



NOTES

- I. REFER TO INDIVIDUAL SHEET LI & L2 FOR COMPLETE LANDSCAPE PLANTING PLANS.
- 2. REFER TO SHT L3 FOR PLANT SCHEDULE, LANDSCAPE NOTES, AND DETAILS.
- 3. REFER TO SHT L4 FOR LANDSCAPE SPECIFICATION AND IRRIGATION PERFORMANCE SPECIFICATION.









PLANT SCHEDULE (REFERENCE SHT L3)

SYM	COMMON NAME	SYM	COMMON NAME	SYM	DESCRIPTION
EVERGREEN TREES		<u>ORNAN</u>	1ENTAL TREES (CLASS I)	[······	
BS MJ VP	HOOPS BLUE SPRUCE MOONGLOW JUNIPER VANDERWOLFS PINE WEERING WHITE SPRUCE	CP PF	CHANTICLEER PEAR PRAIRIFIRE CRABAPPLE		SOD LAWN
		SHRUB	S/ORNAMENTAL GRASSES/PERENNIALS		6' SOLID VINYL FENCE ALONG
RO	NORTHERN RED OAK	CR DL	RED FLOWER CARPET ROSE ENDLESSLILY ORANGE DAYLILY	• • •	PERIMETER PROPERTY LINES, AND END LOTS (TYP)
SHADE/STREET TREES (CLASS II)		GF	GOLDFLAME SPIREA		SEE DTL 4, SHT L3.
HB HL GV NH PM TT	PYRAMIDAL EUROPEAN HORNBEAM SKYLINE HONEYLOCUST GREEN VASE ZELKOVA NEW HORIZON ELM PACIFIC SUNSET MAPLE TULIP TREE	IH F MP RS SP VB	IVORY HALO DOGWOOD KARL FOERSTER REED GRASS SLOWMOUND MUGO PINE RUSSIAN SAGE SPILLED WINE WEIGELA BLUE MUFFIN VIBURNUM	x x x	6' OPEN VISION VINYL SLAT TOP FENCE ALONG CONNECTION PATHWAYS (TYP) SEE DTL 5, SHT L3.
				8-8-8	5' IRON FENCE (TYP) SEE DTL 6, SHT L3.



NOTES

- I. REFER TO SHT L3 FOR PLANT SCHEDULE, LANDSCAPE NOTES, AND DETAILS.
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NOTES: I. REMOVE ALL TWINE, ROPE, OR BINDINGS FROM ALL TRUNKS.

2. REMOVE BURLAP AND WIRE BASKETS FROM THE TOP 1/3 OF ALL ROOT BALLS AFTER

SNIP BASKET & TURN BACK BURLAP 1/3. BACKFILL W/ TOPSOIL MIX AS SPEC'D & TAMP LOOSELY

- MULCH AS SPECIFIED. BRUSH AWAY FROM TRUNK. FERTILIZER TABS AS SPECIFIED

- ABOVE FINISH GRADE. TRUNK FLARE MUST BE VISIBLE IN PLANTING BEDS:

ROOT CROWN TO BE I-2"

8' x 2" x 2" CEDAR STAKE, 2 PER TREE. SET STAKES PARALLEL TO PREVAILING WIND. SECURE WITH RUBBER CINCH TIES. DO NOT PENETRATE ROOTBALL. SEE NOTE 3.



