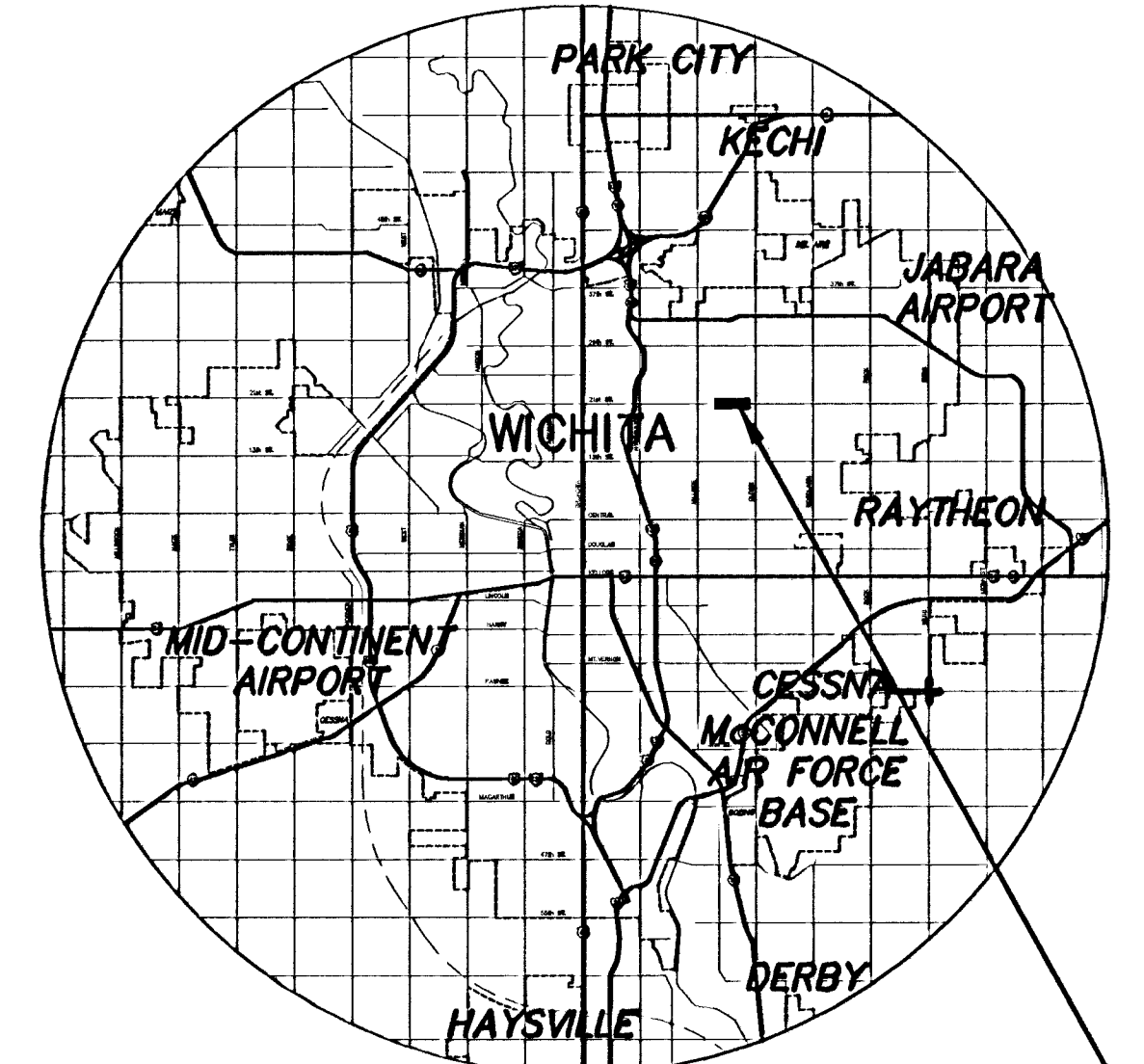


GRADING AND LANDSCAPING FOR
21st HILLSIDE TO OLIVER
PROJECT NO. 472-83368
OCA NO. 706823

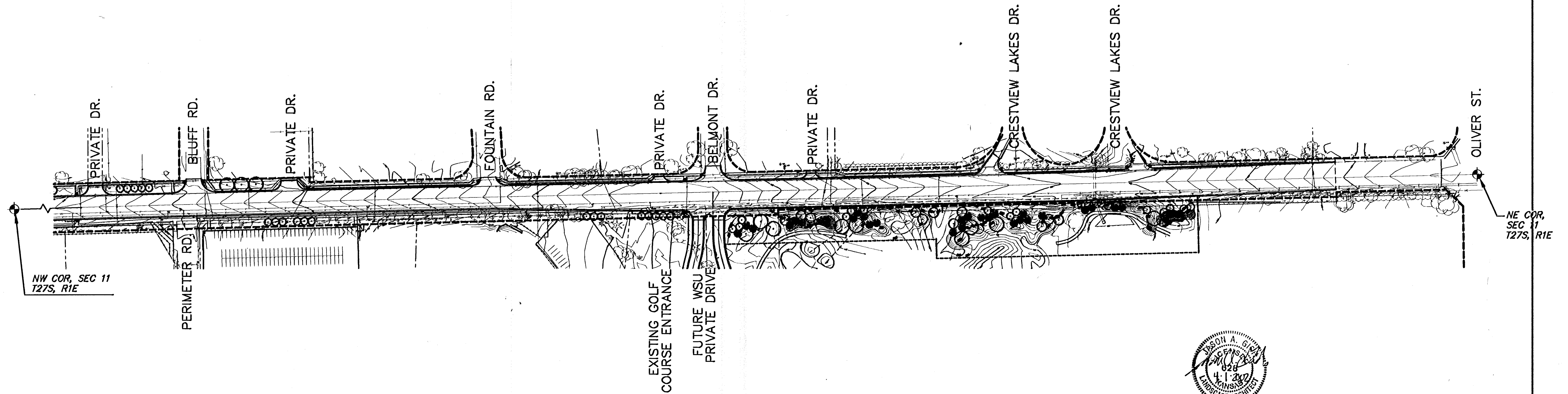
MICHAEL E. LINDEBAK, CITY ENGINEER
WICHITA, SEDGWICK COUNTY
POPULATION 311,746

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2-3	Grading at WSU Golf Course
4	Grading/Tree Protection Details
5-10	Landscaping Plans
11	Landscape Details & Notes



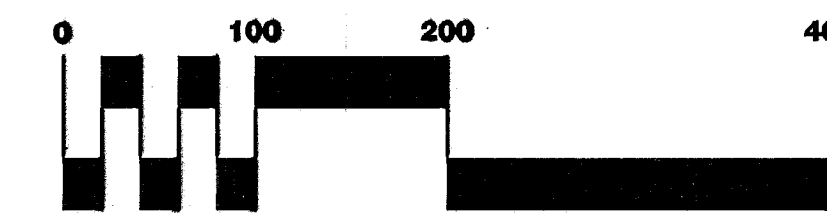
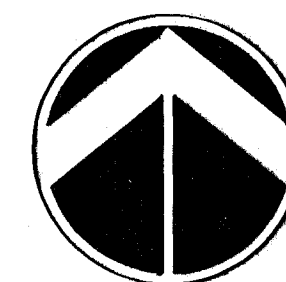
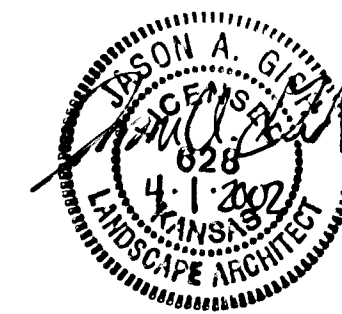
PROJECT LOCATION



***EARTHWORK SUMMARY**

TOPSOIL	
EXCAVATION	1,065 C.Y.
FILL (CONTRACTOR FURNISH)	275 C.Y.
BERM FILL	
COMPACTED FILL (CONTRACTOR FURNISH)	3,750 C.Y.

*FOR INFORMATION ONLY



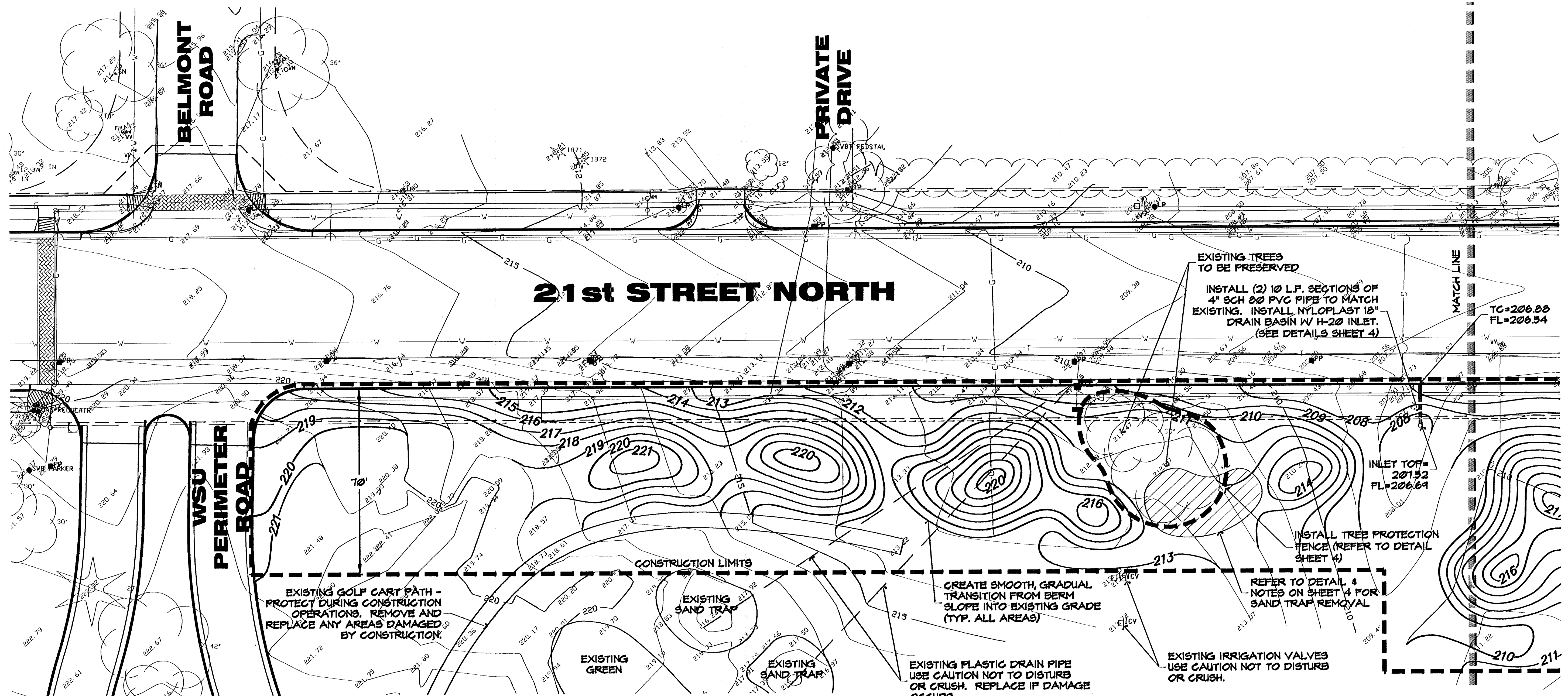
SCALE: 1" = 100'



**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

TITLE SHEET
SHEET TITLE

DESIGN BY:	DRAWN BY:	CHECKED BY:
MARCH 2002	99257GT	1 / 11
DATE	JOB NO.	SHEET/OF



NOTES:

1. TEMPORARY TREE PROTECTION FENCE SHALL BE ERECTED AS INDICATED ON PLANS BEFORE ANY TYPE OF CONSTRUCTION IS INITIATED. EQUIPMENT AND CONSTRUCTION MATERIALS SHALL REMAIN OUT OF AND AWAY FROM ALL TREE DRIPLINES (EVEN TREES WITHOUT PROTECTIVE FENCING) SO AS TO NOT COMPACT THE ROOT ZONE OR DAMAGE THE TREE.

