

GENERAL LANDSCAPING REQUIREMENTS

1.0	GENERAL
1.1	SUMMARY
1.1.1	Includes But Not Limited To
1.	General procedures and requirements for Site Work.
2.0	PRODUCTS – Not Used
3.0	EXECUTION
3.1	PREPARATION
3.1.1	Protection
1.	Spillage:
A.	Avoid spillage by covering and securing loads when hauling on or adjacent to public streets or highways.
B.	Remove spillage and sweep, wash, or otherwise clean project, streets, and highways.
2.	Erosion Control:
A.	Take precautions necessary to prevent erosion and transportation of soil downstream, to adjacent properties, and into on-site or off-site drainage systems.
B.	Develop, install, and maintain an erosion control plan if required by law.
C.	Repair and correct damage caused by erosion.
3.	Existing Plants And Features:
A.	Do not damage tops, trunks, and roots of existing trees and shrubs on site which are intended to remain.
B.	Do not use heavy equipment within branch spread. Interfering branches may be removed only with permission of Landscape Architect.
C.	Do not damage other plants and features which are to remain.
3.1.2	If specified precautions are not taken or corrections and repairs made promptly, Owner may take such steps as may be deemed necessary and deduct costs of such from monies due to Contractor. Such action or lack of action on Owner's part does not relieve Contractor from responsibility for proper protection of the Work.

END OF SECTION

LANDSCAPING PREPARATION

1.0	GENERAL
1.1	SUMMARY
1.1.1	Includes But Not Limited To
1.	General landscape work requirements.
1.2	QUALITY ASSURANCE
1.2.1	Comply with all applicable local, state and federal requirements, regarding materials, methods of work, and disposal of excess and waste materials.
1.2.2	Obtain and pay for all required inspections, permits, and fees.
1.2.3	Provide notices required by governmental authorities.
1.3	PROJECT CONDITIONS
1.3.1	Locate and identify existing underground and overhead services and utilities within contract limit work areas. (Call Miss Dig: 1-800-482-7171 in Michigan).
1.3.2	Provide adequate means to protect utilities and services designated to remain.
1.3.3	Repair utilities damaged during site work operations at Subcontractor's expense.
1.3.4	When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.
1.3.5	Locate, protect, and maintain benchmarks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items at Subcontractor's expense.
1.3.6	Perform landscape work operations and the removal of debris and materials to assure minimum interference with streets, walks, and other adjacent facilities.
1.3.7	Obtain governing authorities' written permission when required to close or obstruct streets, walks and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways when required by governing authorities.
1.3.8	Protect and maintain street lights, utility poles and services, traffic signal control boxes, curb boxes, valves and other services, except items designated for removal.
1.3.9	The General Contractor will occupy the premises and adjacent facilities during the entire period of construction. Perform landscape work operations to minimize conflicts and to facilitate General Contractor's use of the premises and conduct of his normal operations.
1.3.10	Perform landscape preparation work before commencing landscape construction.
1.3.11	Provide necessary barricades, coverings and protection to prevent damage to existing improvements indicated to remain.
1.3.12	Protect existing trees scheduled to remain against injury or damage including cutting, breaking or skinning of roots, trunks or branches, smothering by stockpiled construction materials, excavated materials or vehicular traffic within branch spread.
2.0	PRODUCTS
2.1	MATERIALS/EQUIPMENT
2.1.1	As selected by the General Contractor, except as indicated.
1.	Tree protection:
A.	Wood fencing – Snow fencing 4' height.
B.	Posts – Steel fence post.
C.	Herbicide for lawn restoration – "Round-up" by Monsanto.
3.0	EXECUTION
3.1	EXISTING UTILITIES
3.1.1	Call "MISS DIG" 811 before construction begins. Information on the drawings related to existing utility lines and services is from the best sources presently available. All such information is furnished only for information and is not guaranteed. Excavate test pits as required to determine exact locations of existing utilities.
3.2	CLEARING
3.2.1	Locate and suitably identify trees and improvements indicated to remain.
3.2.2	Fencing/soil erosion fence is to be installed.
3.2.3	Any equipment that compacts the soil in the areas of existing trees is not allowed.
3.2.4	Protect trees scheduled to remain with 4' high snow fence per plans.