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NOT TO SCALE

NOT TO SCALE

SYM CC	OMMON NAME	BOTANICAL NAME	SIZE
EVERGREF	EN TREES		
	DOPS BLUE SPRUCE DONGLOW JUNIPER ANDERWOLFS PINE	PICEA PUNGENS 'HOOPSII' JUNIPERUS SCOPLULORUM 'MOONGLOW' PINUS FLEXILIS 'VANDERWOLFS' PICEA GLAUCA 'PENDULA'	6-8' HT B&B 6-8' HT B&B 6-8' HT B&B 6-8' HT B&B
SHADE TR RO NO	EES (CLASS III) DRTHERN RED OAK	QUERCUS RUBRA	2" CAL B≰B
SHADE/ST	REET TREES (CLASS II)		
HB PY HL Sk GV GF NH NE PM PA TT TV	RAMIDAL EUROPEAN HORNBEAM YLINE HONEYLOCUST REEN VASE ZELKOVA W HORIZON ELM ACIFIC SUNSET MAPLE LIP TREE	CARPINUS BETULUS 'FASTIGIATA' GLEDITSIA TRIACANTHOS F. INERMIS 'SKYCOLE' ZELKOVA SERRATA 'GREEN VASE' ULMUS JAPONICA × PUMILA 'NEW HORIZON' ACER TRUNCATUM × A. PLATANOIDES 'WARRENRED' LIRIODENDRON TULIPIFERA	2" CAL B&B 2" CAL B&B 2" CAL B&B 2" CAL B&B 2" CAL B&B 2" CAL B&B 2" CAL B&B
ORNAMENT CP CH PF PK	T <mark>AL TREES (CLASS I)</mark> HANTICLEER PEAR SAIRIFIRE (RABAPPI E	PYRUS CALLERYANA 'GLENS FORM' MALUS X 'PRAIRIFIRF'	2" CAL B&B 2" CAL B&B
CR RE DL EN GF GC GL GF IH IV KF KA MP SL RS RL SP BL	ED FLOWER CARPET ROSE IDLESSLILY ORANGE DAYLILY OLDFLAME SPIREA RO-LOW SUMAC ORY HALO DOGWOOD ARL FOERSTER REED GRASS LOWMOUND MUGO PINE ISSIAN SAGE PILLED WINE WEIGELA LUE MUFFIN VIBURNUM	ROSA 'FLOWER CARPET- NOARE' HEMEROCALLIS FULVA 'DHEMORANGE' SPIRAEA × BUMALDA 'GOLDFLAME' RHUS AROMATICA 'GRO-LOW' CORNUS ALBA 'BAILHALO' CALAMAGROSTIS ARUNDINACEA 'K.F.' PINUS MUGO 'SLOWMOUND' PEROVKSIA ATRIPLICIFOLIA WEIGELA FLORIDA 'BOKRASPIWI' VIBURNUM DENTATUM 'CHRISTOM'	3 GAL I GAL 5 GAL 5 GAL I GAL 3 GAL 3 GAL 5 GAL 5 GAL
	SOD LAWN 6' SOLID VINYL FENCE ALONG PERIMETER PROPERTY LINES, AND END LOTS (TYP) SEE DTL 4, THIS SHT.	 K→X→X 6' OPEN VISION VINYL SLAT TOP FENCE ALONG CONNECTION PATHWAYS (TYP) SEE DTL 5, THIS SHT. 	5' IRON FENCE (T SEE DTL 6, THIS S
OTE	NTING AREAS SHALL BE INSTALLED	BE IN ACCORDANCE WITH CITY OF STAR CODE. REFER	TO SHEET L4 -
ALL PLA	NTING AREAS TO BE WATERED WITH	AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. REF	ER TO SHEET L4 -
SPEC SEC	AND PROTECT ALL LITELITIES DUPING	ORMANCE SPECIFICATIONS.	
TREES SH FACILITIE CONSTRU SEEPAGE DRAINAG 'ADA COL APPENDI,	HALL NOT BE PLANTED WITHIN THE IG ES IN PARKSTRIPS. SEEPAGE BEDS N CTION AND INSTALLATION OF THE L E BEDS TO HAVE A ROOT BALL THA E SWALE SAND WINDOWS. ACHD STO JNTY HIGHWAY DISTRICT STORMWATH X D.	D-FOOT CLEAR ZONE OF ALL ACHD STORM DRAIN PIPE, MUST BE PROTECTED FROM ANY AND ALL CONTAMINATIO ANDSCAPE IRRIGATION SYSTEM. ALL SHRUBS PLANTED O T DOES NOT EXCEED 18" IN DIAMETER. NO LAWN SOD TO DRMWATER BASINS AND SWALES SHALL BE LANDSCAPEI ER MANAGEMENT BASIN REVEGETATION GUIDANCE MANU	STRUCTURES, OR ON DURING THE OVER OR ADJACENT TO D BE PLACED OVER D ACCORDING TO THE AL' (OCTOBER 2017) IN
NO TREES HIGH AT RESPONS STREET N	5 SHALL IMPEDE THE 40' VISION TRI MATURITY WILL BE LOCATED WITHIN DIBLE FOR PRUNING TREE CANOPIES VISION TRIANGLE.	ANGLE AT ALL INTERSECTIONS. NO CONIFEROUS TREES SIGHT TRIANGLE OR ACHD ROW. AS TREES MATURE, THE TO MEET ACHD REQUIREMENTS FOR MAINTAINING CLEAR	OR SHRUBS OVER 3' E OWNER SHALL BE & VISIBILITY WITHIN 40'
TREES SH	HALL BE PLANTED NO CLOSER THAN	50' FROM INTERSECTION STOP SIGNS.	
CLASS II CONSTRU MUST BE SHALL BI HOME LO UTILITY C	TREES AND LANDSCAPE IN FRONT O CTION ON THESE LOTS. TREE LOCAT CLASS II AND SHALL NOT BE PLANT E REQUIRED TO INSTALL STREET TRE TS PRIOR TO OCCUPANCY. FLEXIBIL CONFLICTS.	OF BUILDING LOTS ON INTERIOR STREETS TO BE COMPLE TONS MAY BE ALTERED TO ACCOMMODATE DRIVEWAYS TED WITHIN 5' OF WATER METERS OR UNDERGROUND UTIL EES 5' FROM BACK OF SIDEWALKS EVERY 35' ADJACEN ITY IN TREE PLACEMENT AND QUANTITIES TO BE GIVEN F	ETED DURING AND UTILITIES. TREES ITY LINES. BUILDER IT TO ALL BUILDABLE FOR DRIVEWAY AND
PLANTI	ST IS SUB IFOT TO SUBSTITUTIONS OF		

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- 9. ALL EXISTING TREES ON SITE TO BE REMOVED.



NUMBER OF TREES PROVIDED ON RESIDENTIAL PARKSTRIPS: NUMBER OF TREES PROVIDED ON COMMON LOTS:

TOTAL NUMBER OF TREES:

WIRE BASKETS TO BE REMOVED FROM ROOT BALL AS MUCH AS POSSIBLE, AT LEAST HALFWAY DOWN THE BALL OF THE TREE. ALL NYLON ROPES TO BE COMPLETELY REMOVED FROM TREES.

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Issue Date ISSUE I2-5-24 FENCE REV I2-24-25 BASE REVISIONS I2-4-25 Image: Im				
MILEPOST COMMONS No.2 STAR, IDAHO	FINAL PLAT LANDSCAPE PLAN			
Job Number	2210			
Drawn Checked KCS KCS Scale AS SHOWN Sheet Title LANDSCAPE DETAILS				
Sheet Numbe	r			

4 of 5 Sheets

SECTION 32 90 00 - LANDSCAPE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections.