2. ANY TREE THAT MUST HAVE BRANCHES REMOVED SHALL BE TRIMMED WITH A SHARP INSTRUMENT/TOOL THAT IS INTENDED FOR SUCH OPERATIONS. GAIN APPROVAL FROM WSU REPRESENTATIVE OR LANDSCAPE ARCHITECT BEFORE REMOVING BRANCHES FROM ANY TREE/KNOCKING BRANCHES OFF WITH A BACKHOE OR OTHER SIMILAR MACHINES (IS NOT ACCEPTABLE) REFER TO DETAIL, SHEET 4 OF 11.

3. AN 8" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND THEN PLACED AT AN 8" THICKNESS ON PROPOSED GRADES. NOTE: THE FINISHED GRADE INDICATES THE SURFACE ELEVATION AFTER THE LAYER OF TOPSOIL HAS BEEN PLACED. WHERE SHRUB BEDS ARE INDICATED THE TOPSOIL THICKNESS SHALL BE INCREASED TO 18". TOPSOIL SHALL BE SUBSIDIARY TO EARTHWORK.

4. THIS IS DESIGN GRADING. ALL GRADES SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES AND WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. SURVEY STAKES ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE PLAN ON THIS SHEET SHALL BE REFERRED TO FOR FINAL GRADING. THE GRADING SHALL BE APPROVED BY A REPRESENTATIVE OF WSU AND THE LANDSCAPE ARCHITECT PRIOR TO THE ADDITION OF THE TOPSOIL LAYER. GRADING SHALL BE SUBSIDIARY TO EARTHWORK.

5. IF ANY OFFSITE TOPSOIL IS NEEDED, IT SHALL BE FERTILE NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEIOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL pH RANGE SHALL BE 5.5 TO 7.0. TOPSOIL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT.

6. DRAIN INLET & PVC PIPE SHALL BE SUBSIDIARY TO EARTHWORK.

7. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE TO NEARBY GOLF COURSE IRRIGATION SYSTEM. ANY DAMAGE THAT MAY OCCUR SHALL BE REPAIRED/REPLACED WITH SAME BY CONTRACTOR.

8. CONTRACTOR SHALL COORDINATE W/C.O.W. & WSU FOR ACCESS TO SITE.

EXISTING TREES
TO BE PRESERVED

INSTALL (2) 10 L.F. SECTIONS OF
4" SCH 80 PVC PIPE TO MATCH
EXISTING. INSTALL NYLOPLAST 18"
DRAIN BASIN W/ H-20 INLET.
(SEE DETAILS SHEET 4)

TC=206.88
FL=206.54

INLET TOP=207.52
FL=206.69

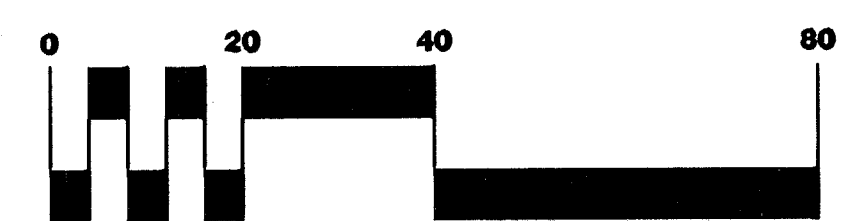
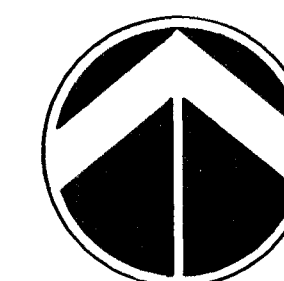
INSTALL TREE PROTECTION
FENCE (REFER TO DETAIL
SHEET 4)

REFER TO DETAIL 4
NOTES ON SHEET 4 FOR
SAND TRAP REMOVAL

CREATE SMOOTH, GRADUAL
TRANSITION FROM BERM
SLOPE INTO EXISTING GRADE
(TYP. ALL AREAS)

EXISTING PLASTIC DRAIN PIPE
USE CAUTION NOT TO DISTURB
OR CRUSH. REPLACE IF DAMAGE
OCCURS.

EXISTING IRRIGATION VALVES
USE CAUTION NOT TO DISTURB
OR CRUSH.



SCALE: 1" = 20'

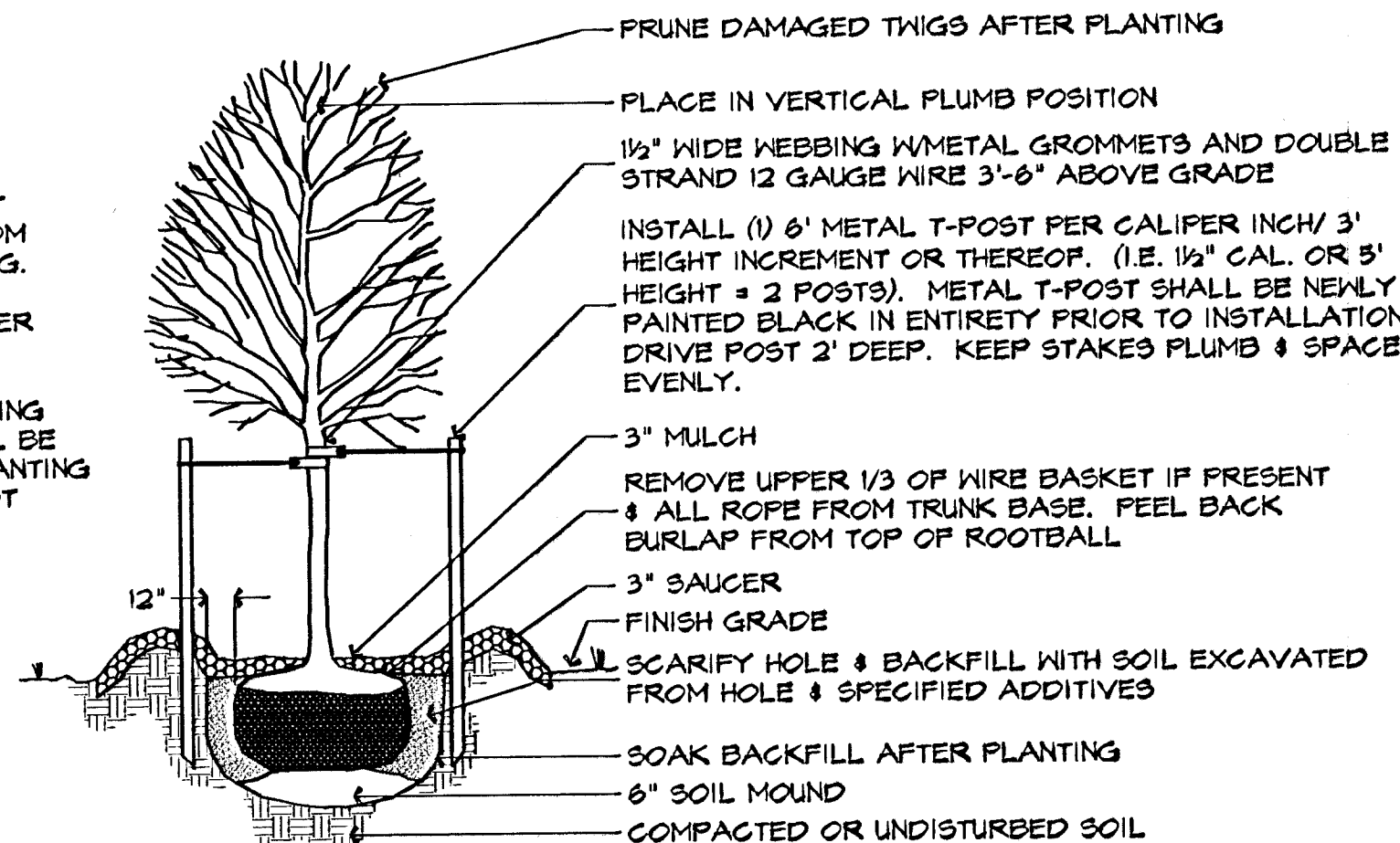


21ST STREET
HILLSIDE TO OLIVER
PROJECT NAME

GRADING PLAN
SHEET TITLE

LAB DESIGN BY:	DMU DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257GD1 JOB NO.	2 / 11 SHEET/OF

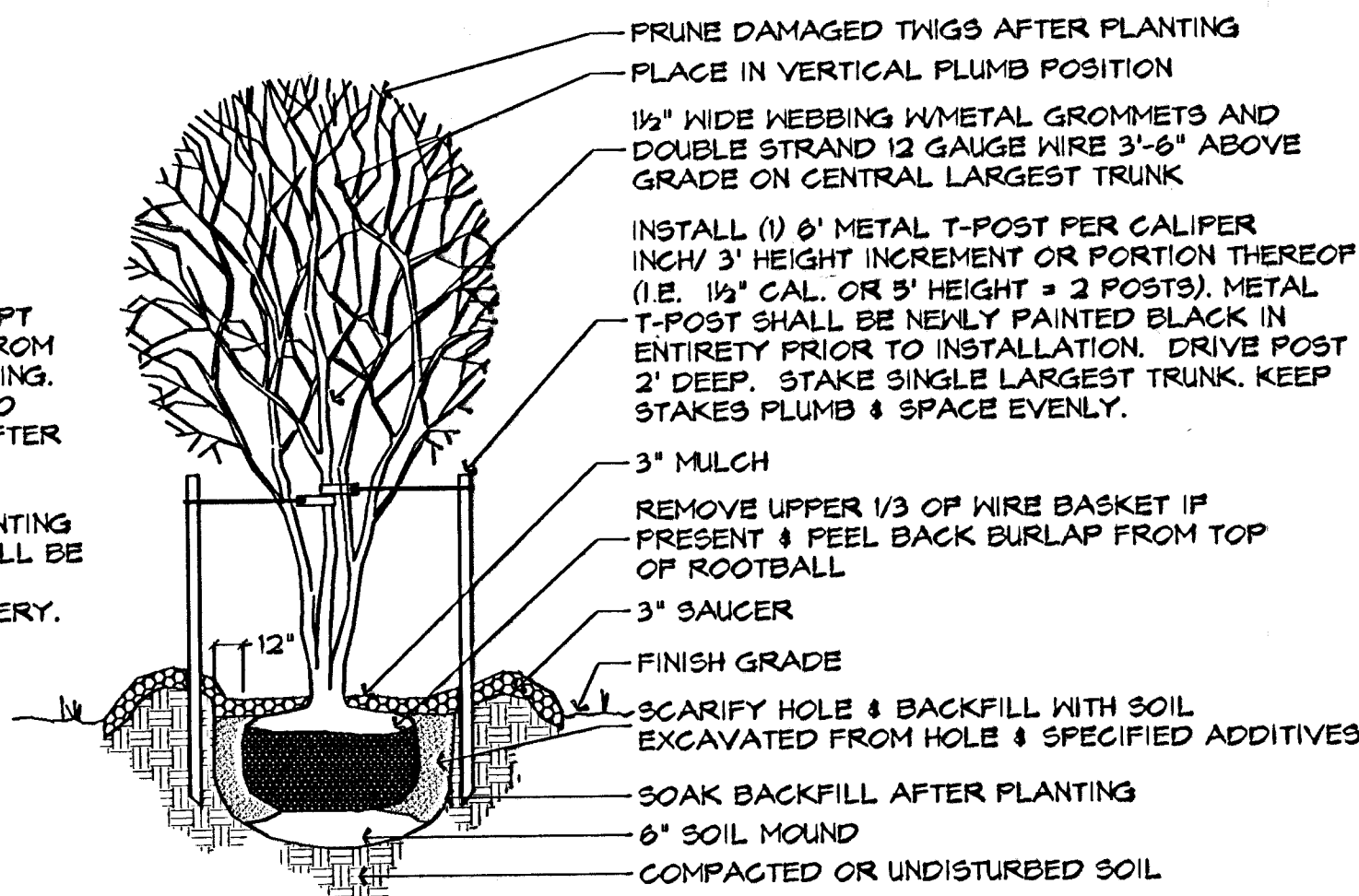
NOTES:
BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER THE MANUFACTURER'S RECOMMENDATIONS. PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY. DO NOT OVERTIGHTEN GUYS.



