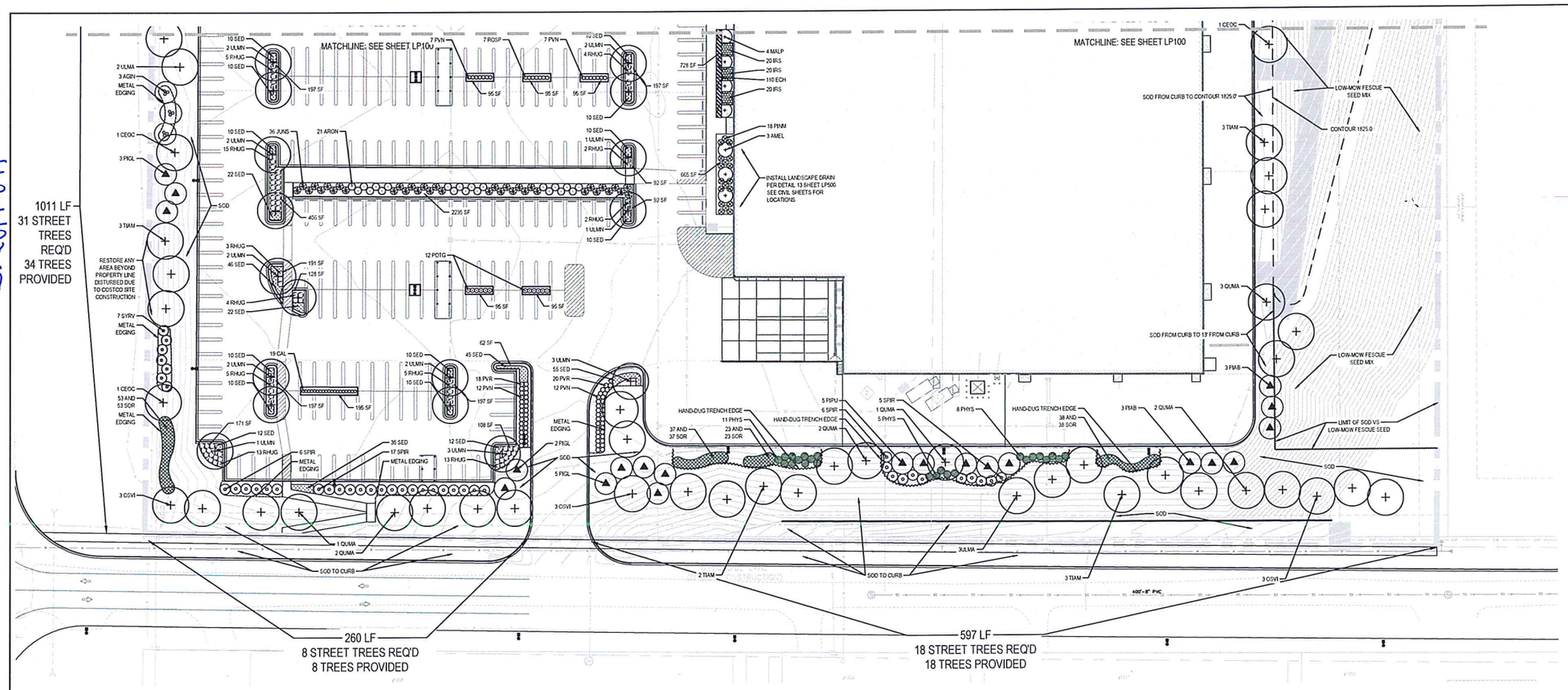
SP2019-041

APPROVED BY PLANNING
Jon Hoffman 8/22/19
TITLE DATE

APPROVED BY FORESTRY
Landscape 8-22-19
TITLE DATE



PLANT LIST

QTY	Acronym	Botanical Name	Common Name	Size	Form	Notes/Spacing
CANOPY TREES						
5	CEOC	Celtis occidentalis	Hackberry	2.5" Cal.	B&B	Full, well-branched, single central leader
11	GLTR	Gleditsia triacanthos 'Northern Acclaim'	Northern Acclaim honeylocust	2.5" Cal.	B&B	Full, well-branched, single central leader
15	OSVI	Ostrya virginiana	Ironwood	2" Cal.	B&B	Full, well-branched, single central leader
22	QUMA	Quercus macrocarpa	Bur oak	2.5" Cal.	B&B	Full, well-branched, single central leader
12	SYRR	Syringa reticulata	Japanese tree lilac	2" Cal.	B&B	Full, well-branched, single central leader
15	TIAM	Tilia americana 'Redmond'	Redmond linden	2.5" Cal.	B&B	Full, well-branched, single central leader
8	TICM	Tilia cordata x mongolica 'Harvest Gold'	Harvest Gold linden	2.5" Cal.	B&B	Full, well-branched, single central leader
13	ULMA	Ulmus x 'Accolade'	Accolade elm	2.5" Cal.	B&B	Full, well-branched, single central leader
21	UMLN	Ulmus x 'New Horizon'	New Horizon elm	2.5" Cal.	B&B	Full, well-branched, single central leader
ORNAMENTAL TREES						
15	AGIN	Acer ginnala	Amur maple	6' Ht.	B&B	Well-branched, multi-stem, min. 3 stems
13	AMEL	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance serviceberry	6' Ht.	B&B	Well-branched, multi-stem, min. 3 stems
13	MALD	Malus 'David'	David crabapple	2" Cal.	B&B	Well-branched, single central leader
14	MALP	Malus 'Purple Prince'	Purple Prince crabapple	1.5" Cal.	B&B	Well-branched, single central leader