3.2.5	No vehicular traffic is permitted beneath drip line at any time. All lawn areas are to be worked by hand.
3.2.6	Clear and grub areas within contract limits as required for site access and execution of the work.
3.2.7	Remove trees, plants, undergrowth, other vegetation and debris, except items indicated to remain.
3.2.8	Treat planting and lawn areas as required with herbicide per manufacturer recommendations to kill existing vegetation prior to planting, seeding and sodding.
3.2.9	Remove stumps and roots to a clear depth of 36" below subgrades. Remove stumps and roots to their full depth within 5'0" of underground structures, utility lines, footings, and paved areas.
3.3	DISPOSAL OF WASTE MATERIALS
3.3.1	Stockpile, haul from site and legally dispose of waste materials and debris. Accumulation is not permitted.
3.3.2	Maintain disposal routes, clear, clean and free of debris.
3.3.3	On site burning of combustible cleared materials is not permitted.
3.3.4	Upon completion of landscape preparation work, clean areas within contract limits, remove tools and equipment. Site to be clear, clean and free of materials and debris and suitable for site work operations.
3.3.5	Materials, items and equipment not scheduled for reinstallation or salvaged for the General Contractor are the property of the Landscape Contractor. Remove cleared materials from the site as the work progresses. Storage and sale of Landscape Contractors salvage items on site is not permitted.

END OF SECTION

FINISH GRADING AND TOPSOIL PLACEMENT

1.0	GENERAL
1.1	SUMMARY
1.1.1	Includes But Not Limited To
1.	Perform finish grading and topsoil placement required to prepare site for installation of landscaping as described in Contract Documents.
1.2	SUBMITTALS
1.2.1	Quality Assurance
1.	Submit test on imported topsoil and on site stockpiled topsoil by independent licensed testing laboratory prior to use. Imported topsoil shall meet minimum specified requirements and be approved by Landscape Architect prior to use.
2.	Provide and pay for testing and inspection during topsoil operations. Laboratory, inspection services, and Soils Engineer shall be acceptable to the Landscape Architect.
3.	Submit report stating location of source of imported topsoil and account of recent use.
4.	Test for pH factor, mechanical analysis, and percentage of organic content.
5.	Submit test reports to General Contractor.
6.	Sub-Contractor, or testing agency to make recommendations on type of quantity of additives required to establish satisfactory pH factor and supply of nutrients to bring nutrients to satisfactory level for planting.
1.3	QUALITY ASSURANCE
1.3.1	Participate in pre-installation meeting with Landscape Architect.
1.4	PROJECT CONDITIONS
1.4.1	Also see Landscape Preparation Section.
1.4.2	Protect existing trees, plants, lawns, and other features designated to remain as part of the landscaping work.
1.4.3	Promptly repair damage to adjacent facilities caused by topsoil operations. Cost of repair at Subcontractor's expense.
1.4.4	Promptly notify the General Contractor and Landscape Architect of unexpected subsurface conditions.
2.0	PRODUCTS
2.1	MATERIALS
2.1.1	Topsoil: supplied and stockpiled topsoil proposed for use must meet the testing criteria results specified. Topsoil must conform to adjustments and recommendations from the soil test and by the Landscape Architect.
2.1.2	Existing topsoil: existing topsoil from on-site stockpile shall be utilized. All processing, cleaning, and preparation of this stored topsoil to render it acceptable for use is the responsibility of the Subcontractor.
2.1.3	Provide additional topsoil as required to complete the job. Topsoil must meet testing criteria results specified.
2.1.4	All processing, cleaning, and preparation of this supplied topsoil to render it acceptable for use is the responsibility of the Subcontractor.
2.1.5	Supplied and stockpiled topsoil, shall be fertile, friable, dark in color and representative of local productive soil, capable of sustaining vigorous plant growth and free of clay lumps, subsoil, noxious weeds or other foreign matter such as stones of 1" in any dimension, roots, sticks, and other extraneous material: not frozen or muddy. PH of soil range between 5.0 and 7.5
2.1.6	Soil shall not contain more than 2 percent of particles measuring over 2.0 mm in largest size