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

NOTES:
BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER THE MANUFACTURER'S RECOMMENDATIONS. PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY.



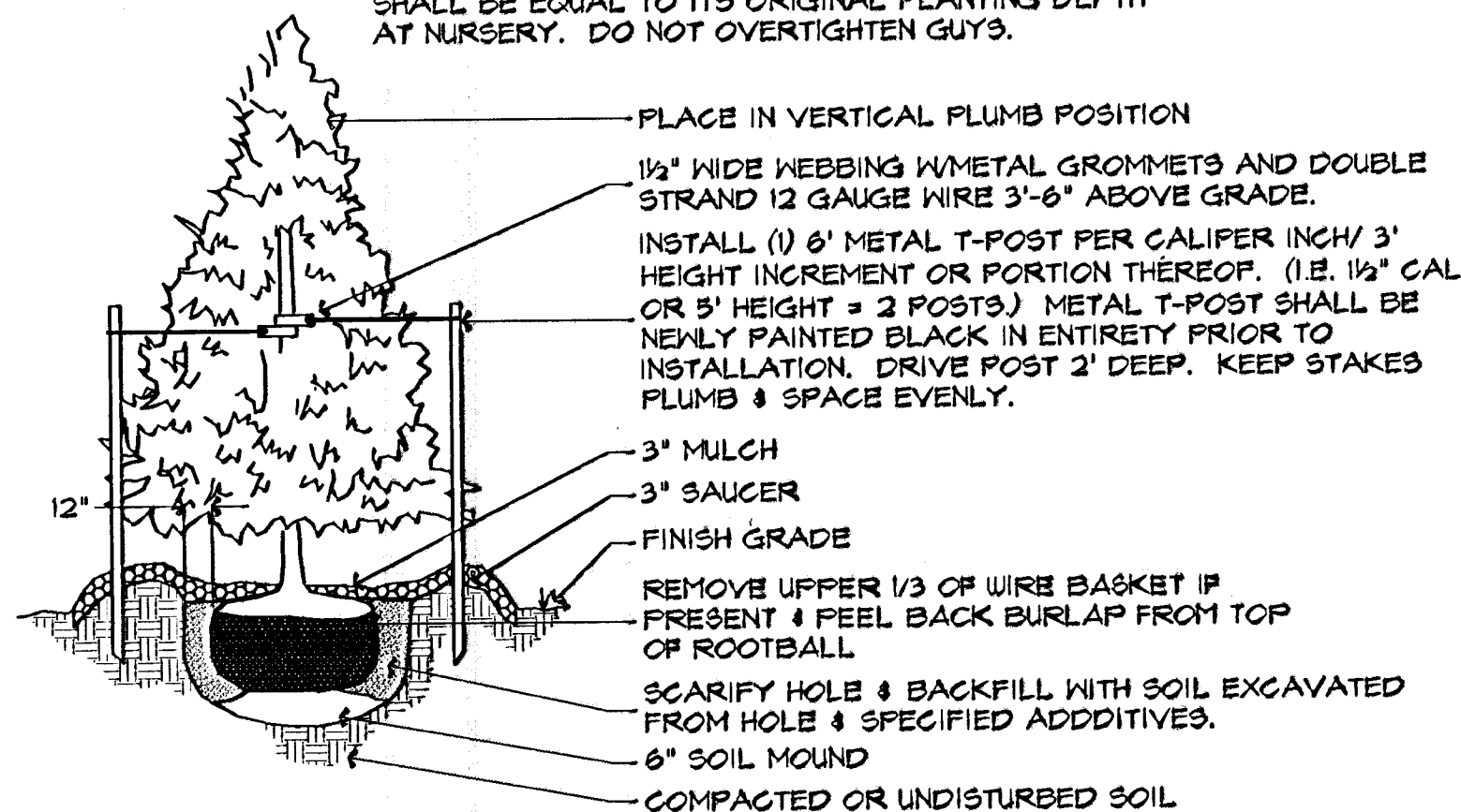
MULTI-TRUNK TREE PLANTING DETAIL

NOT TO SCALE

MASTER PLANT LIST

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
LARGE DECIDUOUS TREES				
1	BALD CYPRESS	Taxodium distichum	3" cal.	Balled-in-Burlap
3	THORNLESS HONEYLOCUST	Gleditsia triacanthos 'Shademaster'	3" cal.	Balled-in-Burlap
2	SHUMARD OAK	Quercus shumardii	3" cal.	Balled-in-Burlap
6	LACEBARK ELM	Ulmus parvifolia	3" cal.	Balled-in-Burlap
LARGE EVERGREEN TREES				
16	EASTERN RED CEDAR	Juniperus virginiana	8'	B-B/Treespade Female
14	AUSTRIAN PINE	Pinus nigra	8'	Balled-in-Burlap
ORNAMENTAL TREES				
11	FLAME AMUR MAPLE	Acer ginnala 'Flame'	8'	Balled-in-Burlap/Multi-trunk
30	INDIAN SUMMER CRABAPPLE	Malus sp. 'Indian Summer'	2" cal.	Balled-in-Burlap
9	OKLAHOMA REDBUD	Cercis reniformis 'Oklahoma'	2" cal.	Balled-in-Burlap
SHRUBS				
17	BAYBERRY	Myrica pensylvanica	5 gal.	Container 6' O.C.
56	GRO-LOW SUMAC	Rhus aromatica 'Gro-Low'	3 gal.	Container 4' O.C.
32	SPRING GLORY FORSYTHIA	Forsythia x intermedia 'Spring Glory'	5 gal.	Container 6' O.C.
LAWN GRASS				
5,330	KANSAS PREMIUM FESCUE GRASS	Festuca arundinacea 'Kansas Premium'	Sod	-

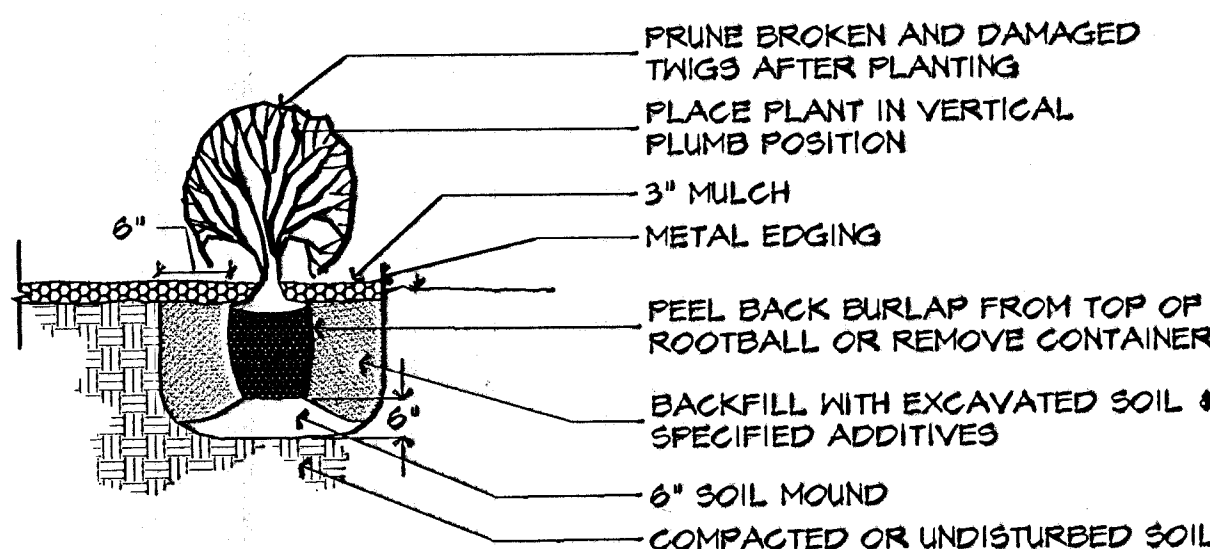
NOTES:
BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER THE MANUFACTURER'S RECOMMENDATIONS. PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY. DO NOT OVERTIGHTEN GUYS.



EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

NOTES:
BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER THE MANUFACTURER'S RECOMMENDATIONS. PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY.



SHRUB PLANTING DETAIL

NOT TO SCALE

NOTES:

1. CONTRACTOR SHOULD MAKE THEMSELVES FAMILIAR WITH THE PLANS AND ALL NOTES BEFORE BIDDING THIS PROJECT. C.O.W. SPECIFICATIONS SHALL APPLY. THE NOTES & DETAILS ON THIS SHEET SHALL TAKE PRECEDENCE OVER C.O.W. SPECS. WHEN IN CONFLICT.

2. LANDSCAPE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES (INCLUDING THOSE INDICATED ON THE PLAN) PRIOR TO INSTALLATION OF PLANT MATERIAL. UTILITIES CAN BE FLAGGED BE FLAGGED BY CALLING 687-2470.

3. AREAS DENOTED AS 'SOD' SHALL BE INSTALLED AS FOLLOWS:

SOD:
KANSAS PREMIUM BLEND FESCUE FERTILIZER:
HAVE SOIL TESTED BY COUNTY EXTENSION SERVICE TO OBTAIN RECOMMENDED SOIL AMENDMENTS FOR THE GRASSES LISTED. REPORT RECOMMENDATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE ANY APPLICATION OF FERTILIZER IS MADE.