CONIFEROUS EVERGREENS						
45	JUNS	Juniperus scopulorum 'Witchita Blue'	Witchita Blue juniper	6' Ht.	B&B	Full to ground, unsheared
9	PIAB	Picea abies	Norway spruce	8' Ht.	B&B	Full to ground, unsheared
12	PIGL	Picea glauca	White spruce	8' Ht.	B&B	Full to ground, unsheared
14	PIPU	Picea pungens	Colorado spruce	8' Ht.	B&B	Full to ground, unsheared
SHRUBS						
21	ARON	Aronia melanocarpa 'Autumn Magic'	Autumn Magic chokeberry	30" Ht.	No. 3 Cont.	Well-branched, min. 4 canes, 5' O.C.
48	DIER	Dierville lonicera	Bush honeysuckle	18" Ht.	No. 3 Cont.	Well-branched, min. 4 canes, 3' O.C.
40	HYDP	Hydrangea paniculata 'Bobo'	Bobo hydrangea	18" Ht.	No. 3 Cont.	Well-branched, min. 3 canes, 3.5' O.C.
31	PHYS	Physocarpus opulifolius 'Summer Wine'	Summer Wine ninebark	30" Ht.	No. 5 Cont.	Well-branched, min. 4 canes, 5' O.C.
45	PINM	Pinus mugo pumilio	Dwarf mugo pine	24" Spd.	B&B	Full to ground, unsheared, 4' O.C.
66	POTG	Potentilla fruticosa 'Goldfinger'	Goldfinger potentilla	18" Ht.	No. 3 Cont.	Well-branched, min. 5 canes, 3' O.C.
49	POTM	Potentilla fruticosa 'McKay's White'	Mckay's White potentilla	18" Ht.	No. 3 Cont.	Well-branched, min. 5 canes, 2.5' O.C.
75	RHUG	Rhus aromatica 'Gro-Low'	Gro-Low sumac	24" Spd.	No. 3 Cont.	Well-branched, min. 3 canes, 3.5' O.C.
95	ROSC	Rosa 'Coral Drift'	Coral Drift rose	18" Spd.	No. 3 Cont.	Well-branched, min. 3 canes, 3' O.C.
29	ROSP	Rosa 'Dwarf Pavement'	Dwarf Pavement rose	24" Spd.	No. 3 Cont.	Well-branched, min. 3 canes, 3' O.C.
31	ROSF	Rosa 'Frau Dagmar Hastrup'	Frau Dagmar Hastrup rose	24" Spd.	No. 3 Cont.	Well-branched, min. 3 canes, 4' O.C.