2.1.7	Prepared topsoil shall be used in planting mixtures as specified in Trees, Plants, and Ground Cover; all beds prepared as specified.
3.0	EXECUTION
3.1	EXAMINATION
3.1.1	Do not commence work of this Section until grading tolerances specified are met.
3.2	PREPARATION
3.2.2	Prior to grading, dig out weeds from planting areas by their roots and remove from site. Before placing top soil in landscape areas, remove rocks larger than 1 inch in any dimension and foreign matter such as building rubble, wire, cans, sticks, concrete, etc.
3.2.3	Prior to placing topsoil, remove any imported base material present in planting areas down to natural subgrade or other material acceptable to Landscape Architect.
3.3	PERFORMANCE
3.3.1	Site Tolerances
1.	Total Topsoil Depth –
A.	Lawn And Groundcover Planting Areas – 3 inches minimum compacted.
B.	Shrub Planting Areas – 12 inches minimum throughout entire shrub bed area.
2.	Elevation of topsoil relative to walks or curbs –
A.	Seeded Lawn Areas – 1/4 inch below
B.	Sodded Lawn Areas – 1 1/2 inches below
C.	Shrub And Ground Cover Areas – 3 inches below

3.3.2	Do not expose or damage existing shrub or tree roots.
3.3.3	Redistribute approved existing top soil stored on site as a result of rough grading. Remove organic material, rocks and clods greater than 1 inch in any dimension, and other objectionable materials. Provide additional approved imported topsoil required for specified topsoil depth and bring surface to specified elevation relative to walk or curb.

3.3.4	For trees, shrubs, ground cover beds and plant mix for beds see Exterior Plants section.
3.3.5	Provide earth berming where indicated on Plans.
3.3.6	Berming to be free flowing in shape and design, as indicated, and to blend into existing grades gradually so that the toe of slope is not readily visible. Landscape Architect or General Contractor's representative to verify final contouring before planting.
3.3.7	Regardless of finish grading elevations indicated, it is intended that grading be such that proper drainage of surface water away from buildings will occur and that no low areas are created to allow ponding. Subcontractor to consult the General Contractor and Landscape Architect regarding variations in grade elevations before rough grading is completed.
3.3.8	Slope grade away from building for 12 feet minimum from walls at slope of 1/2 inch per ft minimum unless otherwise noted. High point of finish grade at building foundation shall be 6 inches minimum below finish floor level. Direct surface drainage in manner indicated on Drawings by molding surface to facilitate natural run-off of water. Fill low spots and pockets with top soil and grade to drain properly.
3.3.9	Rake all topsoil to remove clods, rocks, weeds, and debris.
3.3.10	Grade and shape area to bring surface to true uniform planes free from irregularities and to provide proper drainage and slopes per plans.
3.4	CLEANING
3.4.1	Upon completion of topsoil operations, clean areas within contract limits, remove tools, equipment, and haul all excess topsoil off-site. Site shall be clear, clean, free of debris, and suitable for site work operations.

END OF SECTION

LAWN SEEDING

1.0 SUMMARY

1.1 Includes But Not Limited To

1.1.1 Furnish and install seeded lawn as described in Contract Documents.

1.2 SUBMITTALS

1.2.1 Submit seed vendor's certification for required grass seed mixture, indicating percentage by weight, and percentage of purity, germination, and weed seed for each grass species.

1.3 DELIVERY AND STORAGE

1.3.1 Deliver seed and fertilizer materials in original unopened containers, showing weight, analysis, and name of manufacturer. Store in a manner to prevent wetting and deterioration.