1.2 SUMMARY

- A. This Section includes provisions for the following items:
- 1. Trees. 2. Shrubs; Ground cover.
- Lawns.
- 4. Topsoil and Soil Amendments. 5. Miscellaneous Landscape Elements.
- 6. Initial maintenance of landscape materials.
- B. Related Sections: The following sections contain requirements. 1. Underground sprinkler system is specified in Section 32 84 00 - Irrigation
- 1.3 QUALITY ASSURANCE
- A. Subcontract landscape work to a single firm specializing in landscape work. B. Source Quality Control:
- 1. General: Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
- 2. Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability to Architect, with proposal for use of equivalent material. 3. Analysis and Standards: Package standard products with manufacturer's certified
- analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable. 4. Trees, Shrubs and Groundcovers: Provide trees, shrubs, and groundcovers of quantity,
- size, genus, species, and variety shown and scheduled for work complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock". Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae, and defects such as knots, sun-scaLJ, injuries, abrasions, or disfigurement.
- 5. Label at least one tree and one shrub of each variety with attached waterproof tag with legible designation of botanical and common name. a. Where formal arrangements or consecutive order of trees or shrubs are shown, select
- stock for uniform height and spread. 6. Inspection: The Architect may inspect trees and shrubs either at place of growth or at site
- before planting, for compliance with requirements for genus, species, variety, size, and quality. Architect retains right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from project site.
- 1.4 SUBMITTALS
- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Plant and Material Certifications: 1. Certificates of inspection as required by governmental authorities
- 2. Manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials. 3. Label data substantiating that plants, trees, shrubs and planting materials comply specified requirements.
- C. Mulch: Submit 1 gal bag of mulch sample for approval.
- 1.5 DELIVERY, STORAGE AND HANDLING
- A. Sod: Time delivery so that sod will be placed within 24 hours after stripping. Protect sod against drying and breaking of rolled strips.
- B. Trees and Shrubs: Provide freshly dug trees and shrubs. Do not prune prior to delivery unless otherwise approved by Architect. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery. Do not drop balled and burlapped stock during delivery. C. Deliver trees and shrubs after preparations for planting have been completed and plant
- immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture.
- D. Do not remove container-grown stock from containers until planting time. E. Do not drop or dump materials from vehicles during delivery or handling. Avoid any damage to rootballs during deliver, storage and handling.
- 1.6 JOB CONDITIONS
- A. Utilities: Determine location of underground utilities and work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.
- B. Excavation: When conditions detrimental to plant growth are encountered, such rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.
- C. Adjacent Landscape: Protect planted areas adjacent to construction area. Replace or recondition to prior conditions at project completion.

1.7 SEQUENCING AND SCHEDULING

A. Planting Time: Proceed with, and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.

- 1. Plant or install all plant materials during normal planting seasons from 15 March to
- 15 November. 2. Correlate planting with specified maintenance periods to provide maintenance from date of substantial completion
- B. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.
- 1.8 SPECIAL PROJECT WARRANTY
- A. Warranty lawns through specified lawn maintenance period, until Final Project Acceptance B. Warranty trees and shrubs, for a period of one year after date of substantial completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents beyond Landscape Installer's control.
- C. Remove and replace trees, shrubs, or other plants dead or in unhealthy condition during warranty period. Make replacements during growth season following end of warranty period. Replace trees and shrubs which are in doubtful condition at end of warranty period; unless, in opinion of Architect, it is advisable to extend warranty period for a full growing season.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. If deemed usable, native topsoil shall be stockpiled for re-use in landscape work. Topsoil shall be fertile, friable, natural loam, surface soil, reasonable free of subsoil, clay lumps, brush, weeds, roots, stumps, stones larger than 1 inch in any dimension, and other extraneous or toxic matter harmful to plant growth.
- 1. Contractor shall send a minimum of three (3) representative topsoil samples for testing. See testing requirements below. Contractor is responsible for whatever soil additives are recommended by the tests. Submit to Architect for approval. Compost will be added to other additives and added regardless of test results.
- B. If quantity of stockpiled topsoil is insufficient, contractor to provide imported topsoil that is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 1 inches in any dimension, and other extraneous or toxic matter harmful to plant growth. 1. Obtain topsoil from local sources or areas with similar soil characteristics to that of project
- site. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth of not less than 4 inches. Do not obtain from bogs or marshes. 2. Composition: Topsoil shall contain from 1 to 20% organic matter as determined by the
- Organic Carbon, 6A, Chemical Analysis Method described in USDA Soil Survey Investigation Report No. 1. Maximum particle size, 3/4-inch, with maximum 3% retained on 1/4-inch screen. Other components shall conform to the following limits:

	рн	6.5 to 7.5
	Soluble Salts	600 ppm maximum
	Silt	25-50%
	Clay	10-30%
	Sand	20-50%
. Co	ntractor shall submit re	presentative soil report on imported topsoil pro

approval. Report shall meet standards below. Contractor is responsible for whatever soil additives are recommended by the test. Compost will be in addition to other additives and added regardless of test results.