46	SPIR	Spiraea x vanhouttei	Van Houtte spirea	30" Ht.	No. 3 Cont.	Well-branched, min.4 canes, 7' O.C.
21	SYRV	Syringa vulgaris 'President Grevy'	President Grevy lilac	3' Ht.	B&B	Well-branched, min. 4 canes, 7' O.C.
20	VIBD	Viburnum dentatum 'Red Feather'	Red Feather arrowwood viburnum	3' Ht.	B&B	Well-branched, min.4 canes, 8' O.C.
PERENNIALS/ORNAMENTAL GRASSES						
175	ACH	Achillea millefolium 'New Vintage Rose'	New Vintage Rose yarrow	No. 1	Cont.	Well-rooted; 18" O.C.
189	AND	Andropogon gerardii	Big bluestem	No. 1	Cont.	Well-rooted; 24" O.C.
47	CAL	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster feather reed grass	No. 1	Cont.	Well-rooted; 24" O.C.
114	COR	Coreopsis verticillata 'Zagreb'	Zagreb coreopsis	No. 1	Cont.	Well-rooted; 18" O.C.
136	ECH	Echinacea purpurea 'Pow Wow Wild Berry	Pow Wow Wild Berry coneflower	No. 1	Cont.	Well-rooted; 18" O.C.
152	HRR	Hemerocallis 'Rosy Returns'	Rosy Returns daylily	No. 1	Cont.	Well-rooted; 18" O.C.
164	HSD	Hemerocallis 'Stella d'Oro'	Stella d'Oro daylily	No. 1	Cont.	Well-rooted; 18" O.C.
80	IRS	Iris siberica 'Caesar's Brother'	Caesar's Brother iris	No. 1	Cont.	Well-rooted; 24" O.C.
204	NEP	Nepeta x faassenii 'Walker's Low'	Walker's Low catmint	No. 1	Cont.	Well-rooted; 24" O.C.
50	PVN	Panicum virgatum 'North Wind'	North Wind switchgrass	No. 1	Cont.	Well-rooted; 36" O.C.
62	PVR	Panicum virgatum 'Rotstrahlbush'	Red switchgrass	No. 1	Cont.	Well-rooted; 36" O.C.
32	PEN	Penstemon 'Dark Towers'	Dark Towers penstemon	No. 1	Cont.	Well-rooted; 18" O.C.
347	SED	Sedum spectabile 'Neon'	Neon sedum	No. 1	Cont.	Well-rooted; 18" O.C.
189	SOR	Sorghastrum nutans	Indiangrass	No. 1	Cont.	Well-rooted; 24" O.C.