4. ALL GRAVEL OR OTHER SIMILAR DEBRIS LARGER THE 1/2" IN DIAMETER SHALL BE RAKED UP AND REMOVED BEFORE ANY SODDING OR SEEDING OPERATIONS ARE PERFORMED. SOIL SHALL BE PREPARED & SMOOTHED NEATLY TO REMOVE ALL FOREIGN SUBSTANCES & TO ELIMINATE WATER PONDING LOW SPOTS

5. SOD SHALL BE INSTALLED IN ALL DISTURBED AREAS. GRADING SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SOD INSTALLATION. TRANSITION FROM NEWLY SODDED AREAS TO UNDISTURBED SHALL BE SMOOTH WITHOUT LIP. ON A MAJORITY OF THE STREET PLANTING PROJECTS, NEW SOD MAY ALREADY BE IN PLACE WHERE TREE PLANTINGS ARE DIRECTED. DO NOT RUT OR TEAR UP THIS SOD. IF DAMAGE OCCURS THE CONTRACTOR SHALL REPLACE WITH LIKE SOD TO THE LANDSCAPE ARCHITECT'S SATISFACTION.

6. PLANTING DATES FOR PLANT MATERIAL SHALL BE DURING THE MONTHS BETWEEN OCTOBER 1st AND MAY 15th. PLANTING SHALL ONLY BE CONDUCTED WHEN THE GROUND IS NOT FROZEN, SNOW COVERED, OR IN AN OTHERWISE UNSUITABLE CONDITION FOR PLANTING. DEVIATION FROM THE ABOVE PLANTING DATES WILL ONLY BE PERMITTED WITH APPROVAL FROM THE LANDSCAPE ARCHITECT.

7. THE PLANTING SOIL MIXTURE FOR ALL TREE PLANTINGS SHALL BE SOIL EXCAVATED FROM THE HOLE.

8. ROOT STIMULATOR SHALL BE APPLIED TO ALL PLANT MATERIALS WITH THE EXCEPTION OF LAWN AREAS. APPLY AS PER THE MANUFACTURER'S RECOMMENDATIONS.

9. ALL TREE SAUCERS AND PLANTING BEDS ARE TO BE MULCHED WITH A MINIMUM OF 3" FINE SHREPPED DARK HARDWOOD MULCH OR CYPRESS MULCH. MULCH SHALL BE APPROVED BY LANDSCAPE ARCHITECT WHERE PLANTING BEDS ARE ADJACENT TO WALKS AND CURBS THE SOIL LEVEL SHALL BE 3" LOWER TO ALLOW FOR MULCH LAYER. WHERE SOD IS INDICATED, ITS THICKNESS SHALL ALSO BE ACCOUNTED FOR SO THAT THE SOIL SURFACE IN THE SOD MATCHES IN LEVEL WITH THE LANDSCAPE SURFACE.

10. ALL SHRUB/PERENNIAL PLANTING BEDS SHALL BE TREATED WITH A PRE EMERGENT HERBICIDE SUCH AS TREFLAN OR EQUAL. APPLY AS PER MANUFACTURER'S RECOMMENDATION. THE PRE EMERGENT SHALL NOT BE APPLIED UNTIL AFTER ALL PLANTING AND MULCHING WITHIN THESE AREAS ARE COMPLETE. DO NOT DISTURB AREAS AFTER APPLICATION. WATER IN AS DIRECTED.

11. MULCH, STAKES, GUY WIRE, PRE EMERGENT HERBICIDES, ETC. SHALL BE SUBSIDIARY TO INDIVIDUAL PLANTS.

12. ALL PLANTING BEDS ABUTTING LAWN AREAS SHALL BE EDGED WITH CURV-RITE ALUMINUM EDGING (BLACK ANODIZE 1/8x4") OR APPROVED EQUAL. EDGING SHALL BE PLACED IN SMOOTH CURVING SHAPES INDICATED WITHOUT KINKS OR TWISTS. INSTALL AS PER THE MANUFACTURER'S RECOMMENDATIONS.

13. THE CONTRACTOR SHALL FLAG/PAINT PROPOSED PLANT LOCATIONS & BEDS AND GAIN APPROVAL OF LOCATIONS FROM LANDSCAPE ARCHITECT PRIOR TO BRINGING PLANTS TO THE SITE. PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. PLANTS SHALL BE OF FIRST CLASS QUALITY WITHOUT SCRAPES, POOR FOLIAGE & ROOTS. BALLED AND BURLAPPED MATERIAL SHALL BE HEADED IN & PROTECTED IF NOT PLANTED WITHIN 6 HOURS OF ARRIVAL TO SITE. MULCH, STAKE, AND WATER IN ALL PLANTS PLANTED BEFORE ENDING WORK FOR THE DAY.

14. LABEL EACH TREE, SHRUB, ORNAMENTAL GRASS, GROUND COVER MASS AND PERENNIAL MASS WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTH BOTANICAL AND COMMON NAME. DO NOT REMOVE UNTIL AFTER PROVISIONAL ACCEPTANCE.

15. STAKES AND GUYING SHALL BE REMOVED BY THE CONTRACTOR AT THE END OF ONE FULL GROWING SEASON.

16. ANY TOPSOIL NEEDED TO CORRECT SOIL LEVELS IN PLANTING ISLANDS OR SUMP AREAS IN LAWNS SHALL BE FERTILE NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL PH RANGE SHALL BE 5.5 TO 7.0.

17. SUBSTITUTION OF PLANT SPECIES TYPES FOR THOSE LISTED IN THE PLANT LIST IS NOT PERMISSIBLE UNLESS APPROVED BY MKEC (684-9600). ANY SPECIES SUBSTITUTION WHICH HAS NOT BEEN APPROVED SHALL BE REMOVED IMMEDIATELY AND REPLACED WITH THE CORRECT PLANT.

18. COORDINATE LANDSCAPE PLANTING WITH WSU'S IRRIGATION CONTRACTOR. THE TREE FLAGGING SHALL BE IN PLACE BEFORE IRRIGATION LINE ROUTING BEGINS. WATER TREES BY HAND FREQUENTLY. UNTIL IRRIGATION SYSTEM IS FULLY FUNCTIONAL. SHRUBS AND PERENNIALS SHALL NOT BE INSTALLED UNTIL THE IRRIGATION SYSTEM IS FUNCTIONAL. THE IRRIGATION SYSTEM SHALL BE COMPLETE AND FULLY FUNCTIONAL IN ALL LAWN AREAS BEFORE SOD IS PLACED.

G:\CIVIL\99257\LANDSCAPE\99257.LS.D

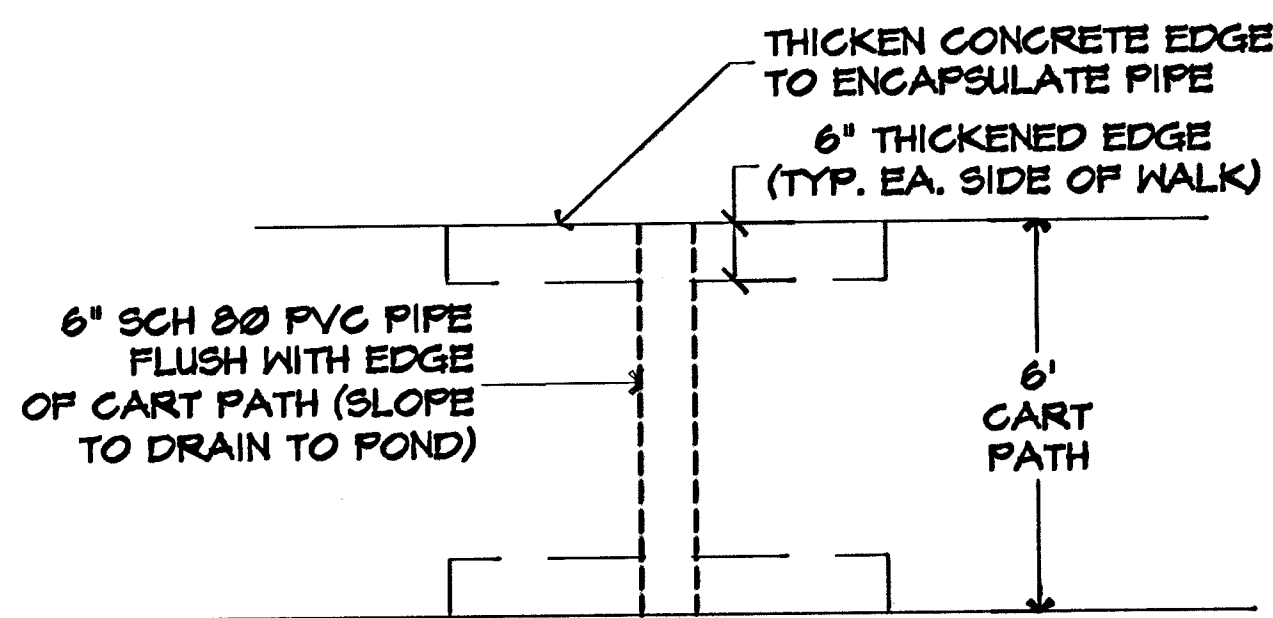
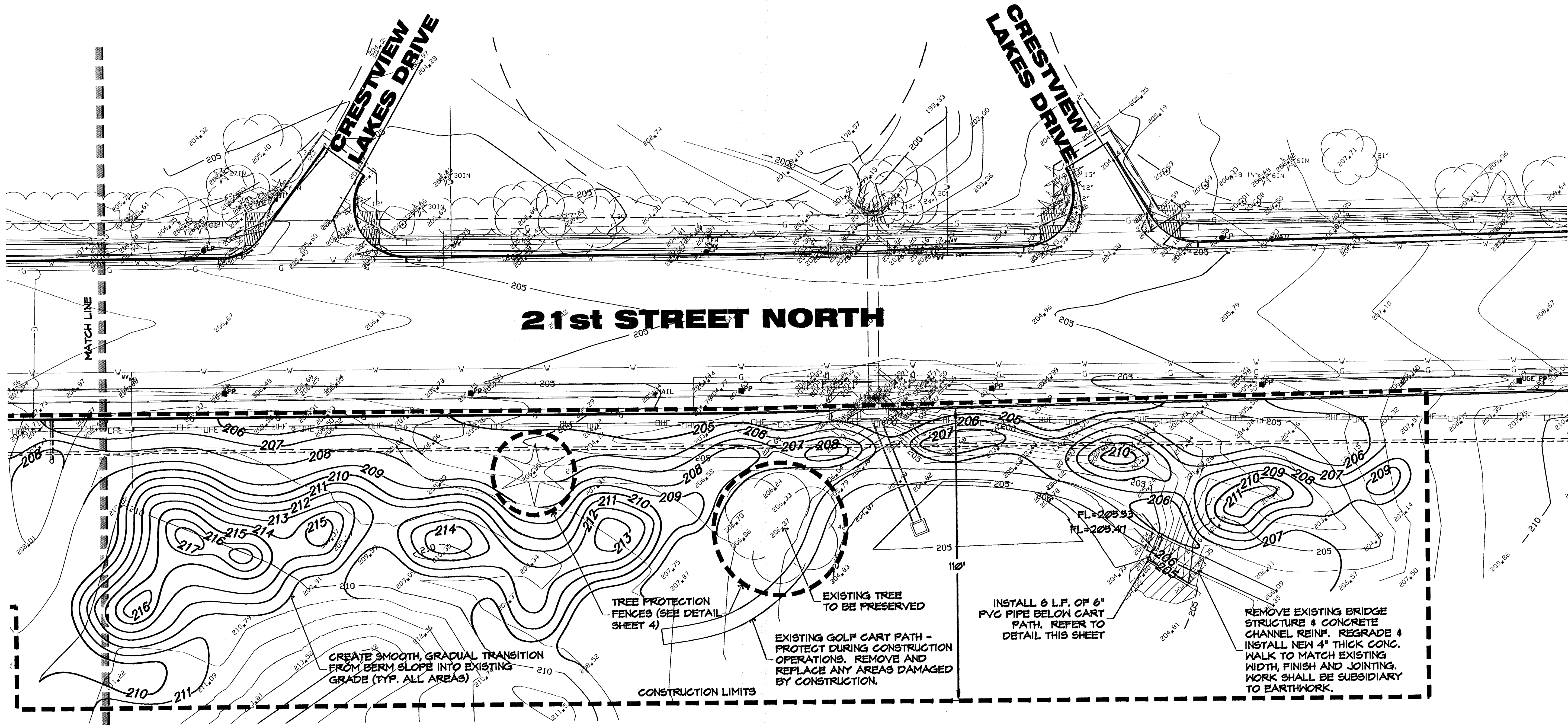