C. Soil Testing

- 1. Soil tests are required for this project (see above for requirements). Test shall be provided as follows:
- a. Provide certified analysis at time of sample submitted (three samples imported topsoil). Amend soils per chemist's recommendations and as herein specified unless otherwise approved by Architect.
- 2. Test shall include, but not limited to recommendations on chemical distributions, organic contents, pH factors, and sieve analysis as necessary. Test #1T by Western Laboratories (1-800-658-3858) is required. 3. Contractor is responsible for whatever soil additives are recommended by the soil testing
- laboratory
- 4. Contractor shall coordinate, obtain and pay for all soil tests.
- 5. If regenerative noxious weeds are present in the soil, remove all resultant growth including roots throughout one-year period after acceptance of work, at no cost to Owner. 2.2 pH ADJUSTERS
- A. When pH does not comply with this specification, commercial grade aluminum sulfate shall be used to adjust soil pH.
- 2.3 SOIL AMENDMENTS
- A. Compost: Compost: "Cascade Compost" from Cloverdale Nursery (208) 375-5262 and NuSoil Compost (208) 629-6912 or approved equal in equal amounts by volume. B. Commercial Fertilizer: Fertilizer shall be complete, standard commercial brand fertilizer. It shall be free-flowing and packaged in new waterproof, non-overlaid bags clearly labeled as
- to weight, manufacturer, and content. Protect materials from deterioration during delivery and while stored at site. 1. Commercial fertilizer "A" for trees and shrubs during planting; slow release Agriform
- Planting 5-gram tablets 20-10-5 type or equal. 2. Commercial fertilizer "B" for lawn areas, applied to bed prior to seeding or sodding, to be
- 16-16-17 applied at the rate of ten pounds per acre. 3. Commercial fertilizer "C" for lawn areas three to four weeks after planting (sod) or after first mowing (seed). Organic Fertilizer Milorganite (6-0-2) type or equal.
- C. Herbicide: Pre-emergent for topical application in planting beds. Oxiadiazon 2G brand or pre-approved equal. Use in accordance with manufacturer's recommendation on all planting
- 2.4 PLANT MATERIALS
- A. Quality: Provide trees, shrubs, and other plants of size, genus, species, and variety shown for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock"
- B. Deciduous Trees: Provide trees of height and caliper scheduled or shown with branching configuration recommended by ANSI Z60.1 for type and species required. Single stem trees except where special forms are shown or listed.
- C. Deciduous Shrubs: Provide shrubs of the height shown or listed, not less than minimum number of canes required by ANSI Z60.1 for type and height of shrub.
- D. Coniferous and Broadleafed Evergreens: Provide evergreens of sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad upright, and columnar. Provide normal quality evergreens with well balanced form complying with requirements for other size relationships to the primary dimension shown.
- 2.5 GRASS MATERIALS
- A. Lawn sod: Provide strongly rooted sod, not less than 1 growing season oLJ, and free of weeds and undesirable native grasses. Provide only sod capable of growth and development when planted (viable, not dormant).
- 1. Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected.
- B. Provide sod composed of: Rhizomatous Tall Fescue (RTF) from the The Turf Company, Meridian, ID (208) 888-3760 or approved equal.

2.6 MISCELLANEOUS LANDSCAPE MATERIALS A. Anti-Desiccant: Emulsion type, film-forming agent designed to permit transpiration, but retard excessive loss of moisture from plants. Deliver in manufacturer's fully identified containers

- and mix in accordance with manufacturer's instructions. B. Mulch: Rock mulch for planting beds to be: Crushed Stone Perma Bark - dark color. 1/2" max size. 3" thick in all areas. Provide samples of rock mulch for approval by architect and ownership group prior to installation. Rock mulch to be placed over woven weed barrier
- fabric installed per manufacturer's instructions. per the Manufacturer's recommended application rate. Verify all methods of application. C. Stakes and Guys: Provide stakes and deadmen of sound new hardwood, treated softwood, Contractor shall notify the Architect in writing that the fertilizer applications have occurred or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, and on what dates. twisted, pliable galvanized iron wire, not lighter than 12 ga. with zinc-coated turnbuckles. 3.7 MAINTENANCE Provide not less than 2 inch diameter rubber or plastic hose, cut to required lengths and of uniform color, material, and size to protect tree trunks from damage by wires. A. Begin landscape maintenance immediately after planting. Maintenance shall continue until

PART 3 - EXECUTION

minor adjustments as may be required.

materials harmful or toxic to plant growth.

Shrub Areas: 1/3 compost, 2/3 topsoil.

3.3 PREPARATION FOR PLANTING LAWNS

inches of topsoil.

3.4 PREPARATION OF PLANTING BEDS

3.5 PLANTING TREES AND SHRUBS

for mulching.

topsoil and mix thoroughly before planting.

planting will not follow placing of planting soil in a few days.

Fertilizer: Per soil test and manufacture's recommendations.

areas which will be planted promptly after preparation

stocks, stones, rubbish, and other extraneous matter.

C. Apply Pre-Emergent per manufacturer's recommendation.

partial backfilling so as not to damage root balls.

1. Provide 3 inches thickness of mulch.

necessary for elimination of weeds.

3.6 SODDING NEW LAWNS

adjacent grass.

F. Sodded Lawn Establishment

B. Soil Preparation

described

D. Sod Placement

frozen.

final layer of backfill. Remove all ties from around base of trunk.

into top of backfill and finish level with adjacent finish grades.

trees, if any. Prune shrubs to retain natural character.

H. Guy and stake trees immediately after planting, as indicated.

A. General: Install lawn sod in all areas designated on the drawings.

an adequate film over trunks, branches, stems, twigs and foliage.

Compost: Lawn Areas: 1/4 compost, : 3/4 topsoil.

