.

B. FIELD ROOTZONE SOIL MIX

. ROOTZONE TOPSOIL SHALL BE SHREDDED NATIVE SANDY LOAM WITH 97% SAND, 1.5% CLAY/SILT NS 1.5% GRAVEL WITH AN ORGANIC CONTENT OF 5% TO 12% OF TOTAL DRY

2.2 SEED SEED SHALL BE VENDOR MIXED, DELIVERED IN ORIGINAL BAGS AND SHALL BE PROPORTIONED

AS FOLLOWS:

ATHLETIC FIELD SEED MIX SHALL BE:

1. 50% KENTUCKY BLUEGRASS (3VARIETIES), 50% PERENNIAL RYEGRASS (3 VARIETIES) 2. APPLY AT THE RATE OF 5 LB/1,000 SQ. FT.

2.3 MULCH

- B. MULCH SHALL BE CLEAN STRAW FREE OF SEED AND WEED SEED.
- 1. ANCHORING FOR MULCH SHALL BE AN ODOT SPECIFIED SS-1 AT 60 GAL./TON NON-TOXIC TACKIFIER SUCH AS HYDRO-STIK, OR EQUAL, OR BY SECURING WITH A PHOTO
- C. IF HYDROSEEDING IS USED, WOOD FIBER MULCHING MATERIAL SHALL BE USED AND SHALL CONSIST OF VIRGIN WOOD FIBERS MANUFACTURED EXPRESSLY FROM WHOLE WOOD CHIPS AND SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS.

MOISTURE CONTENT ORGANIC CONTENT

10.0% + 3.0% 99.2% + 0.8% O.D. BASIS

4.8 + 0.5

1,000

WATER HOLDING CAPACITY, MINIMUM (GRAMS OF WATER PER 100 GRAMS OF FIBER)

WOOD FIBER MULCHING MATERIAL SHALL BE PROCESSED IN SUCH A MANNER AS TO CONTAIN NO GROWTH OR GERMINATION INHIBITING FACTORS, AND MUST CONTAIN A BIODEGRADABLE GREEN DYE TO AID IN VISUAL METERING DURING APPLICATION.

PART 3 _ EXECUTION

3.1 PREPARATION _ GENERAL

- A. ROUGH GRADING TO A DEPTH NECESSARY TO ACCEPT THE SPECIFIED THICKNESS OF TOPSOIL MUST BE APPROVED PRIOR TO PLACING TOPSOIL.
- B. LOOSEN SUBGRADE, REMOVE ANY STONES GREATER THAN ½" IN ANY DIMENSION. REMOVE STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER.
- C. SPREAD TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES, TO MEET LINES, GRADES, AND ELEVATIONS SHOWN ON PLAN, AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. REMOVE STICKS, ROOTS, RUBBISH, STONES GREATER THAN 1/2" IN ANY DIMENSION, AND OTHER EXTRANEOUS MATTER. TOPSOIL SHALL BE TILLED THOROUGHLY BY PLOWING, DISKING, HARROWING, OR OTHER APPROVED METHODS. ADD SPECIFIED SOIL AMENDMENTS AND MIX THOROUGHLY INTO THE TOPSOIL.
- D. PREPARATION OF UNCHANGED GRADES: WHERE SEED IS TO BE PLANTED IN AREAS THAT HAVE NOT BEEN ALTERED OR DISTURBED BY EXCAVATING, GRADING, OR STRIPPING OPERATIONS, PREPARE SOIL FOR PLANTING AS FOLLOWS: TILL TO A DEPTH OF NOT LESS THAN 6 INCHES. APPLY SOIL AMENDMENTS AND INITIAL FERTILIZERS AS SPECIFIED. REMOVE HIGH AREAS AND FILL IN DEPRESSIONS. TILL SOIL TO A HOMOGENOUS MIXTURE OF FINE TEXTURE, FREE OF LUMPS, CLODS, STONES, ROOTS AND OTHER EXTRANEOUS MATTER. SOILS TEST REQUIREMENTS APPLY HERE AS WELL.
- 1. PRIOR TO PREPARATION OF UNCHANGED AREAS, REMOVE EXISTING GRASS, VEGETATION AND TURF. DISPOSE OF SUCH MATERIAL OUTSIDE OF PROJECT LIMITS. DO NOT TURN EXISTING VEGETATION OVER INTO SOIL BEING PREPARED FOR SEED. IF NECESSARY, SUPPLY AND INSTALL TOPSOIL IN AREAS WHERE THERE IS NO TOPSOIL LEFT AFTER VEGETATION HAS BEEN REMOVED.
- 2. APPLY SPECIFIED SOIL AMENDMENTS AT RATES SPECIFIED IN THE SOILS TEST AND THOROUGHLY MIX INTO UPPER 2 INCHES OF TOPSOIL. ADD TOPSOIL IF EXISTING GRADE HAS LESS THAN 4" OF TOPSOIL DELAY APPLICATION OF AMENDMENTS IF PLANTING WILL NOT FOLLOW WITHIN TWO (2) DAYS.
- E. FINE GRADE AREAS TO SMOOTH, EVEN SURFACE WITH LOOSE, UNIFORMLY FINE TEXTURE. ROLL, RAKE, AND DRAG LAWN AREAS, REMOVE RIDGES AND FILL DEPRESSIONS, AS REQUIRED TO MEET FINISH GRADES. REMOVE STICKS, ROOTS, RUBBISH, STONES GREATER THAN 1/2" IN ANY DIMENSION, AND OTHER EXTRANEOUS MATTER. LIMIT FINE GRADING TO AREAS WHICH CAN BE PLANTED IMMEDIATELY AFTER GRADING.
- F. MOISTEN PREPARED AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE MOISTURE TO DRY BEFORE PLANTING LAWNS. DO NOT CREATE A MUDDY
- G. RESTORE AREAS TO SPECIFIED CONDITION, IF ERODED OR OTHERWISE DISTURBED, AFTER FINE GRADING AND PRIOR TO PLANTING.