21ST STREET
HILLSIDE TO OLIVER
PROJECT NAME

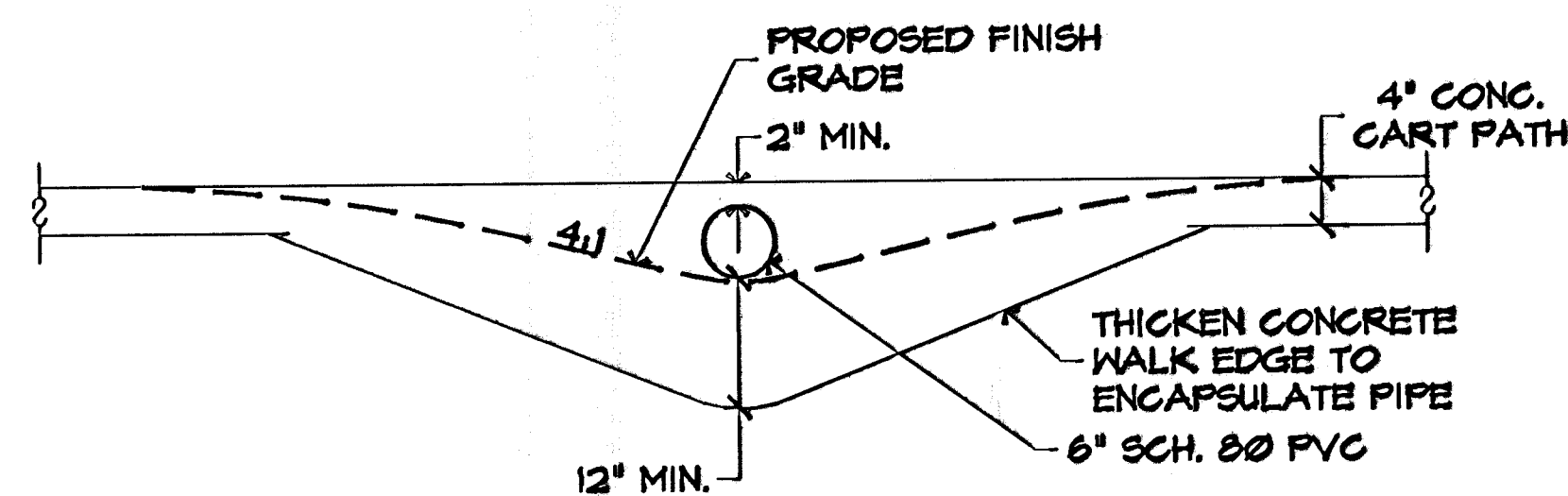
LANDSCAPE DETAILS
SHEET TITLE

LAB DESIGN BY:	DMU DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257LS.D JOB NO.	11 / 11 SHEET/OF

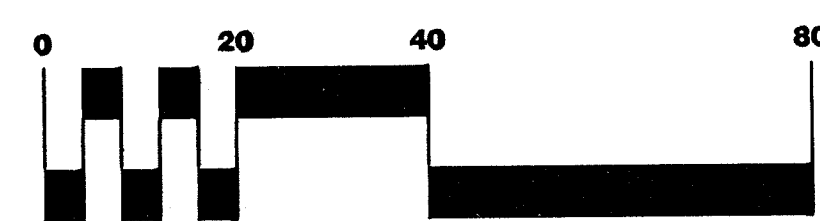
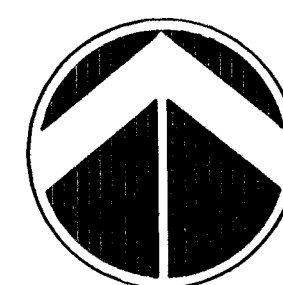
18-13-04-05



CART PATH DRAIN PIPE-PLAN
NOT TO SCALE



CART PATH DRAIN PIPE-ELEVATION/SECTION
NOT TO SCALE



SCALE: 1" = 20'

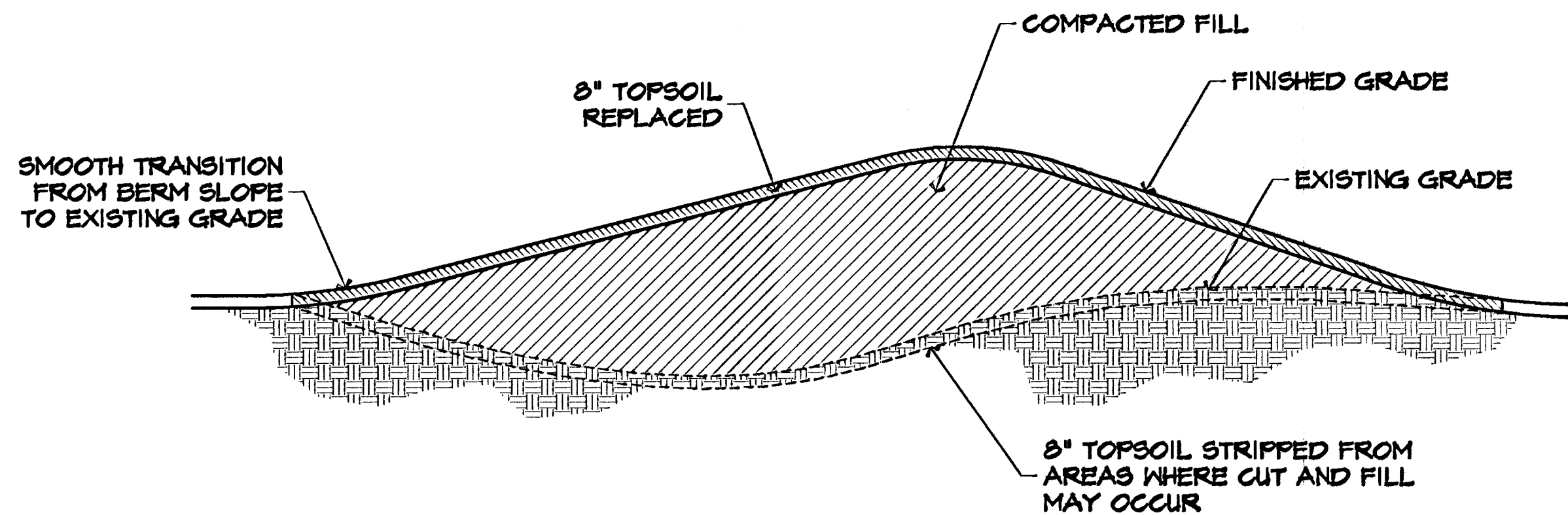


**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

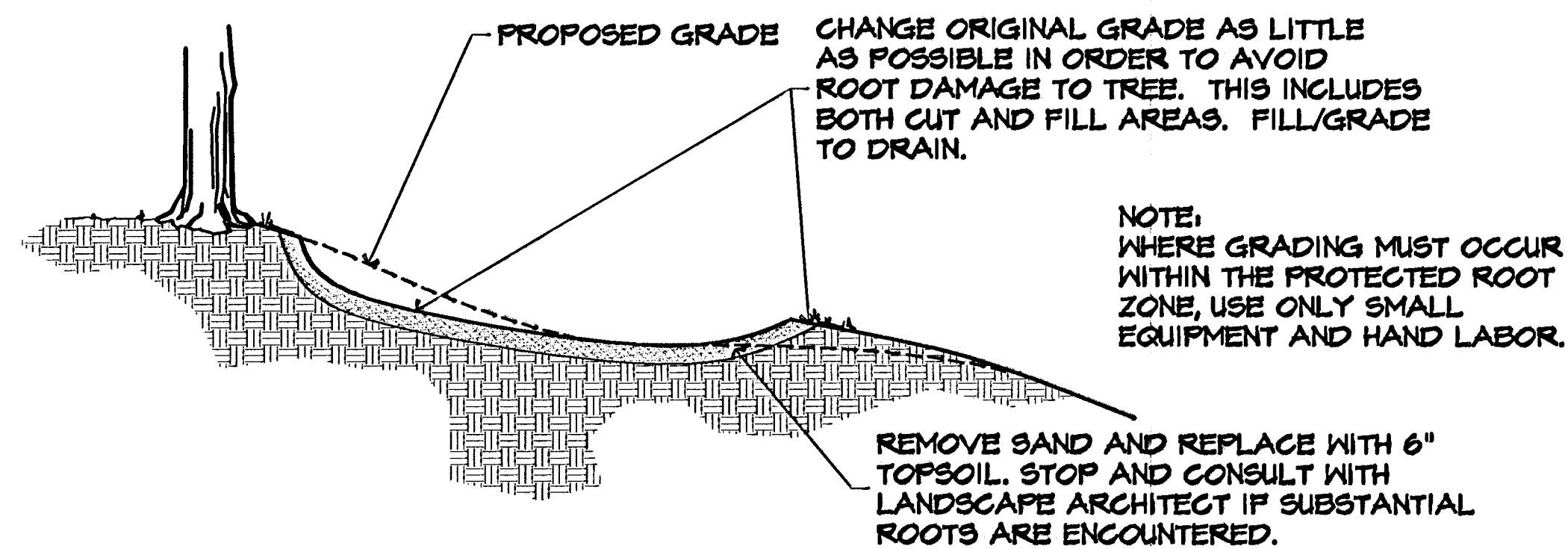
GRADING PLAN
SHEET TITLE

LAB DESIGN BY:	DMU DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257GD2 JOB NO.	3 / 11 SHEET/OF

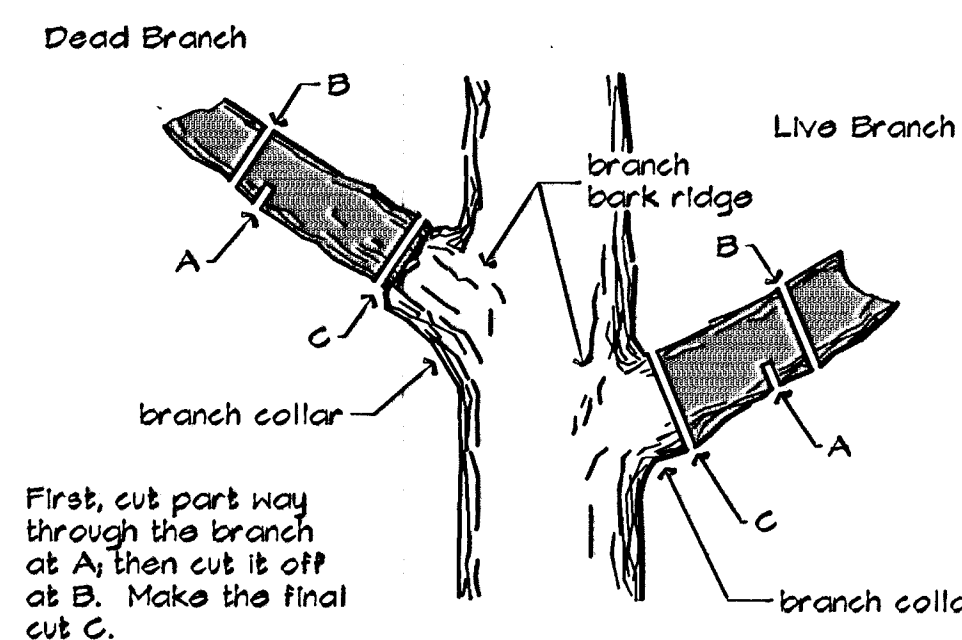
G:\LOCAL 199257\DWG\LANDSCAPE\ENGLISHA 99257GD2



