

APPROVED BY FORESTRY

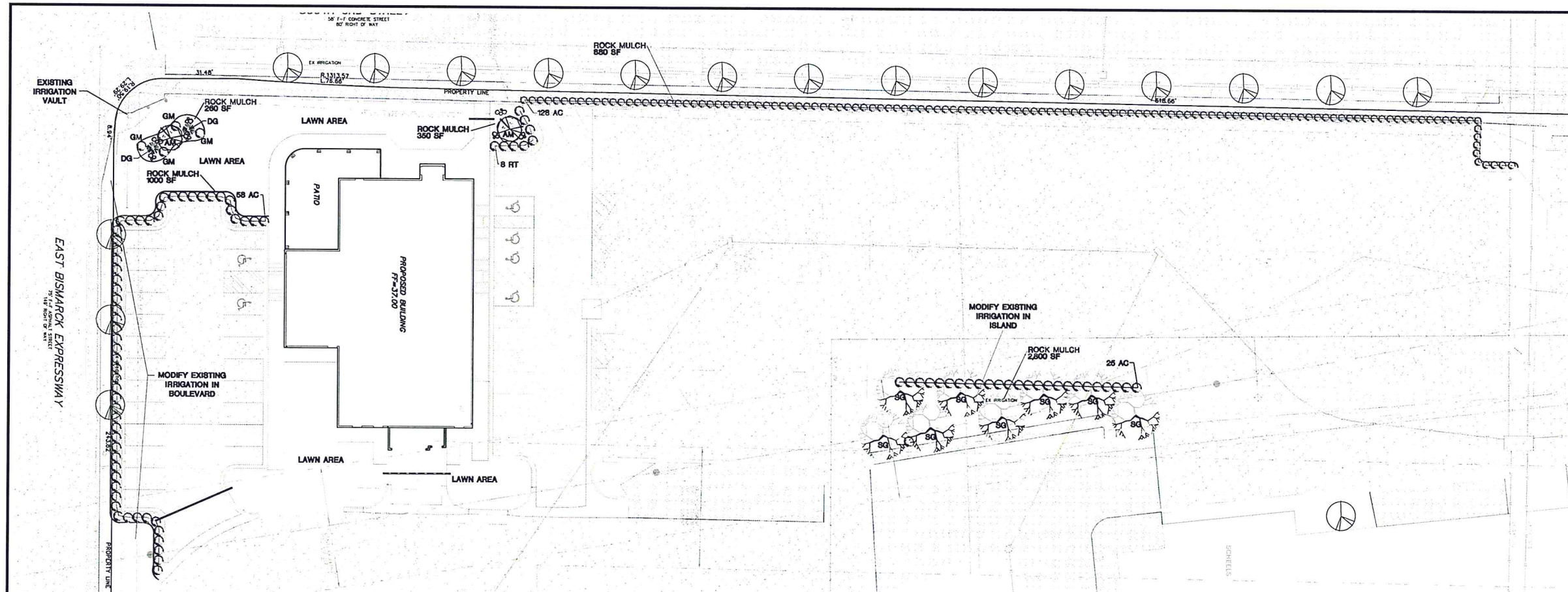
M. D. D. D.

LANDSCAPE 10-13-16 DATE

APPROVED BY PLANNING

J. D. D. D.

LANDSCAPE 10-13-16 DATE



GENERAL LANDSCAPING NOTES FOR ALL SHEETS

- 1. ALL CONTRACTORS DESIGNED TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
- 2. PROTECT THE IMPROVEMENTS ON SITE AND ON THE ADJOINING PROPERTIES. PROVIDE BARRICADES, COVERINGS OR OTHER TYPE OF PROTECTION AS NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY TO EXISTING UTILITIES.
- 3. DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 4. ALL PLANTING BEDS SHALL BE INSTALLED WITH 3" OF 3/4" CRUSHED ROCK MULCH, LANDSCAPE FABRIC WITH A MINIMUM HEIGHT OF 4 OZ./YD. AND WHERE NECESSARY, 6" COMMERCIAL GRADE BLACK PLASTIC EDGING TO CONTAIN THE PLANTING BED.
- 5. ALL LANDSCAPE PLANTINGS ARE TO BE WATERED BY THE LANDSCAPE CONTRACTOR THE SAME DAY THAT THE PLANTING OCCURS. WATER IS NOT AVAILABLE AT THE BUILDING, THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALTERNATIVE METHODS FOR WATERING.
- 6. SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MATTLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS. TREES IN ROCK MULCH AREA DO NOT NEED A WOOD MULCH MATTLE RING.
- 7. CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING:
 FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
- 8. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND CARING FOR ALL PLANT MATERIAL, AND OTHER LANDSCAPING IMPROVEMENTS UNTIL THE DATE OF FINAL INSPECTION AND APPROVAL.