3.2 SEEDING

- A. DO NOT USE WET SEED OR SEED THAT IS MOLDY OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE. SEED SHALL NOT BE SOWN WHEN THE GROUND IS FROZEN, MUDDY, OR WHEN WEATHER CONDITIONS PREVENT PROPER SOIL PREPARATION, INTERFERENCE WITH SOWING AND/OR PROPER INCORPORATION OF SEED INTO THE SOIL.
- R SOW SEED LISING A SPREADER OF HADROSEEDER DO NOT SEED WHEN WIND VELOCITY EXCEEDS 5 MILES PER HOUR. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING 3 LBS. PER 1000 S.F. AT RIGHT ANGLES TO EACH OTHER. TOTAL AMOUNT TO EQUAL A MINIMUM
- C. FOR SEED SOWN WITH A SPREADER, MULCH SHALL BE SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET AT A RATE OF 100 LBS. PER 1,000 S.F. MULCH SHALL BE 1 1/2" LOOSE MEASUREMENT OVER SEEDED AREAS AND SHALL BE ANCHORED.
- D. CONTRACTOR HAS THE OPTION TO HYDROSEED LARGE LAWN AREAS, USING EQUIPMENT SPECIFICALLY DESIGNED FOR SUCH APPLICATION. THE RATE OF APPLICATION OF WOOD FIBER MULCHING MATERIALS IS 40 LBS./1,000 S.F. CONTRACTOR SHALL NOT HYDROSEED WITHIN CLOSE PROXIMITY TO BUILDINGS AND STRUCTURES, OR WHEN UNFAVORABLE WIND CONDITIONS MAY BLOW THE HYDROSEED MATERIAL ONTO THE STRUCTURE. CONTRACTOR SHALL CLEAN ALL AREAS NOT TO BE SEEDED OF OVERSPRAY.
- E. THE SEEDED AREA SHALL BE WATERED, AS SOON AS THE SEED IS APPLIED, AT THE RATE OF 120 GALLONS PER 1000 SQUARE FEET. THE WATER SHALL BE APPLIED BY MEANS OF A HYDROSEEDER OR A WATER TANK UNDER PRESSURE WITH A NOZZLE THAT WILL PRODUCE A SPRAY THAT WILL NOT DISLODGE THE MULCHING MATERIAL. COST OF THIS WATERING SHALL BE INCLUDED IN THE COST OF SEEDING AND MULCHING.

3.3 DORMANT SEEDING METHOD

- A. SEEDING SHALL NOT TAKE PLACE FROM OCTOBER 15 THROUGH NOVEMBER 20. DURING THIS PERIOD PREPARE THE SEED BED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, AND OTHER AMENDMENTS, THEN MULCH AND ANCHOR.
- B. FROM NOVEMBER 20 THROUGH APRIL 1, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEED BED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH, AND ANCHOR. INCREASE THE SEEDING RATE BY 50 PERCENT.

3.4 RECONDITIONING EXISTING LAWNS

- A. A SOILS TEST SHALL BE REQUIRED FOR EXISTING LAWNS PRIOR TO ANY RECONDITIONING.
- B. RECONDITION ALL EXISTING LAWN AREAS DAMAGED BY CONTRACTOR'S OPERATIONS INCLUDING STORAGE OF MATERIALS AND EQUIPMENT AND MOVEMENT OF VEHICLES. ALSO RECONDITION EXISTING LAWN AREAS WHERE MINOR REGRADING IS REQUIRED.
- C. PROVIDE SOIL AMENDMENTS AS CALLED FOR IN THE SOILS TEST.
- D. PROVIDE NEW TOPSOIL, AS REQUIRED, TO FILL LOW SPOTS AND MEET NEW FINISH GRADES.
- E. CULTIVATE BARE AND COMPACTED AREAS ACCORDING TO THE TOPSOIL SPECIFICATIONS.
- F. REMOVE DISEASED AND UNSATISFACTORY LAWN AREAS; DO NOT BURY INTO SOIL. REMOVE TOPSOIL CONTAINING FOREIGN MATERIALS RESULTING FROM THE CONTRACTOR'S OPERATIONS, INCLUDING OIL DRIPPINGS, STONE, GRAVEL, AND OTHER LOOSE BUILDING
- G. ALL WORK SHALL BE THE SAME AS FOR NEW SEEDING
- H. WATER NEWLY PLANTED SEED AREAS. MAINTENANCE OF RECONDITIONED LAWNS SHALL BE THE SAME AS MAINTENANCE OF NEW LAWNS.