3.2 PREPARATION OF PLANTING SOIL

B. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Architect's acceptance before start of planting work. Make

A. Before mixing, clean topsoil of roots, plants, sod, stones, clay lumps, and other extraneous

B. Mix specified compost and fertilizers with topsoil at rates specified. Delay mixing fertilizer if

C. For shrub and lawn area, mix planting soil either prior to planting or apply on surface of

A. After excavating and removing surface material to proper depth, loosen subgrade of lawn

areas to a minimum depth of 4 inches. Remove stones measuring over 1-1/2 inches in any

1. Spread topsoil mix to minimum depth of 4 inches for sodded lawns as required to meet

lines, grades, and elevations shown, after light rolling, addition of amendments, and

natural settlement. Place approximately 1/2 of total amount of topsoil required. Work

into top of loosened subgrade to create a transition layer and then place remainder of

A. Loosen subgrade of planting areas to a minimum depth of 6 inches using a culti-mulcher or

B. Spread planting soil mixture to minimum 12 inch depth required to meet lines, grades, and

elevations shown, after light rolling and natural settlement. Add 1 1/2 inches of specified

approximately 1/2 of total amount of planting soil required. Work into top of loosened

subgrade to create a transition layer, then place remainder of the planting soil.

compost over entire planting area and mix thoroughly into upper 6 inches of topsoil. Place

A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and

in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. Remove burlap from sides of balls; retain on bottoms. When set, place additional

backfill around base and sides of ball, and work each layer to settle backfill and eliminate

instructions. When excavation is approximately 2/3 full, water roughly before placing

B. Set container grown stock, as specified, for balled burlapped stock, except cut cans on 2

C. Trees planted in turf area: Remove turf 3' dia around tree trunk. Dish top of backfill to allow

D. Mulch pits, and planted areas. Provide not less than following thickness of mulch, and work

E. If season and weather conditions dictate, apply anti-desiccant, using power spray, to provide

practice. Prune trees to retain required height and spread. Unless otherwise directed by

G. Remove and replace excessively pruned or misformed stock resulting from improper pruning.

I. Apply approved herbicide to all shrub bed areas at manufacture specified rate. Re-apply as

Architect, do not cut tree leaders, and remove only injured or dead branches from flowering

1. Any sod lawn areas that may have become compacted prior to sodding must be scarified

to a depth of eight (8) inches by approved means, then finish graded as hereinbefore

C. Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is

1. Sod will be brought onto lawn areas by wheeled means with proper protection of sod

supervised by an experienced foreman. The Contractor shall insure that the base

2. Lay to form a solid mass with tightly fitted joints. Butt ends and sides of strips; do not

3. Sod shall be rolled with a two hundred (200) pound roller after installation to insure

based on uniform, healthy and vigorous growth with no dry or dead spots.

4. Add fertilizer "B" at the manufacturer's recommended application rate.

E. Water sod thoroughly with a fine spray immediately after planting.

of sod lawn areas until Final Acceptance of the project.

two (2) inches high for all mowings.

immediately ahead of sod layer is moist. Sod shall be laid tight with not gaps. Allowance

damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work

proper contact between soil and sod. Final rolling must provide a uniform surface. After

final rolling, the sod lawn shall be mowed and watered. Approval of sod lawns shall be

1. The Contractor shall be responsible for first mowing, subsequent mowings and fertilizing

2. Mowing shall be done by an approved "reel" type mower. Mower blades shall be set at

3. Subsequent fertilizing shall occur three to four weeks after installation. Apply fertilizer as

shall be made for shrinkage. Lay sod with long edges perpendicular to primary slope.

overlap. Stagger strips to offset joints in adjacent courses. Work on boards to avoid

sifted soil into minor cracks between pieces; remove excess to avoid smothering of

beds. Sod layers shall be experienced, or if inexperienced, shall be constantly

F. Prune, thin out, and shape trees and shrubs in accordance with standard horticultural

voids and air pockets. Place fertilizer tablets in excavated area per manufacture's written

remainder of backfill. Repeat watering until no more is absorbed. Water again after placing

sides with an approved can cutter and remove can; remove bottoms of wooden boxes after

similar equipment. Remove stones measuring over 1 1/2 inches in any dimension. Remove

planting soil. Add specified soil amendments as required and mix thoroughly into upper 4

dimension. Remove sticks, roots, rubbish, and other extraneous matter. Limit preparation to

- 3.1 PREPARATION GENERAL A. General Contractor shall be responsible for excavating planting areas to appropriate depths for placement of topsoil as specified herein

roposed for use for

- - Project Final Acceptance. B. Maintain trees, shrubs, and other plants by pruning, cultivating, and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
 - C. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations such as tolling, regrading and replanting as required to establish a smooth, acceptable lawn, free of eroded or bare areas. D. Maintain lawns for no less than period stated above, or longer as required to establish acceptable lawn.
 - 3.8 CLEANUP AND PROTECTION
 - A. During landscape work, keep pavements clean and work area in an orderly condition. B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.
 - 3.9 INSPECTION AND ACCEPTANCE
 - A. When landscape work is completed, including maintenance, Architect will, upon request, make an inspection to determine acceptability.
 - B. When inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site