BERM FILL DETAIL
NOT TO SCALE



SAND TRAP FILL DETAIL
NOT TO SCALE

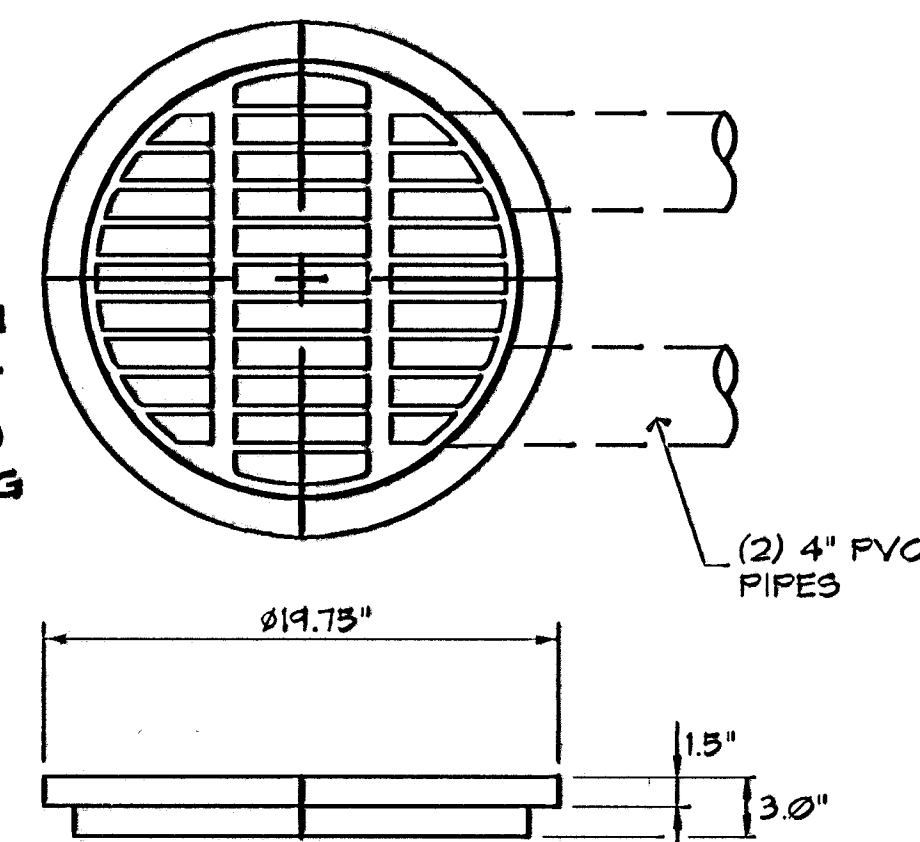


TREE TRIMMING DETAIL
NOT TO SCALE

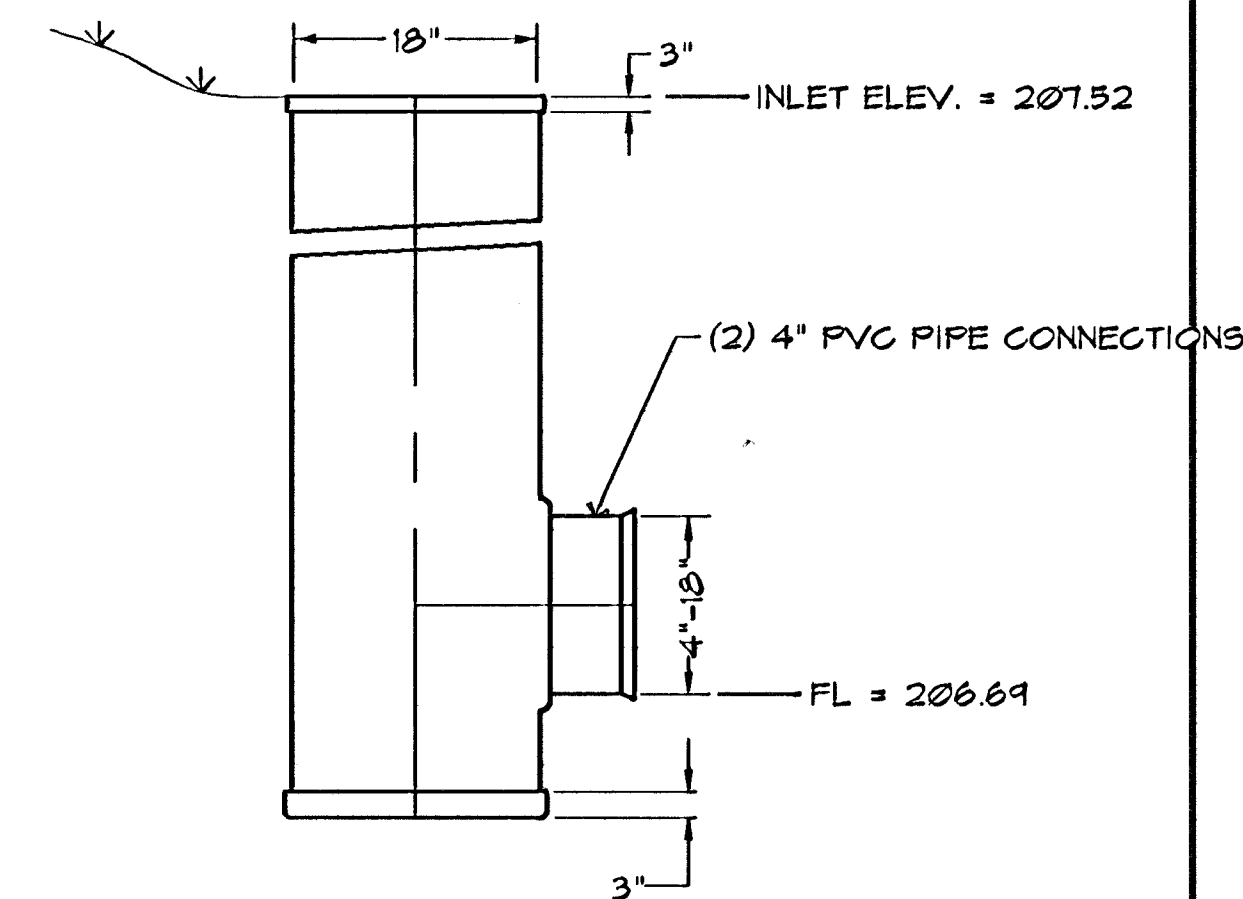
NOTE: NYLOPLAST 18" DRAIN BASIN OR APPROVED EQUAL.
GRATE SHALL HAVE AN H-20 (HEAVY TRAFFIC) DOT RATING

QUALITY: MATERIAL SHALL CONFORM TO ASTM A536 GRADE 10-30-03

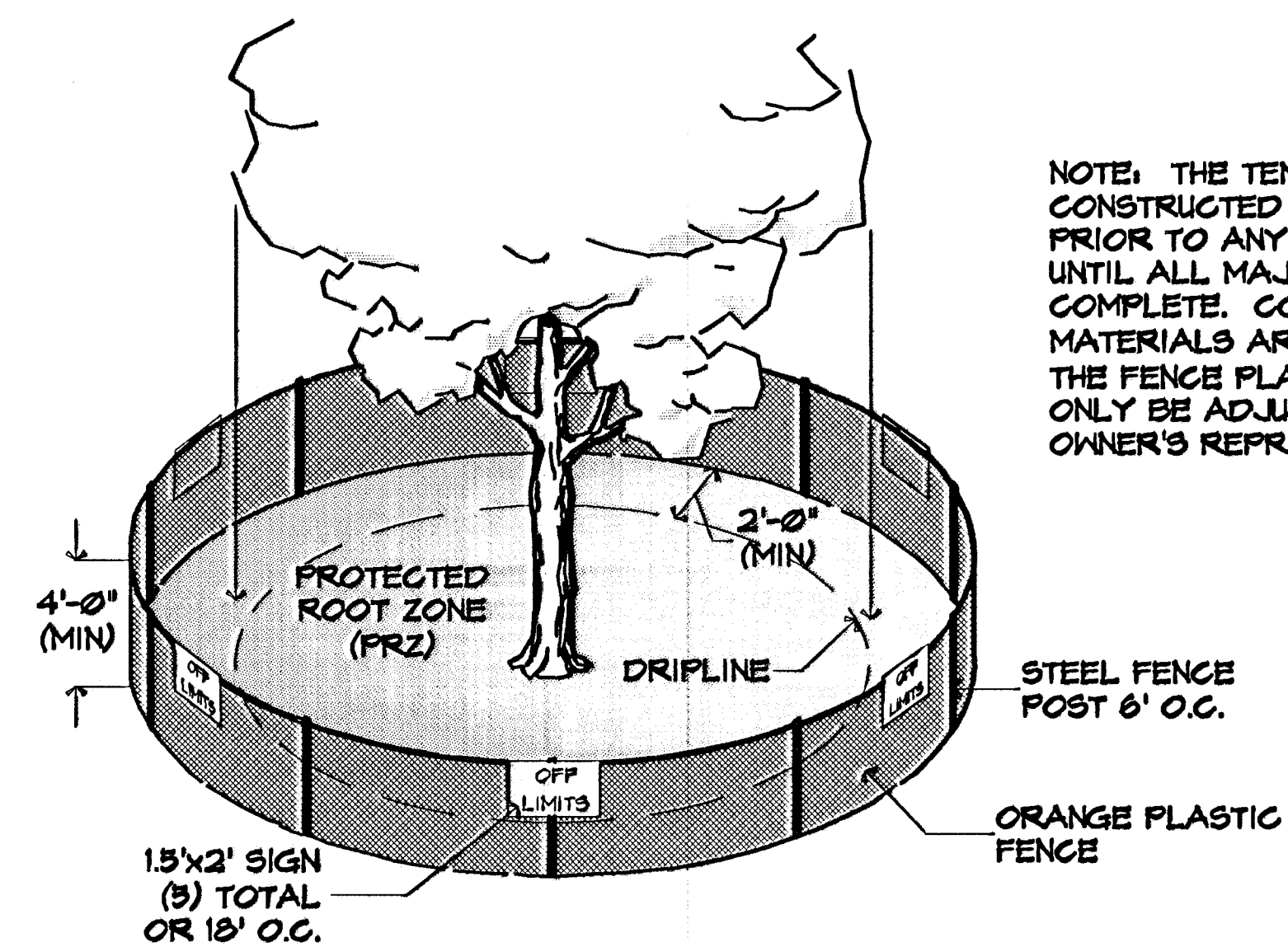
PAINT: CASTINGS SHALL BE FURNISHED WITH A BLACK PAINT



18" CAST IRON STANDARD GRATE
NOT TO SCALE



18" DRAIN BASIN
NOT TO SCALE



NOTE: THE TEMPORARY FENCE IS TO BE CONSTRUCTED AROUND SPECIFIED AREAS/TREES PRIOR TO ANY CONSTRUCTION AND SHALL REMAIN UNTIL ALL MAJOR EARTHWORK CONSTRUCTION IS COMPLETE. CONSTRUCTION EQUIPMENT AND MATERIALS ARE NOT PERMITTED WITHIN THE (PRZ). THE FENCE PLACEMENT AROUND THE (PRZ) MAY ONLY BE ADJUSTED WITH PERMISSION FROM THE OWNER'S REPRESENTATIVE.

TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE

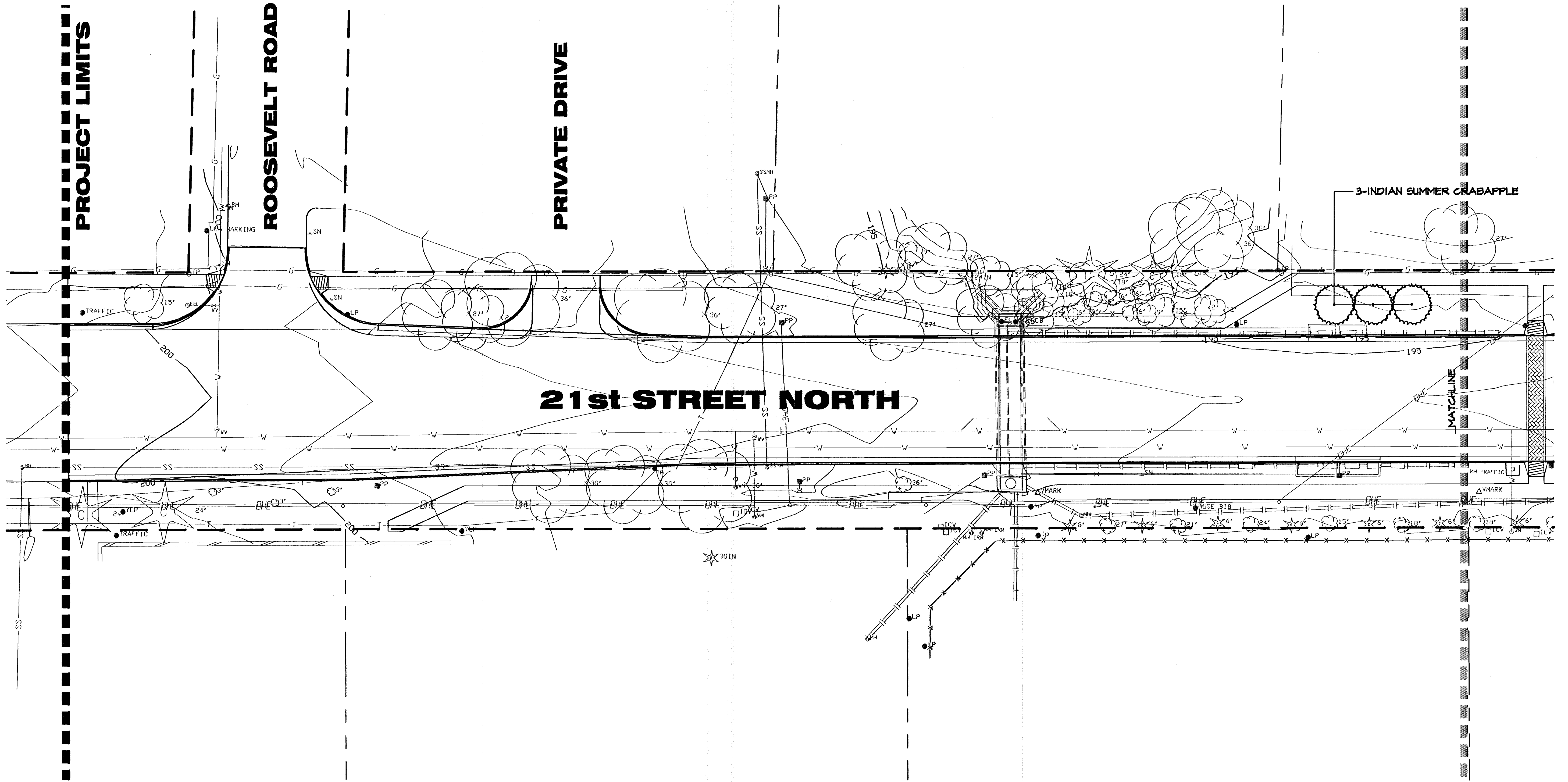
G:\CIVIL\99257\DWG\LANDSCAPE\ENGLISH\99257.GD3



**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

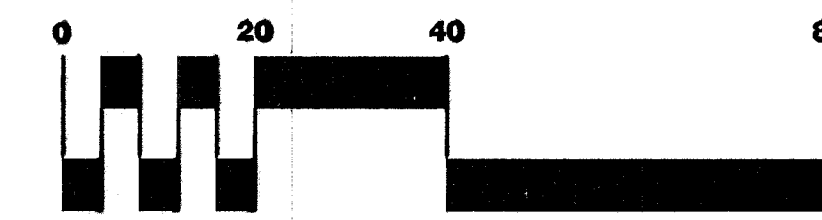
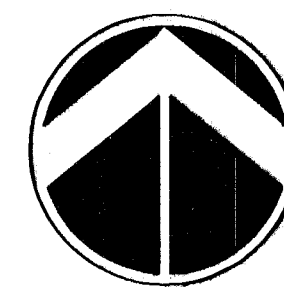
GRADING/TREE PROTECTION DETAILS
SHEET TITLE

LAB DESIGN BY:	LAB DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257GD3 JOB NO.	4 / 11 SHEET/OF



MASTER PLANT LIST

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
ORNAMENTAL TREES				
3	INDIAN SUMMER CRABAPPLE	Malva sp. 'Indian Summer'	2" cal.	Balled-in-Burlap



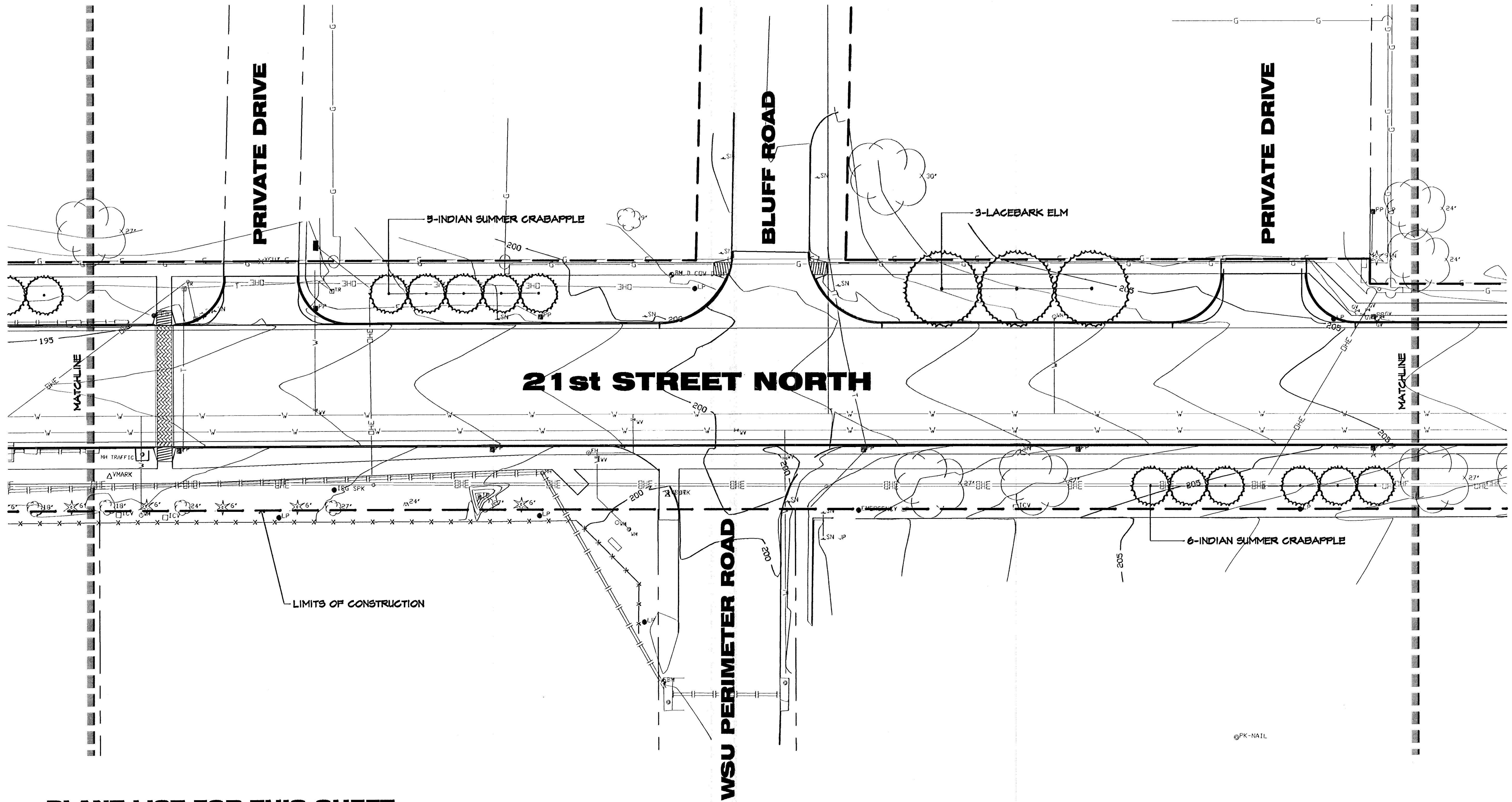
SCALE: 1" = 20'

MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9000

**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

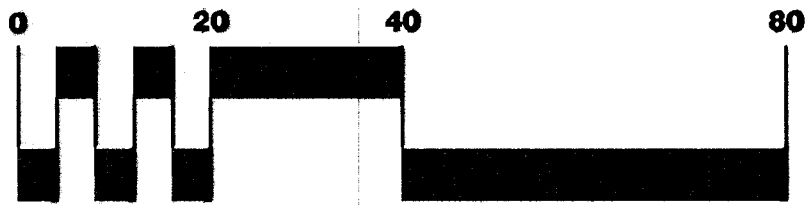
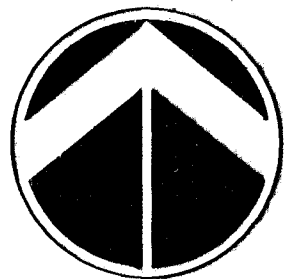
LANDSCAPE PLAN
SHEET TITLE

LAB DESIGN BY:	DMU DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257LS1 JOB NO.	5 / 11 SHEET/OF



PLANT LIST FOR THIS SHEET

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
LARGE DECIDUOUS TREES				
3	LACEBARK ELM	Ulmus parvifolia	3" cal.	Balled-in-Burlap
ORNAMENTAL TREES				
11	INDIAN SUMMER CRABAPPLE	Malus sp. 'Indian Summer'	2" cal.	Balled-in-Burlap



SCALE: 1" = 20'