3.5 ESTABLISHMENT

- A. MAINTAIN WORK AREAS AS LONG AS NECESSARY TO ESTABLISH A UNIFORMLY CLOSE STAND OF GRASS OVER THE ENTIRE LAWN AREA. A UNIFORMLY CLOSE STAND OF GRASS IS DEFINED AS THE SEEDED AREAS HAVING 90%+ COVERAGE OF GRASS AT 60 DAYS AFTER SEEDING. 90%+ COVERAGE IS DEFINED AS VERY LITTLE OR NO DIRT SHOWING WHEN SEEDED AREA IS VIEWED FROM DIRECTLY OVERHEAD.
- B. MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH

1. MOWING

- a. MOW LAWN AREAS DURING THE PERIOD OF MAINTENANCE TO A HEIGHT OF 2 INCHES WHENEVER THE HEIGHT OF THE GRASS BECOMES 3 INCHES. A MINIMUM OF 3 MOWINGS IS REQUIRED DURING THE PERIOD OF MAINTENANCE.
- a. DISTRIBUTE FERTILIZER ON THE SEEDED AREA BETWEEN AUGUST 15 AND OCTOBER 15, DURING THE PERIOD WHEN GRASS IS DRY, AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE FERTILIZER SHALL BE AS SPECIFIED IN THE SOILS TEST.
- RESEEDING a. RESEED WITH THE SEED SPECIFIED FOR THE ORIGINAL SEEDING, AT THE RATE OF 4 LBS. PER 1,000 S.F. IN A MANNER WHICH WILL CAUSE MINIMUM DISTURBANCE TO THE EXISTING STAND OF GRASS AND AT AN ANGLE OF NOT LESS THAN 15 DEGREES FROM
- 4. WATERING a. THE CONTRACTOR SHALL KEEP ALL WORK AREAS WATERED DAILY TO ACHIEVE SATISFACTORY GROWTH. WATER SHALL BE APPLIED AT A RATE OF 120 GALLONS PER 1,000 SQUARE FEET. IF WATER IS LISTED AS A PAY ITEM, IT SHALL BE SEPARATELY PAID FOR BASED ON THE ACTUAL AMOUNT OF WATER USED, MEASURED IN THOUSANDS OF
- 5. ANY MULCHING WHICH HAS BEEN DISPLACED SHALL BE REPAIRED IMMEDIATELY. ANY SEED WORK WHICH HAS BEEN DISTURBED OR DAMAGED FROM THE DISPLACEMENT OF MULCH SHALL BE REPAIRED PRIOR TO REMULCHING.

3.6 INSPECTION AND ACCEPTANCE

- A. WHEN SEEDING WORK IS COMPLETE AND AN ACCEPTABLE STAND OF GROWTH IS ATTAINED, THE CONTRACTOR SHALL REQUEST THE OWNER'S REPRESENTATIVE TO MAKE AN INSPECTION TO DETERMINE FINAL ACCEPTANCE.
- B. ACCEPTANCE SHALL BE BASED UPON ACHIEVING A VIGOROUS UNIFORMLY STAND OF THE SPECIFIED GRASSES. IF SOME AREAS ARE SATISFACTORY AND SOME ARE NOT, ACCEPTANCE MAY BE MADE IN BLOCKS, PROVIDED THEY ARE DEFINABLE OR BOUNDED BY READILY IDENTIFIED PERMANENT SURFACES, STRUCTURES, OR OTHER REFERENCE MEANS. PARTIAL ACCEPTANCE DECISIONS MAY BE MADE BY THE OWNER'S REPRESENTATIVE. EXCESSIVE FRAGMENTATION INTO ACCEPTED AND UNACCEPTED AREAS SHALL NOT BE ALLOWED. UNACCEPTED AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ACCEPTABLE.
- C. NO PAYMENT SHALL BE MADE UNTIL AREAS ARE ACCEPTED.

THE DIRECTION OF ROWS OF PRIOR SEEDING.

D. ALL SEEDED AREAS SHALL BE GUARANTEED FOR ONE FULL GROWING SEASON TO COMMENCE UPON FINAL ACCEPTANCE OF THE AREAS.

END OF SECTION 329219

REVISION NO DATE

CITY OF RICHMOND HEIGHTS

DESAN PARK IMPROVEMENTS

CUYAHOGA COUNTY, OHIO

ISS	SUED FOR:	BID
ISS	SUE DATE:	JUNE 2025
sc	ALE:	AS SHOWN
DE	SIGNED BY:	JRH
DR	RAWN BY:	JRH
СН	IECKED BY:	WTV

SEEDING SPECIFICATION

GENERAL - 00 SERIES

PROJECT NO. 241785 DISCIPLINE CIVIL SHEET NAME **D-2** SHEET