1.4 PROJECT CONDITIONS

1.4.1 See landscape preparation section.

1.4.2 Work notification: Notify Landscape Architect of General Contractor's representative at least seven (7) working days prior to start of seeding operation.

1.4.3 Protect existing utilities, paving, and other facilities from damage caused by seeding operations.

1.4.4 Perform seeding work only after planting and other work affecting ground surface has been completed.

1.4.5 Provide hose and lawn watering equipment as required.

1.4.6 The irrigation system will be installed prior to seeding. Locate, protect, and maintain the irrigation system during seeding operations. Repair irrigation system components damaged during seeding operations at the Sub-Contractor's expense.

1.5 WARRANTY

1.5.1 See Landscape Maintenance and Warranty Section

2.0 PRODUCTS

2.1 MATERIALS

2.1.1 Topsoil for Seeded Areas: See Topsoil Placement and Drawings.

2.1.2 Lawn seeded areas: Fresh, clean and new crop seed mixture. Mixed by approved methods.

2.1.3 Seed mixture composed of the following varieties, mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

2.1.4	Irrigated Lawn Seed Mixture proportioned by volume as indicated below:																
	<table><tr><th>SEED TYPE</th><th>PROPORTION</th><th>PURITY</th><th>GERMINATION</th></tr><tr><td>Kentucky Bluegrass</td><td>50%</td><td>95%</td><td>75%</td></tr><tr><td>Penn Lawn Fescue</td><td>30%</td><td>95%</td><td>80%</td></tr><tr><td>Annual Ryegrass</td><td>20%</td><td>95%</td><td>80%</td></tr></table>	SEED TYPE	PROPORTION	PURITY	GERMINATION	Kentucky Bluegrass	50%	95%	75%	Penn Lawn Fescue	30%	95%	80%	Annual Ryegrass	20%	95%	80%
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2.1.5	Non-Irrigated Seed Mixture proportioned by volume as indicated below:																
	<table><tr><th>SEED TYPE</th><th>PROPORTION</th><th>PURITY</th><th>GERMINATION</th></tr><tr><td>Penn Lawn Fescue</td><td>60%</td><td>90%</td><td>85%</td></tr><tr><td>Kentucky 26½ Common Bluegrass</td><td>20%</td><td>90%</td><td>90%</td></tr><tr><td>Pennfenn Perennial Ry</td><td>20%</td><td>90%</td><td>90%</td></tr></table>	SEED TYPE	PROPORTION	PURITY	GERMINATION	Penn Lawn Fescue	60%	90%	85%	Kentucky 26½ Common Bluegrass	20%	90%	90%	Pennfenn Perennial Ry	20%	90%	90%
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Penn Lawn Fescue	60%	90%	85%														
Kentucky 26½ Common Bluegrass	20%	90%	90%														
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2.1.6	Fertilizer: granular, non burning product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer.																

2.1.6	Fertilizer: granular, non burning product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer.
2.1.7	Ground Limestone: Used if required by soil test report: Containing not less than 85% of total carbonates and ground to such fineness that 50% will pass through a 100 mesh sieve and 90% will pass through a 20% mesh sieve.
2.1.8	Straw Mulch: Used in crimping process only. Clean oat or wheat straw well seasoned before baling, free from mature seed-bearing status, or roots of prohibited or noxious weeds.
2.1.9	Water: Free of substance harmful to seed growth. Hoses or other methods to transportation furnished by Sub Contractor.
3.0	EXECUTION
3.1	INSPECTION
3.1.1	Landscape Architect or General Contractor's representative must approve finish surfaces, grades, topsoil quality and depth. Do not start seeding work until unsatisfactory conditions are corrected.