- **1.1 CONDITIONS AND REQUIREMENTS:** A. General and Supplementary Conditions, and Division 1 General Requirement
- 1.2 SUMMARY
- A. Work included:
- 1. Provide and install a complete and operating automatic irrigation system for all lawn and planting areas. Connect to main water supply at existing site stubout as provided.
- 3. Sleeving under paved areas (by others) 4. Obtain and pay for all permits and fees for the work of this section. 5. Perform work on a design/construct basis, subject to the requirements of
- the Contract Documents, applicable codes, and good design practice. 6. Winterization of system.
- 1.3 SUBMITTALS
- A. Within 30 days after Contractor's receipt of Owner's Notice to Proceed, subm 1. Manufacturer's printed product information and catalog cut sheets for all system components; five copies.
- B. Shop Drawings: Submit shop drawings for underground irrigation system incl plan layout and details illustrating location and type of head, type and size of valve, piping circuits, circuit GPM, pipe size, controls, and accessories. C. Record Drawings: At completion of this work, submit to the Contractor:
- 1. Record Drawings; reproducible and five prints. 2. Operations and Maintenance information (2 copies), including:
- a. Information including descriptive details, parts list, specifications, maintenance schedules and procedures for system components. b. Operation, adjustment of system and components instructions. c. Winterization procedures.
- d. Schedule indicating required open valve time to produce given precipitation amounts and seasonal adjustments.
- e. Warranties and guarantees. f. Submit five copies.
- 1.4 GUARANTEE
- A. Guarantee in writing all materials, equipment and workmanship furnished to free of all defects of workmanship and materials. Within one year after date of Substantial Completion repair or replace all defective parts or workmanship the may be found at no additional cost to Owner.
- B. Fill and repair all depressions and replace all necessary lawn and planting w result from the settlement of irrigation trenches for one year after date of Substantial Completion.
- C. Supply all manufacturer's printed guarantees.
- 1.5 QUALITY ASSURANCE
- A. Contractor shall be licensed in the State in which this work is being performe B. Contractor shall have at least two years prior experience in projects of equal or larger scope. Provide minimum of three references and list of similar projects with owners' names, addresses, and phone numbers, when requested Owner
- C. Contractor shall employ on site at all times a foreman who is thoroughly experienced and competent in all phases of the work of this Section.
- 1.6 SYSTEM DESCRIPTION
- A. Design requirements: 1. Minimum water coverage: Planting areas - 85%, Lawn areas - 100% 2. Layout system to obtain optimum coverage using manufacturer's standard heads. Spray on walks, walls or paved areas is not acceptable.
- 3. Zoning shall be designed for optimum use of available pressure and efficient distribution for types of plantings and shapes of planting areas. 4. Design pressures: Install pressure regulating equipment as necessary.
- 5. Provide/install approved fixed tee or coupling device for air blow winterization Location shall be on main supply line downstream from main shut off valve.
- 6. Install approved backflow prevention device in conformance with local or prevailing codes, and in approved site location. Provide for drainage without erosive damage.
- 1.7 EXTRA EQUIPMENT
- A. In addition to installed system, furnish owner with the following: 1. Valve operating key and marker key.
- 2. Wrench for each sprinkler head cover type. 3. Two (2) sprinkler head bodies of each size and type.
- 4. Two (2) nozzles for each size and type used.
- B. Store above items safely until Substantial Completion.
- C. Deliver above items at Substantial Completion.
- PART 2 PRODUCTS
- 2.1 PIPE AND FITTINGS
- A. PVC 1120, ASTM D-1784, permanently marked with manufacturer's name, schedule rating, size, type. Solvent-weld type:
- 1. Pipe:
- a. Pressure lines: Schedule 40 solvent weld. b. Lateral lines: Class 200 pvc.
- c. Sleeving: Class 200 pvc.
- 2. Fittings: Schedule 40 PVC, solvent-weld type. Install threaded joints where required at valves, risers, etc.
- 3. Risers: Lawn and shrub heads flexible and damage-resistant plastic "polypipe" riser.
- 4. Solvent: NSF approved solvent for Type I & II PVC.
- B. Polyethylene Pipe 1. Pipe: Class 100, 3/4" lateral line, for use on drip irrigation zone(s) where drip tubing is not otherwise used.
- 2. Fittings: Schedule 80 PVC.
- 3. Clamps: Stainless Steel. C. Drip Line: Netafim Techline Dripperline, with .6 GPH drippers at 18" spacing.
- 2.2 SPRINKLER HEADS
- A. Description: Appropriate for application in throw, pressure and discharge. Ea type of head shall be of a single manufacturer.
- 1. Lawn heads: pop-up type. B. Manufacturer: Rainbird, Hunter, Weathermatic Irrigation Company.
- 2.3 AUTOMATIC CONTROL SYSTEM A. General; Furnish low voltage system manufactured expressly for control of automatic circuit valves of underground irrigation systems. Provide unit of
- capacity to suit number of circuits as indicated. B. Control Enclosure: Manufacturer's standard wall mount with locking cover, complying with NFPA 70.
- C. Circuit Control: each circuit variable from approximately 5 to 60 minutes. Including switch for manual or automatic operation of each circuit. D. Timing Device: Adjustable 24-hour and 7 or 14 day clocks to operate any tim
- of day and skip any day in a 7 or 14 day period. E. Wiring: Solid or stranded direct-burial type as recommended by manufacture of control unit; type AWG-UF, UL approved.
- 2.4 VALVING

2. Size: 3/4 inch.

Champion 100, or approved equal.