TOPSOIL NOTES

- 1. ALL PORTIONS OF THE SITE NOT RECEIVING CONCRETE, CURB & GUTTER OR OTHER IMPROVEMENTS SHALL BE COVERED WITH A MINIMUM OF 6" OF TOPSOIL AND SEEDED ACCORDING TO SPECIFICATIONS. TOPSOIL SHALL BE IMPORTED AND SHALL BE SCREENED AND FREE OF ROCKS AND DEBRIS.
- 2. TOPSOIL SHALL BE PLACED AND SEEDING AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CURB AND GUTTERS AND SIDEWALKS AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

SEEDING NOTES

- 1. CLEAR AND GRUB SITE BEFORE SEEDING ENSURING THAT THE SITE IS IN A SMOOTH CONDITION WITH NO DEBRIS OR ROCKS LARGER THAN 2" IN DIAMETER.
- 2. FERTILIZE SOIL DURING THE SEEDING PROCESS USING AN APPROPRIATE APPLICATION PROCESS. FERTILIZER SHALL BE 10-10-10 AND APPLIED AT A RATE OF 4 LBS. PER 1000 SQUARE FEET.
- 3. SEED SHALL BE DRILL SEED TO A DEPTH OF 1/4" TO 1/2" AND SHALL BE EVENLY SPREAD. AFTER SEED HAS BEEN SOWN, THE SOIL SHALL BE REPAKED IMMEDIATELY AFTER THE SEED IS APPLIED TO FIRM THE SOIL AROUND THE SEED. NO SEED SHALL BE PLACED ON DAYS WHERE THE WIND IS STRONG ENOUGH TO PREVENT IT FROM BEING PROPERLY MINGLED INTO THE SOIL.
- 4. SEED MUST SHOW A DENSITY OF 20 TO 30 SEEDLINGS PER SQUARE FOOT BEFORE ACCEPTANCE WILL OCCUR. THE CONTRACTOR SHALL FURNISH AND REPLACE WITHOUT ADDITIONAL COMPENSATION THEREFORE, ANY SEED FOR AREAS THAT HAVE NOT GERMINATED, HAVE DIED, OR ARE DAMAGED TO THE EXTENT THAT REPLACEMENT IS REQUIRED TO CONFORM TO THE REQUIREMENTS OUTLINED ABOVE. THE CONTRACT WARRANTY PERIOD SHALL ALSO APPLY TO THIS ITEM.
- 5. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY EROSION SCARS OR WASHOUTS UNTIL THE DATE THAT FINAL SEED STAND IS ACCEPTED. SEE EROSION CONTROL PLAN FOR EROSION CONTROL METHODS.

WARRANTY / DISCLAIMER

The drawings represented in these plans are in accordance with the conditions of the contract and do not constitute a warranty of any kind, nor do they constitute a representation of any kind. The Contractor shall not be held responsible for any errors or omissions on the part of the Contractor or any other party.

SAFETY NOTICE TO CONTRACTOR

In accordance with generally accepted construction practices, the Contractor shall be responsible for the safety of all personnel and property during performance of the work. The Contractor shall be responsible for the safety of all personnel and property during performance of the work.

NOTICE TO CONTRACTOR

The location of existing underground utilities are shown in an approximate manner. The Contractor shall determine the exact location of all utilities before construction. The Contractor shall be responsible for the safety of all personnel and property during performance of the work.

IRRIGATION SPECIFICATIONS:

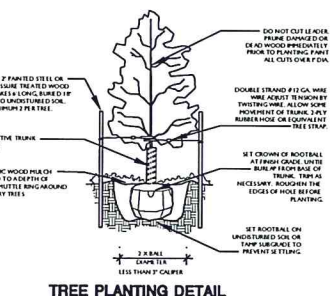
1. IRRIGATION CONTRACTOR SHALL DESIGN, SUPPLY ALL MATERIAL, EQUIPMENT AND LABOR TO MODIFY EXISTING IRRIGATION SYSTEM AND INSTALL A COMPLETE IRRIGATION SYSTEM FOR THE PLANTING BEDS, PERIMETER LANDSCAPING, AND LAWN AREAS SHOWN ON THESE PLANS.
2. ALL ON SITE CONTRACTORS SHALL PROTECT AND MAINTAIN ALL INSTALLED MANHOLES, LATERALS AND MISC. TO IRRIGATION ZONES. REPAIRS NECESSITATED BY CONSTRUCTION SHALL BE PERFORMED BY QUALIFIED PERSONNEL OR COMPANIES NORMALLY ENGAGED IN IRRIGATION INSTALLATION.
3. IRRIGATION CONTRACTOR SHALL FIELD LOCATE IRRIGATION SYSTEM AND COMPONENTS IN THE MOST EFFICIENT AND PRACTICAL LOCATIONS THAT OFFER THE MOST CONVENIENCE FOR MAINTENANCE PERSONNEL.
4. ALL PLANTING BEDS AND PERIMETER LANDSCAPING SHALL BE WATERED WITH RAINBOW JET - BIG LEAFER AND ASSOCIATED TUBING AND VALVES OR APPROVED EQUAL. TUBING SHALL BE INSTALLED ABOVE PLANTING BEDS WITH BARRIER MAT AND BELOW MULCH MATERIAL WITH 4 INCH METAL LANDSCAPE STAKES PLACED AT 1' INTERVALS. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR LANDSCAPE PLANTING BED INSTALLATION. COORDINATE WITH LANDSCAPE CONTRACTOR TO ENSURE PROPER WATER COVERAGE FOR PLANT MATERIAL.
5. EACH ZONE VALVE OR OTHER IRRIGATION CONNECTION COMPONENT SHALL BE INSTALLED IN AN APPROPRIATELY SIZED ZONE VALVE BOX AS MANUFACTURED BY RAINBOW OR APPROVED EQUAL. VALVE BOXES FOR EACH ZONE VALVE SHALL BE RECTANGULAR MODEL 18 - STD WITH GREEN COVERS IN TURF AREAS AND TAN COVERS IN LANDSCAPE AREAS. CHECK COUPLER VALVES SHALL BE INSTALLED WITH A VALVE BOX MODEL 18 - 100ND WITH A TAN COVER. ALL VALVE BOXES SHALL BE INSTALLED IN PLANTING BEDS.
6. EACH ZONE VALVE SHALL BE LABELED WITH ITS ASSOCIATED ZONE NUMBER AND ZONE DESCRIPTION THAT MATCHES THE LABELS ON THE IRRIGATION CLOCK. THE LABEL SHALL BE PERMANENT AND WATERPROOF AND SHALL BE ATTACHED TO THE VALVE (ITSELF OR SOMEHOW ATTACHED INSIDE THE VALVE BOX) SO THAT IT CAN BE EASILY READ WHILE KNEELING NEXT TO THE BOX.
7. WATER PRESSURE AT THE SITE IS APPROXIMATELY 75 PSI.
8. MAINLINES SHALL BE BURIED A MINIMUM 18". LATERALS SHALL BE BURIED A MINIMUM 12".
9. WRING SHALL BE 1/4" O.D. DIRECT BURY IRRIGATION WIRE BURIED WITHOUT SPACES BETWEEN CONTROLLER AND VALVES. WRING SHALL BE BURIED BELOW THE MAINLINE.
10. SYSTEM SHALL BE EQUIPPED TO BE BLOWN OUT FOR WINTERIZATION.
11. PROVIDE AND INSTALL CLASS 35 PVC CONDUITS THAT ARE TWICE THE DIAMETER OF THE IRRIGATION PIPE FOR ALL IRRIGATION LINES THAT ARE TO BE INSTALLED. OR AS SHOWN ON THE PLANS. UNDER ALL SIDEWALKS, PAVEMENT AND DRIVEWAYS. EXTEND CONDUIT A MINIMUM OF 6" INTO IRRIAGATED AREAS.
12. THE CONTRACTOR SHALL TEST AND FLUSH THE SYSTEM PRIOR TO ACCEPTANCE BY OWNER. THE CONTRACTOR SHALL FURNISH THE OWNER AS-BUILT DRAWINGS BEFORE ACCEPTANCE BY OWNER.
13. IRRIGATION CONTRACTOR SHALL HAVE ALL UTILITIES FIELD LOCATED BEFORE COMMENCING WORK.
14. IRRIGATION MATERIALS & EQUIPMENT:
 MAIN LINES - 1-1/2" CLASS 180 PVC PIPE
 LATERAL LINE - 1/2" POLYETHYLENE TUBING (SIZED AS REQUIRED)
 SHOWER HEADS - 1/2" MESH 1/2" MESH SHOWER HEADS FOR IRRIGATION SYSTEMS OR APPROVED EQUAL.
 DROP LINE VALVE - RAINBOW LOW FLOW WITH 1/2" FILTER SIZED AS NECESSARY OR APPROVED EQUAL.
 ISOLATION GATE VALVE - RAINBOW BY SERIES OR APPROVED EQUAL.
 ZONE VALVE - RAINBOW MODEL 18 - STD OR APPROVED EQUAL.
 CONTROLLER - INSTALL A RAINBOW ESP-4C WITH THE CAPACITY TO CONTROL ONE EXTRA ZONE OF APPROVED EQUAL TUBING - RAINBOW DISTRIBUTION TUBING OR APPROVED EQUAL.