PREPARATION

SURFACE PREPARATION

1.	Seven days maximum prior to seeding, –
A.	Treat Lawn areas if required with "Round-Up" by Monsanto, per label direction to kill existing vegetation prior to seeding.
B.	Loosen topsoil areas to minimum depth of 4", dampen thoroughly, and cultivate to properly break up clods and lumps.
C.	Rake area to remove clods, rocks, weeds, roots, debris, and stones over 1" in any dimension.
D.	Grade lawn areas to smooth, free draining even surface with a loose, moderately coarse texture. Roll and rake, remove ridges, and fill depressions as required to drain.
E.	Apply limestone to supplied topsoil if required by soil test report at rate determined by the soil test, to adjust pH of topsoil to not less than 6.0 no more than 6.8. Distribute evenly by machine and incorporate thoroughly into topsoil.
F.	Apply fertilizers to indicated turf areas at a rate equal to 1 lb. of actual nitrogen 1,000 sq. ft. (43 lbs / acre).
G.	Apply fertilizers by mechanical rotary or drop type distributor, thoroughly and evenly incorporated with soil to a depth of 1" by approved method. Fertilize areas inaccessible to power equipment with hand tools and incorporate into soil.

H.	After lawn areas have been prepared, take no heavy objects over them except lawn rollers.
I.	After preparation of lawn areas and with topsoil in semi-dry condition, roll lawn planting areas in two directions at approximately right angles with water ballast roller weighing 100 to 300 lbs according to soil type.
J.	Rake or scarify and cut or fill irregularities that develop as required until area is true and uniform, free from lumps, depressions, and irregularities.
K.	Restore prepared areas to specified condition if eroded, settled or otherwise disturbed after fine grading and prior to seeding.
3.3	INSTALLATION
3.3.1	SEEDING
1.	Seed lawns only between April 1, and June 1, and fall seeding between August 15, and October 15, or at such other times acceptable to Landscape Architect.
2.	Seed immediately after preparation of bed. Seed indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
3.	Perform seeding operations when the soil is dry and when the winds do not exceed five(5) miles per hour velocity.
4.	Apply seed with a rotary or drop type distributor. Install seed evenly by sowing equal quantities in two (2) directions, at right angles to each other.
5.	Sow seed at a rate of 300 lbs./acre.
6.	After seeding, rake or drag surface of soil lightly to incorporate seed into top 1/8" of soil. Roll with light lawn roller.
7.	Provide soil erosion planting mat where grade conditions required to stabilize the planting area.

HYDRO-SEEDING

1.	Hydro-seeding: The application of grass seed and a wood cellulose fiber mulch tinted green shall be accomplished in one operation by use of an approved spraying machine.
A.	Mix seed, fertilizer, and wood cellulose fiber in required amount of water to produce a homogeneous slurry. Add wood cellulose fiber after seed, water, and fertilizer have been thoroughly mixed and apply at the rate of 200 pounds per acre dry weight.
B.	For hydro-seeding, wood cellulose fiber shall be used. Silva-Fiber Mulch by Weyerhaeuser Company, Tacoma, WA (800-443-9179).
C.	Hydraulically spray material on ground to form a uniform cover impregnated with grass seed.
D.	Immediately following application of slurry mix, make separate application of wood cellulose mulch at the rate of 1,000 pounds, dry weight, per acre.
E.	Apply cover so that rainfall or applied water will percolate to underlying soil.

MULCHING

1.	Place straw mulch on seeded areas within 24-hours after seeding.
2.	Place straw mulch uniformly in a continuous blanket at a rate of 2-1/2 tons per acre, or two (2) 50 lb. bales per 1,000 sq. ft. of area. A mechanical blower may be used for straw mulch application when acceptable to the Landscape Architect.
3.	Crimp straw into soil by use of a "crimper". Two passes in alternate direction required. Alternative methods on areas too small for crimper must be approved by the Landscape Architect or Owner's Representative.
3.3.3	ESTABLISH LAWN
1.	Establish dense lawn of permanent grasses, free from lumps and depressions. Any area failing to show uniform germination to be reseeded; continue until dense lawn established.
2.	Damage to seeded area resulting from erosion to be repaired by Sub Contractor.
3.	In event Sub Contractor does not establish dense lawn during first germination period, return to project to refertilize and reseed to establish dense lawn.
4.	Should the seeded lawn become largely weeds after germination, Sub Contractor is responsible to kill the weeds and reseed the proposed lawn areas to produce a dense turf, as specified.