LANDSCAPE REQUIREMENTS:

1. STREET TREES - 3 DECIDUOUS TREES PER 100' OF STREET FRONTAGE:
   1.1. STREET TREES ALONG 57TH AVE NE ARE UNABLE TO BE INSTALLED IN THE NORTHEAST PORTION OF THE SITE (SHEET LP100) DUE TO 200' WIDE ELECTRICAL EASEMENT. STREET TREES IN THE NORTHWEST PORTION OF THE SITE ALONG 57TH AVE NE (SHEET LP100) ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BECAUSE ROAD ROW IS NOT YET KNOWN.
   1.2. STREET TREES ALONG US-83 ARE UNABLE TO BE PLANTED IN ROAD ROW BECAUSE IT IS A DITCH - TREES ARE PLANTED ALONG SITE PROPERTY LINE.
   1.3. STREET TREES ALONG BROOKSIDE LANE ARE UNABLE TO BE INSTALLED WITHIN THE ROAD ROW DUE TO OVERHEAD POWER LINES, UTILITY EASEMENTS, AND RETAINING WALL.
   1.4. STREET TREE INSTALLATION MAY BE DELAYED DUE TO CONSTRUCTION OF BOTH 57TH AVE N AND BROOKSIDE LANE.
2. PERIMETER PARKING LOT PLANTINGS - 2 UNDERSTORY OR CANOPY TREES AND 15 SHRUBS PER 100' STREET FRONTAGE:
   2.1. REQUIRED WEST SIDE: 783 LINEAR FEET PARKING LOT PERIMETER - 16 UNDERSTORY OR CANOPY TREES AND 118 SHRUBS.
   2.2. PROVIDED WEST SIDE: 25 UNDERSTORY/CANOPY TREES, 14 SHRUBS, AND 182 PERENNIALS. GRADE SLOPES STEEPLY DOWN TO SITE ALONG ½ OF THE PARKING LOT PERIMETER.
   2.3. REQUIRED SOUTH SIDE: 234 LINEAR FEET PARKING LOT PERIMETER - 5 UNDERSTORY OR CANOPY TREES AND 35 SHRUBS.
   2.4. PROVIDED SOUTH SIDE: 7 CANOPY TREES, 23 SHRUBS, AND 35 PERENNIALS. SIDEWALK TO COSTCO PARKING LOT, OVERHEAD LINES, AND UTILITY EASEMENT PREVENTS PLANTING NEAR ROAD ROW.
3. INTERIOR PARKING LOT PLANTINGS:
   3.1. 1 SHADE TREE AND 3 SHRUBS FOR EVERY 20 PARKING SPACES:
        750 PARKING SPACES:
        REQUIRED: 38 TREES AND 113 SHRUBS
        PROVIDED: 70 TREES, 337 SHRUBS, AND 881 PERENNIALS
   3.2 10 SF LANDSCAPED AREA PER PARKING SPACE.
        741 PARKING SPACES
        REQUIRED: 7,410 SF LANDSCAPED AREA
        PROVIDED: 16,645 SF LANDSCAPED AREA