PLANT PALETTE

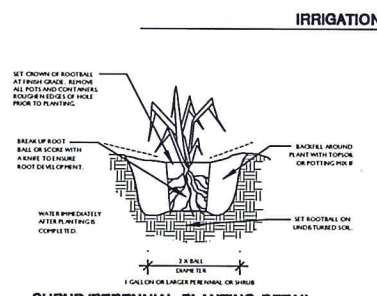
SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	QTY/100
SM	SIEMMA GLEN MAPLE	Acer Fremonii "Sienna"	2" Cal.	8
AM	AMUR MAPLE	Acer ginnala	1-1/2" Cal.	2
AC	ALPINE CURRIANT	Ribes alpinum	2 Gallon	211
GM	GOLD MOUND SPIRUEA	Spiraea japonica "Gold Mound"	2 Gallon	4
RT	RED CHINQUE DOGWOOD	Cornus calca "Redgum"	2 Gallon	4
DC	DWARF GLOBE BLUE SPRUCE	Picea pungens "Globo Globosa"	2 Gallon	2
O	BOULDERS	2" dia. to 5" dia.		24

LANDSCAPING REQUIREMENTS

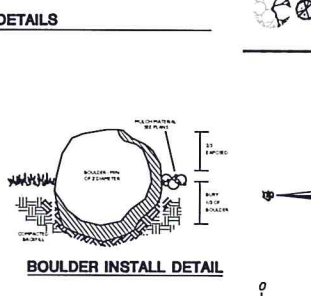
- REQUIRED INTERIOR LANDSCAPING:
 1,540 SF
 25 SHRUBS
 8 SHADE TREES
- REQUIRED STREET TREES:
 3 PER 100 FEET
- REQUIRED PERIMETER PARKING:
 CONTINUOUS HEDGE
- PROVIDED INTERIOR LANDSCAPING:
 2,800 SF
 25 SHRUBS
 8 SHADE TREES
- PROVIDED STREET TREES:
 EXISTING
- PROVIDED PERIMETER PARKING:
 CONTINUOUS HEDGE



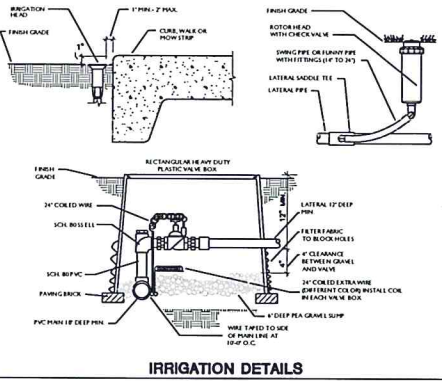
TREE PLANTING DETAIL



SHRUB/PERENNIAL PLANTING DETAIL



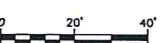
BOULDER INSTALL DETAIL



IRRIGATION DETAILS

LEGEND

- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC LINE/LINES
- EXISTING UNDERGROUND COMMUNICATION LINE/LINES
- EXISTING UNDERGROUND GAS
- EXISTING OVERHEAD POWER
- EXISTING LIGHT POLE
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED ASPHALT/CONCRETE ALTERNATE
- EXISTING TREE
- PROPOSED TREES & SHRUBS
- PROPOSED CONDUIT



SCALE: 1" = 20'
NGVD 29 DATUM
SEPTEMBER 14, 2016

CALL BEFORE YOU DIG
NORTH DAKOTA
UTILITIES UNDERGROUND LOCATION SERVICE
1-800-795-5555

PRELIMINARY-NOT FOR CONSTRUCTION,
RECORDING PURPOSES OR IMPLEMENTATION

REVISIONS	DATE
Per City Comments	9-29-16
Per City Comments	10-10-16

LANDSCAPING & IRRIGATION PLAN
LUCKY'S 13 PUB
KIRKWOOD MALL
BISMARCK, NORTH DAKOTA

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SHANDCO
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P:\Bismarck\VPSC\ Lucky's 13 Pub Site Plan

SHEET C4.0