CLEANING

3.4.1	Perform Cleaning during installation of the work and upon completion of the work to the approval of the Landscape Architect. Remove from site all excess materials, debris, and equipment. Repair damage resulting from seeding operations.
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MAINTENANCE

3.5.1	See Landscape Maintenance and Warranty Section.
3.6	ACCEPTANCE
3.6.1	See Landscape Maintenance and Warranty Section.

END OF SECTION

LAWN SODDING

1.0	GENERAL
1.1	SUMMARY
1.1.1	Includes But Not Limited To
1.	Furnish and install sodded lawn as described in Contract Documents.
1.2	QUALITY ASSURANCE
1.2.1	Sod: Comply with American Sod Producers Association (ASPA) classes of sod materials.
1.3	SUBMITTALS
1.3.1	Submit sod growers certification of grass species. Identify source location.
1.3.2	Submit manufacturer's certification of fertilizer.
1.4	DELIVERY, STORAGE, AND HANDLING
1.4.1	Cut, deliver, and install sod within 24 hour period.
1.4.2	Do not harvest or transport sod when moisture content may adversely affect sod survival.
1.4.3	Protect sod from sun, wind, and dehydration prior to installation. Do not tear, stretch, or drop sod during handling and installation.
1.4.4	Sod which dries out before installation will be rejected.
1.5	PROJECT CONDITIONS
1.5.1	See Landscape Preparation section.
1.5.2	Work notification: Notify Landscape Architect or General Contractor's representative at least seven (7) working days prior to start of sodding operation.
1.5.3	Protect existing utilities, paving, and other facilities from damage caused by sodding operations.
1.5.4	Perform sodding work only after planting and other work affecting ground surface has been completed.
1.5.5	Restrict traffic from lawn areas until grass is established. Erect signs and barriers as required.