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE PLANS.
2. NO PLANT SHALL BE INSTALLED BEFORE TOPSOIL PLACEMENT HAS BEEN REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT.
3. THE LAYOUT OF ALL PLANTING BEDS, TREES, AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR PRIOR TO ANY PLANT INSTALLATION FOR REVIEW BY LANDSCAPE ARCHITECT. INTERNAL BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. THE LANDSCAPE ARCHITECT WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR BEFORE ANY PLANTS ARE INSTALLED AND MAKE MINOR ADJUSTMENTS AS NECESSARY. SUCH ADJUSTMENTS SHALL OCCUR AT NO ADDITIONAL COST TO THE OWNER.
4. ALL PLANT MATERIALS SHALL CONFORM TO PLANT SCHEDULES. SIZES SHALL BE THE MINIMUM STATED ON THE PLANT LIST OR LARGER. LARGER PLANTS WILL RESULT IN NO ADDITIONAL COST TO OWNER. ALL MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE A.A.N. "STANDARDS FOR NURSERY STOCK".
5. THE LANDSCAPE ARCHITECT SHALL REVIEW THE PLACEMENT OF PLANT MATERIAL AFTER INSTALLATION, AND RESERVES THE RIGHT TO ADJUST LAYOUT TO ACCOMMODATE SITE CONDITIONS AND DESIGN INTENT AT NO ADDITIONAL COST TO OWNER. ANY FIELD ADJUSTMENT DUE TO EXISTING SITE CONDITIONS SHALL BE REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO ADJUSTMENT BEING MADE.
6. METAL EDGING SHALL BE INSTALLED SMOOTHLY AND CONTINUOUSLY AND FOLLOW THE ALIGNMENT SHOWN ON THE PLANS. ALL METAL EDGING SHALL BE INSTALLED INTO A HAND-DUG TRENCH AND NOT DRIVEN INTO THE SOIL WITH A HAMMER. FINAL LOCATION OF EDGING SHALL BE SPRAY PAINTED ONTO THE SOIL AND APPROVED BY THE LANDSCAPE ARCHITECT IN ADVANCE OF INSTALLATION. INSTALL CONTINUOUS METAL EDGING TO SEPARATE ALL PLANT BEDS FROM SOD.
7. HAND-CUT TRENCH EDGES MUST BE INSTALLED PER DETAIL 12 SHEET LP500.
8. SPACING OF PLANT MATERIALS SHALL BE AS SHOWN ON PLANS AND AS INDICATED IN PLANT LISTS. UNLESS INDICATED OTHERWISE ON PLANS, ALL PERENNIALS SHALL BE INSTALLED ON A TRIANGULAR PATTERN PER DETAIL 9 SHEET LP500.
9. ALL SHRUB AND/OR PERENNIALS BED SUBGRADE SHALL BE ROTOTILLED, LIGHTLY COMPACTED, AND 18" DEEP PLANTING MIX SHALL BE INCORPORATED PER SECTION 329000. ALL COSTCO PARKING LOT ISLANDS SHALL RECEIVE A MINIMUM 18" DEEP PRE-APPROVED OFF-SITE TOPSOIL.
10. PROVIDE 4" MINIMUM PRE-APPROVED OFF-SITE TOPSOIL FOR ALL SODDED AREAS. PROVIDE 2" PRE-APPROVED OFF-SITE TOPSOIL FOR ALL LOW-MOW SEEDED AREAS.
11. ALL COSTCO PARKING LOT ISLANDS AND LANDSCAPE BEDS SHALL BE CROWNED TO DRAIN. 4" AT CENTER ABOVE CURBLINE AFTER COMPACTION. FLAT BEDS WILL NOT BE PERMITTED. FINAL GRADE AFTER COMPACTION BACK OF CURB SHALL BE NO LOWER THAN 1" FROM TOP OF CURB.
12. ALL COSTCO LAWN AREAS SHALL BE SOD, NOT SEED, EXCEPT THOSE AREAS INDICATED ON PLANS AROUND THE DETENTION BASIN TO BE LOW-MOW FESCUE SEED MIX.
13. CONTRACTOR SHALL CONFIRM THAT TREE PITS DO NOT HOLD WATER FOR A TIME PERIOD LONGER THAN 12 HOURS. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT PRIOR TO PLANTING TREES IF TREE PITS HOLD WATER LONGER THAN SPECIFIED PERIOD FOR FURTHER DIRECTION.
14. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ALL ON-SITE AND OFF-SITE DISTURBANCES NOT NOTED ON PLANS AND COORDINATE RESTORATION OF THESE AREAS WITH THE LANDSCAPE ARCHITECT.
15. TREES SHALL HAVE CLEAR, SINGLE, UNBROKEN CENTRAL LEADERS. TREES WITHOUT SINGLE CENTRAL LEADERS WILL BE REJECTED.
16. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
17. ALL DEBRIS ASSOCIATED WITH PLANTING SHALL BE LEGALLY DISPOSED OFF-SITE. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL.

COSTCO WHOLESALE
BISMARCK, NORTH DAKOTA

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ISSUED FOR	REV	DATE
CITY REVIEW		08.20.19
CITY REVIEW		08.07.19
CITY REVIEW		06.10.19

SEALS AND SIGNATURES

KEY PLAN

PROJECT NORTH

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN - SHEET 2 OF 2

SCALE: 1" = 30'

SCALE 11567.000

PROJECT NUMBER LP101

DRAWING NUMBER

FILE: P:\11567.000\CADD\Layout\Smiths concept L-SHEET_B-20-19.dwg USER: cashulte DATE: Aug. 20 2019 TIME: 03:31 pm