SECTION 32 84 00 - IRRIGATION (PERFORMANCE)		Issue Description Date
PART 1 - GENERAL	E. Pressure Regulator: Netafim Model PRV075HE35_3/4", one per zones.	ISSUE 12-5-24 FENCE REV 1-24-25
1.1 CONDITIONS AND REQUIREMENTS: A. General and Supplementary Conditions, and Division 1 General Requirements.	F. Flushing Valve: Netafim Model TLFV-1, two per zone (each end). G. Filter: Netafim Model DF075-120, 3/4" filter; one per drip zone. H. Air Relief Valve: Netafim Model TLAVRV,	BASE REVISIONS 2-14-25
 SUMMARY Work included: Provide and install a complete and operating automatic irrigation system for all lawn and planting areas. Connect to main water supply at existing site stubout as provided. Sleeving under paved areas (by others)	 2.5 MISCELLANEOUS A. Chemicals: primer and solvent glue as required by pipe manufacturer. B. Valve box - high impact plastic, green in color. C. Valve cover and frame - compatible with valve box with provision for locking. D. Drainage backfill - clean gravel or crushed stone, graded from 3" maximum to 3/4" minimum. PART 3 - EXECUTION 3.1 GENERAL 	C. SECON
 1.3 SUBMITTALS A. Within 30 days after Contractor's receipt of Owner's Notice to Proceed, submit: Manufacturer's printed product information and catalog cut sheets for all system components; five copies. B. Shop Drawings: Submit shop drawings for underground irrigation system including plan layout and details illustrating location and type of head, type and size of valve, piping circuits, circuit GPM, pipe size, controls, and accessories. C. Record Drawings: At completion of this work, submit to the Contractor: 	 A. Install system to provide for adequate protection against freeze damage. B. Install system in accordance with approved Contractor design drawings. All deviations from the plans must be approved, and clearly recorded on record drawing. C. Install system and components in strict accordance with manufacturer's recommendations. D. Install quick coupler(s) on main supply line, approximately equal spacing, at valve box locations or intervals of approximately 200 feet, whichever is greater. Locate adjacent to paved surfaces, at valve boxes where practical. 	ANDSCAPE MUT
 Record Drawings; reproducible and five prints. Operations and Maintenance information (2 copies), including: a. Information including descriptive details, parts list, specifications, maintenance schedules and procedures for system components. b. Operation, adjustment of system and components instructions. c. Winterization procedures. d. Schedule indicating required open valve time to produce given precipitation amounts and seasonal adjustments. e. Warranties and guarantees. f. Submit five copies. 	 3.2 SURFACE CONDITIONS A. Examine the areas and conditions under which work will be performed. Notify Contractor of conditions detrimental to timely and proper completion of Section work. Do not proceed until unsatisfactory conditions are corrected. B. Locate all underground utilities and structures and notify Architect of any conflict with Section work. Protect structures and utilities. Repair or replace said structures or utilities damaged by this work at no cost to the Owner. 3.3 SLEEVING 	
 1.4 GUARANTEE A. Guarantee in writing all materials, equipment and workmanship furnished to be free of all defects of workmanship and materials. Within one year after date of Substantial Completion repair or replace all defective parts or workmanship that may be found at no additional cost to Owner. B. Fill and repair all depressions and replace all necessary lawn and planting which result from the settlement of irrigation trenches for one year after date of Substantial Completion. C. Supply all manufacturer's printed guarantees. 	 A. Sleeving installed by others. Coordinate with other trades. 3.4 TRENCHING AND BACKFILLING A. Trenching and backfilling shall be per applicable ISPWC Section. B. Cut trenches straight and without abrupt grade changes to allow the following minimum cover: Main Lines and Sleeving: 18 inches. PVC Laterals: 12 inches. C. Surround lines with 2 inches of clean rock-free material on all sides. 	Site Planning Landscape Architecture 1509 Tyrell Lane, Ste 130 Boise, Idaho 83706 Ph. (208) 343-7175
 1.5 QUALITY ASSURANCE A. Contractor shall be licensed in the State in which this work is being performed. B. Contractor shall have at least two years prior experience in projects of equal or larger scope. Provide minimum of three references and list of similar projects with owners' names, addresses, and phone numbers, when requested by Owner. C. Contractor shall employ on site at all times a foreman who is thoroughly experienced and competent in all phases of the work of this Section. 	 3.5 MISCELLANEOUS VALVES A. Install manual drain valves up stream. Install devise at mainline tap in accordance with manufacturer requirements for complete operation. Install backflow provision and connect to controller. 3.6 CIRCUIT VALVES A. Install in valve box, arranged for easy adjustment and removal. 1. Provide union on downstream side. 2. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit. 	www.jensenbelts.com
 SYSTEM DESCRIPTION A. Design requirements: 	 3.7 PIPE INSTALLATION A. Lay PVC pipe in accordance with standard and acceptable practice. Thrust blocks to be used at points of intersection and change of direction in main line pipe as per manufacturer's recommended specifications. Install manual drains. B. PVC pipe joints, solvent welded except as indicated. Cut pipe square, deburr, wipe from surface all saw chips, dust, dirt, moisture and any foreign matter which may contaminate the cemented joint. Apply cleaner/primer and solvent cement, make joints in accordance with manufacturer's recommendations. Use Teflon thread sealant (tape) at all threaded joints. C.Contractor shall size pipe according to schedule provided. Flow velocities shall not exceed 5 feet/second in all cases. Lateral lines shall be laid out and installed per zone to balance the pressure loss and provide minimum fluctuation in system operating pressures. 	IS No.2 Plan