1.5.6	Provide hose and lawn watering equipment as required.
1.5.7	The irrigation system will be installed prior to sodding. Locate, protect, and maintain the irrigation system during sodding operations. Repair irrigation system components damaged during sodding operations at the Subcontractor's expense.
1.6	WARRANTY
1.6.1	See Landscape Maintenance and Warranty Section.
2.0	PRODUCTS
2.1	MATERIALS
2.1.1	Sod: An "approved" nursery grown blend of Improved Kentucky Bluegrass varieties.
2.1.2	Sod containing Common Bermudagrass, Quackgrass, Johnsongrass, Palsen Ivy, Nutsedge, Nimblewill, Canada Thistle, Timothy, Bentgrass, Wild Oat, Ground Ivy, Perennial Sorrel, or Bramegrass weeds will not be acceptable.
2.1.3	Provide well rooted, healthy sod, free of diseases, nematodes and soil borne insects. Provide sod uniform in color, leaf texture, density, and free of weeds, undesirable grasses, stones, roots, thatch, and extraneous material; viable and capable of growth and development when planted.
2.1.4	Furnish sod, machine stripped in square pads or strips not more than 3'-0" long; uniformly 1" to 1-1/2" thick with clean cut edges. Mow sod before stripping.
2.1.5	Fertilizer: granular, non burning product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer.
2.1.6	Type A: starter fertilizer containing 20% nitrogen, 12% phosphoric acid, and 8% potash by weight or similar approved composition.
2.1.7	Ground Limestone: Used if required by soil test report: Containing not less than 85% of total carbonates and ground to such fineness that 50% will pass through a 100 mesh sieve and 90% will pass through a 20% mesh sieve.
2.1.8	Stakes: softwood, 3/4" x 8" long.
2.1.9	Water: Free of substance harmful to seed growth. Hoses or other methods to transportation furnished by Sub Contractor.
2.1.10	Topsoil: see Topsoil Placement section.
3.0	EXECUTION
3.1	INSPECTION
3.1.1	Landscape Architect or General Contractor's representative must approve finish surfaces, grades, topsoil quality and depth. Do not start sodding work until unsatisfactory conditions are corrected.
3.2	PREPARATION
3.2.1	Surface Preparation:
1.	Seven days maximum prior to sodding, –
a.	Treat Lawn areas if required with herbicide per manufacturer recommendations to kill existing vegetation prior to sodding.
b.	Loosen topsoil areas to minimum depth of 4", dampen thoroughly, and cultivate to properly break up clods and lumps.
c.	Rake area to remove clods, rocks, weeds, roots, debris, and stones over 1" in any dimension.
d.	Grade lawn areas to smooth, free draining even surface with a loose, moderately coarse texture. Roll and rake, remove ridges, and fill depressions as required to drain.
e.	Apply limestone to indicated topsoil if required by soil test report at rate determined by the soil test, to adjust pH of topsoil to not less than 6.0 no more than 6.8. Distribute evenly by machine and incorporate thoroughly into topsoil.
f.	Apply fertilizers to indicated turf areas at a rate equal to 1 lb. of actual nitrogen 1,000 sq. ft. (43 lbs / acre).
g.	Apply fertilizers by mechanical rotary or drop type distributor, thoroughly and evenly incorporated with soil to a depth of 1" by approved method. Fertilize areas inaccessible to power equipment with hand tools and incorporate into soil.
h.	After lawn areas have been prepared, take no heavy objects over them except lawn rollers.
i.	After preparation of lawn areas and with topsoil in semi-dry condition, roll lawn planting areas in two directions at approximately right angles with water ballast roller weighing 100 to 300 lbs.
j.	Rake or scarify and cut or fill irregularities that develop as required until area is true and uniform, free from lumps, depressions, and irregularities.
k.	Restore prepared areas to specified condition if eroded, settled or otherwise disturbed after fine grading and prior to sodding.
l.	Dampen dry soil prior to sodding.

INSTALLATION

3.3	Sodding:
1.	Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips. Do not overlay edges. Stagger strips to offset joints in adjacent course. Remove excess sod to avoid othering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains, and seeded areas.
2.	Do not lay dormant sod or install sod on saturated, frozen soil.
3.	Install initial row of sod in a straight line, beginning at the bottom of slopes, perpendicular to direction of the sloped area. Place subsequent rows parallel to and lightly against previously installed row.
4.	Peg sod on slopes greater than 3 to 1 or in centerline of swales to prevent slippage at a rate of 2 stakes per yard of sod.
5.	Water sod thoroughly with a fine spray immediately after laying to obtain moisture penetration through sod into top 4 inches of topsoil.
6.	Roll with light lawn roller in two directions perpendicular to each other to ensure contact with sub grade.
7.	Install sod at indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
8.	Damage to sodded area resulting from erosion to be repaired by Subcontractor.
3.4	CLEANING
3.4.1	Perform Cleaning during installation of the work and upon completion of the work to the approval of the Landscape Architect. Remove from site all excess materials, debris, and equipment. Repair damage resulting from sodding operations.

MAINTENANCE

3.5.1	See Landscape Maintenance and Warranty Section.
3.6	ACCEPTANCE
3.6.1	See Landscape Maintenance and Warranty Section.
END OF SECTION	



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REVISIONS:

ISSUE DATE:

DEVELOPMENT PLAN	02-24-2021
DDP RESUBMITTAL	03-31-2021
DDP RESUBMITTAL	05-26-2021
STATE PERMIT	06-07-2021

DRAWN BY: LGD

PANDA PROJECT #: D8060
CIVIL PROJECT #: 2020-0251



P&A GROUP
TRUE WARM & WELCOME
SR 32 & SPRING MILL ROAD (MEIJER #319)
WESTFIELD, IN, 46074

LANDSCAPE SPECIFICATIONS
L02.1