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Wm. Hebb
Planner
8/22/19
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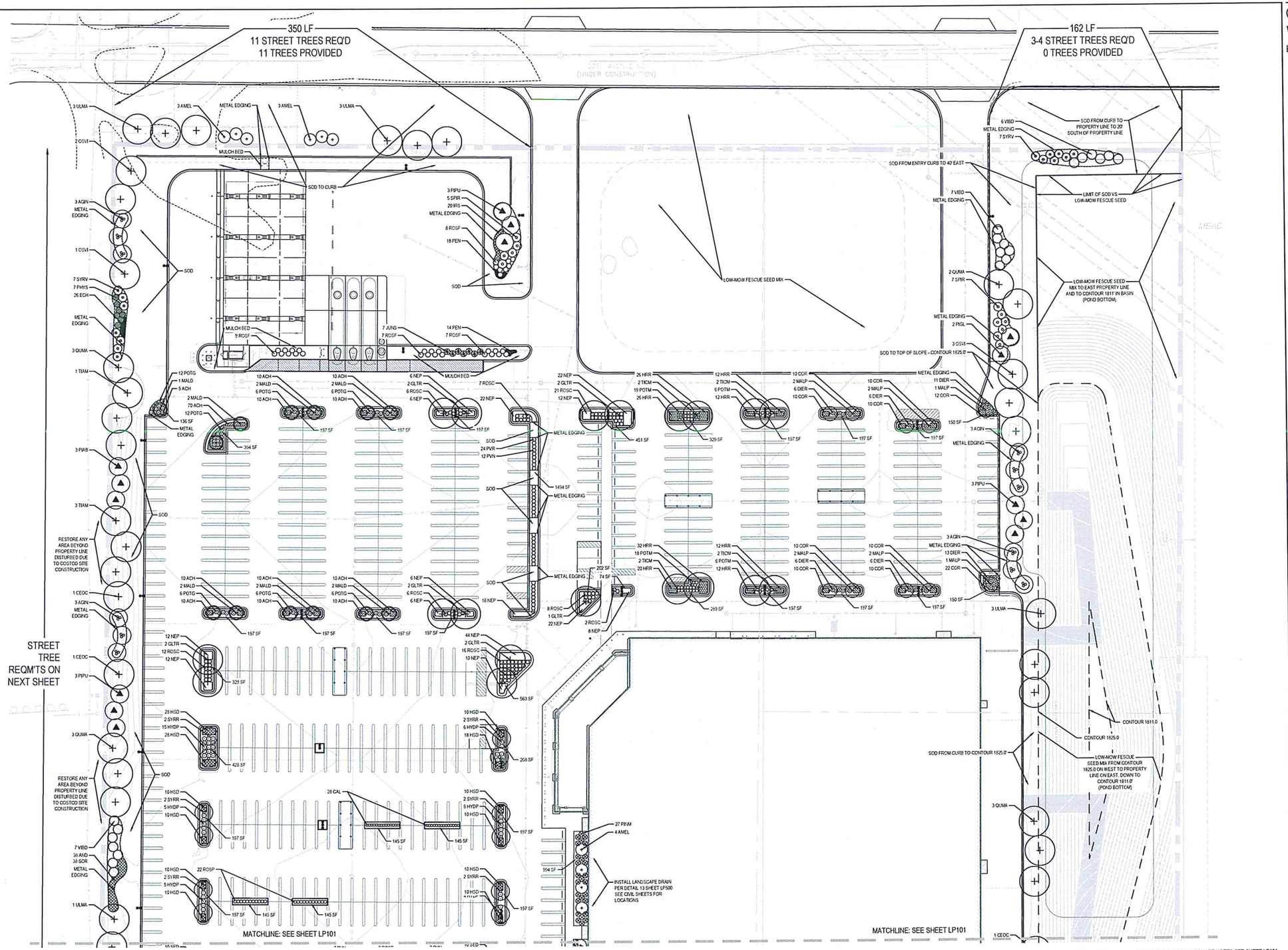

FOR LANDSCAPE PLANT LIST AND GENERAL LANDSCAPE NOTES SEE SHEET LP101.

COSTCO WHOLESALE
BISMARCK, NORTH DAKOTA

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ISSUED FOR	REV	DATE
CITY REVIEW		08.07.19
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SEALS AND SIGNATURES

KEY PLAN

PROJECT NORTH

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN - SHEET 1 OF 2

SCALE: 1" = 30'

SCALE

PROJECT NUMBER 11567.000

DRAWING NUMBER LP100

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