 1.7 EXTRA EQUIPMENT A. In addition to installed system, furnish owner with the following: Valve operating key and marker key. Wrench for each sprinkler head cover type. Two (2) sprinkler head bodies of each size and type. Two (2) nozzles for each size and type used. B. Store above items safely until Substantial Completion. C. Deliver above items at Substantial Completion. 	Pipe Size Pipe Section Pipe Size Pipe Section 3/4" 0-9 GPM 1 1/2" 26-34 GPM 1" 10-17 GPM 2" 35-50 GPM 1 1/4" 18-25 GPM 2 1/2" 51-80 GPM D. Techline Drip Line: Place in shallow furrow at 1"-2" below finish topsoil grade, below layer of specified mulch. Lay in uniform grid pattern in groundcover/shrub areas (rows 18"-24" apart max). Coil 20 linear feet at each balled and burlapped tree around base and to allow for tree removal if required. Staple drip line every 36" max. Flush all lines with full head of water prior to installation of flush valves at end of circuit runs. E. Flush Valves: Install flush valve at end of each drip line run.	MMON DAHO UDSCAPE
 2.1 PIPE AND FITTINGS A. PVC 1120, ASTM D-1784, permanently marked with manufacturer's name, schedule rating, size, type. Solvent-weld type: Pipe: Pressure lines: Schedule 40 solvent weld. Lateral lines: Class 200 pvc. Sleeving: Class 200 pvc. 2. Fittings: Schedule 40 PVC, solvent-weld type. Install threaded joints where required at valves, risers, etc. Risers: Lawn and shrub heads - flexible and damage-resistant plastic "polypipe" riser. Solvent: NSF approved solvent for Type I & II PVC. Polyethylene Pipe Pipe: Class 100, 3/4" lateral line, for use on drip irrigation zone(s) where drip tubing is not otherwise used. Fittings: Schedule 80 PVC. Clamps: Stainless Steel. C. Drip Line: Netafim Techline Dripperline, with .6 GPH drippers at 18" spacing. 	 3.8 SPRINKLER HEADS A. Flush circuit lines with full head of water prior to head installation. 1. Install heads at level with mulch 2. Locate part-circle shrubbery heads to maintain a minimum distance of six inches (6") from walls and four inches (4") from other boundaries unless otherwise indicated. Keep overspray to a minimum. 3.9 CONTROL WIRE INSTALLATION A. Bury wires beside or below main line pipe in same trench. B. Bundle multiple wires together with tape at ten feet (10') maximum intervals. C. Provide 36 inch loop in wires at each valve where controls are connected and at 100' maximum intervals between. D. Make all electrical joints (splices) in boxes only. Make electrical joints waterproof. Scotch-Lock connectors, or approved. 3.10 AUTOMATIC CONTROLLER A. Install on site as approved. Verify location with Owner Representative. B. Install typewritten legend inside controller door. 	EPOST CO STAR, I STAR, I
 2.2 SPRINKLER HEADS A. Description: Appropriate for application in throw, pressure and discharge. Each type of head shall be of a single manufacturer. 1. Lawn heads: pop-up type. B. Manufacturer: Rainbird, Hunter, Weathermatic Irrigation Company. 	 3.11 TESTING A. Do not allow or cause any work of this Section to be covered up or enclosed until it has been inspected and tested. B. Pressure testing: Make necessary provision for thoroughly bleeding the line of air and debris. 	
 2.3 AUTOMATIC CONTROL SYSTEM A. General; Furnish low voltage system manufactured expressly for control of automatic circuit valves of underground irrigation systems. Provide unit of capacity to suit number of circuits as indicated. B. Control Enclosure: Manufacturer's standard wall mount with locking cover, 	 Defore resting, cap all risers, and install all valves. Fill all main supply lines with water. Pressurize to 100 psi. Close air supply and test for leakage. Test shall be approved if no greater than 5 psi loss occurs in 15 minutes. Fill all zone lines with water to static pressure. Hold for 15 minutes. Inspect for leakage 	Job Number 2210
 complying with NFPA 70. C. Circuit Control: each circuit variable from approximately 5 to 60 minutes. Including switch for manual or automatic operation of each circuit. D. Timing Device: Adjustable 24-hour and 7 or 14 day clocks to operate any time of day and skip any day in a 7 or 14 day period. E. Wiring: Solid or stranded direct-burial type as recommended by manufacturer of control unit; type AWG-UF, UL approved. 2.4 VALVING A. Manual valves: brass or bronze for direct burial, gate valves, 150 pound class, threaded connection with cross type handle designed to receive operating key. B. Automatic circuit valves: high impact plastic with corrosion-resistant internal parts a law power calebraid control unit; and the start of units are as a start of the start of t	 5. Contractor shall provide all required testing equipment and personnel. Test shall be performed in presence of Architect. Contractor shall make notice of test (48) hours in advance. 6. Provide required testing equipment and personnel. 7. Repair leaks, and retest until acceptance by the Architect. C. Coverage inspection: upon completion of all systems, perform a coverage test to determine if coverage of water afforded all areas is complete, adequate and uniform. Change heads, nozzles, orifices and/or adjustment as directed to provide uniform coverage. D. Final inspection: Clean, adjust, and balance all systems. Verify that: Remote control valves are properly balanced; 	Drawn Checked KCS KCS Scale AS SHOWN Sheet Title LANDSCAPE SPECIFIC ATIONS
 parts. Low power solenoid control, normally closed, with manual flow adjustment; same manufacturer as control unit. 1. Standard sprinkler valve shall be Rainbird PEB-PRS-B. Use scrubber valve if not connected to potable water. 2. Drip Control Zone Kit: Hunter PCZ-101. C. Quick coupler valve: brass or bronze construction with hinged top. One per zone or valve grouping. D. Manual drain valves: Bronze construction, straight type, 150 pound class, threaded connections, 	 b. Heads are properly adjusted for radius and arc of coverage; c. The installed system is workable, clean and efficient. E. Winterization: Winterize system at the end of first season of system operation. Review procedures with Owner Representative. 	Sheet Number

of 5 Sheets