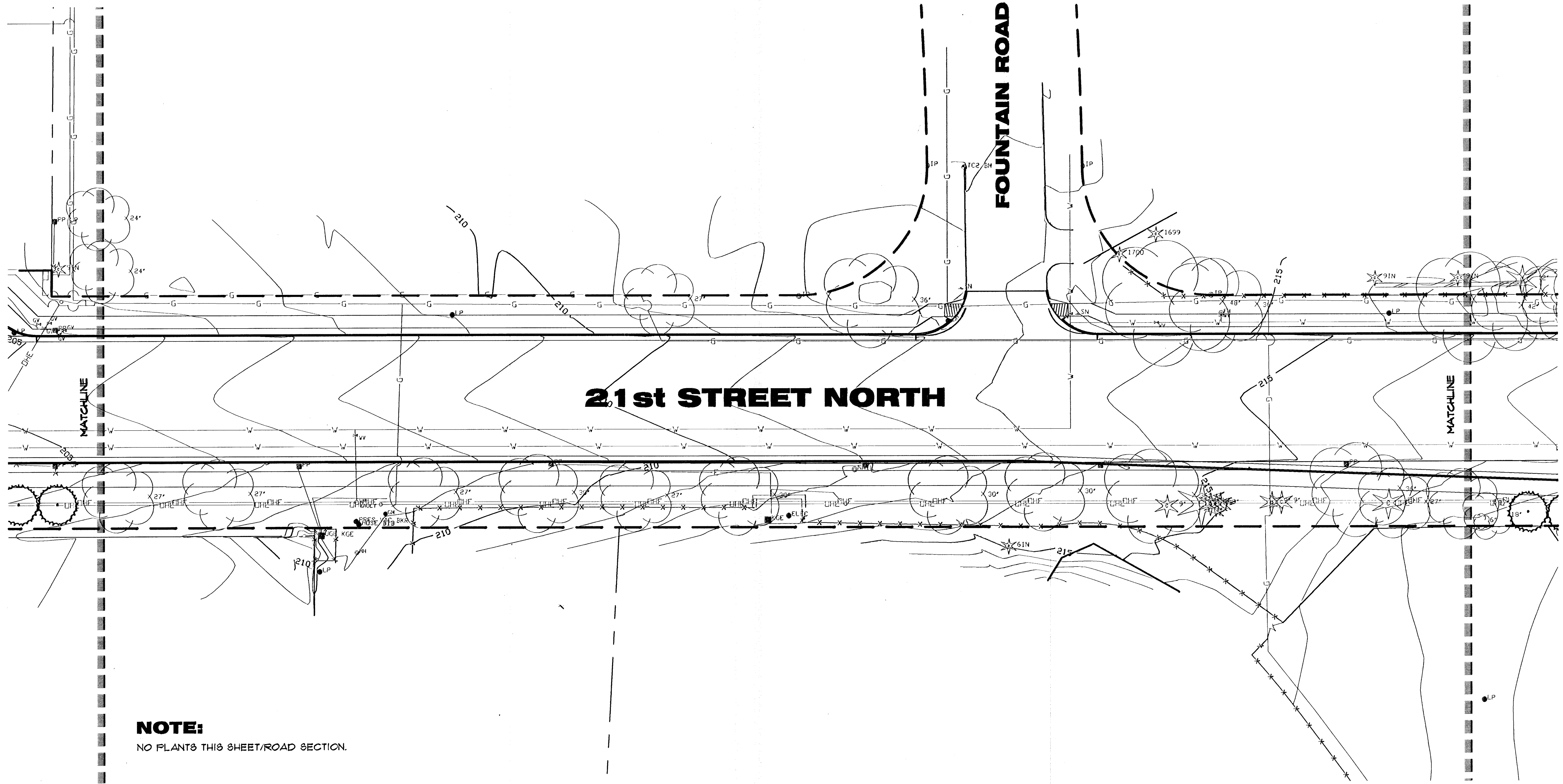
G:\CIVIL\99257\DWG\LANDSCAPE\99257LS2

MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67204
316 - 684 - 9600

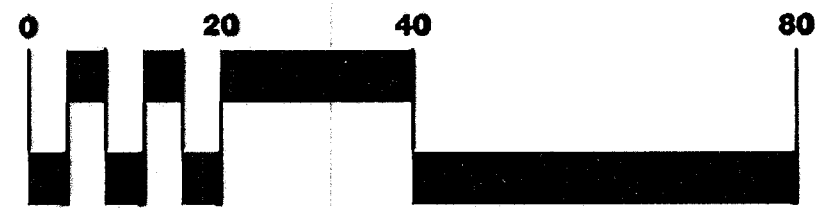
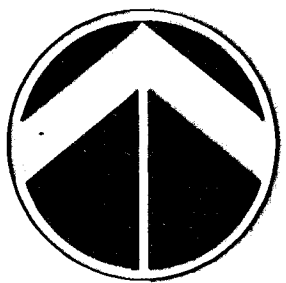
21ST STREET
HILLSIDE TO OLIVER
PROJECT NAME

LANDSCAPE PLAN
SHEET TITLE

LAB	DMU	JAG
DESIGN BY:	DRAWN BY:	CHECKED BY:
MARCH 2002	99257LS2	6 / 11
DATE	JOB NO.	SHEET/OF



NOTE:
NO PLANTS THIS SHEET/ROAD SECTION.



SCALE: 1" = 20'

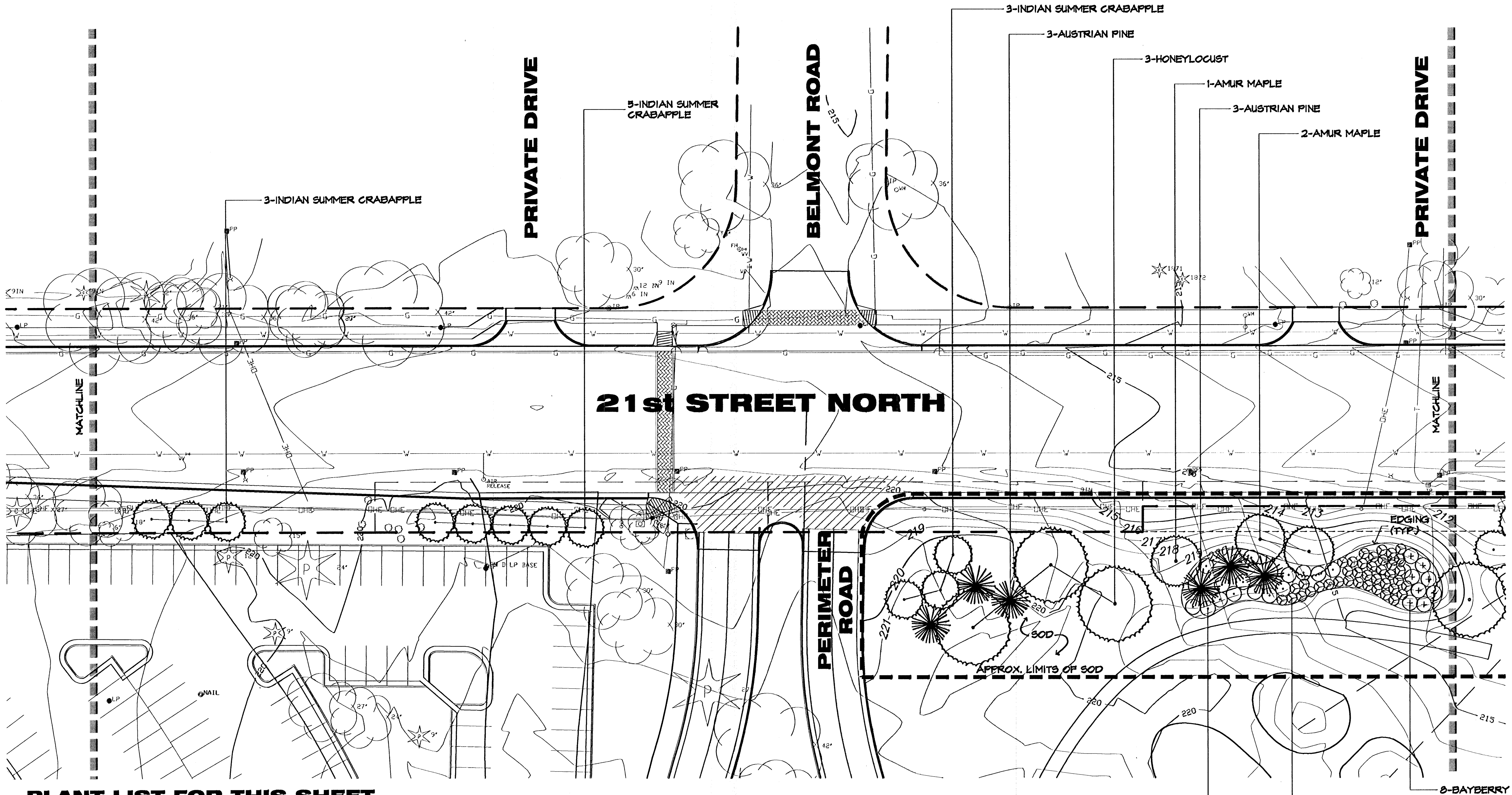
G:\CIVIL\99257\DWG\LANDSCAPE\99257LS3

MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

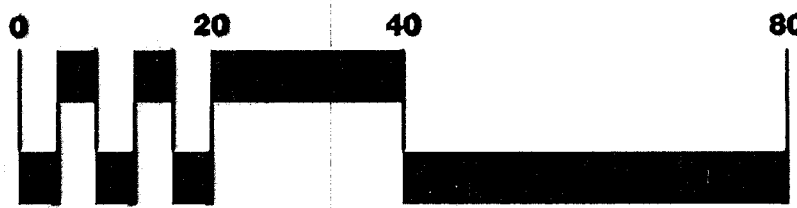
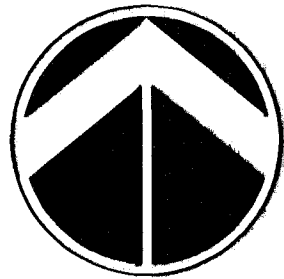
LANDSCAPE PLAN
SHEET TITLE

DESIGN BY:	DMU	CHECKED BY:
DATE	99257LS3	7 / 11
	JOB NO.	SHEET/OF



PLANT LIST FOR THIS SHEET

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
LARGE DECIDUOUS TREES				
3	THORNLESS HONEYLOCUST	Gleditsia triacanthos 'Shademaster'	3" cal.	Balled-in-Burlap
LARGE EVERGREEN TREES				
6	AUSTRIAN PINE	Pinus nigra	8'	Balled-in-Burlap
ORNAMENTAL TREES				
3	FLAME AMUR MAPLE	Acer ginnala 'Flame'	8'	Balled-in-Burlap/Multi-trunk
11	INDIAN SUMMER CRABAPPLE	Malus sp. 'Indian Summer'	2" cal.	Balled-in-Burlap
SHRUBS				
8	BAYBERRY	Myrica pensylvanica	5 gal.	Container 6' O.C.
39	GRO-LOW SUMAC	Rhus aromatica 'Gro-Low'	2 gal.	Container 4' O.C.
15	SPRING GLORY FORSYTHIA	Forsythia x intermedia 'Spring Glory'	5 gal.	Container 6' O.C.
LAWN GRASS				
18,120 S.F.	KANSAS PREMIUM FESCUE GRASS	Festuca arundinacea 'Kansas Premium'	80d	-



SCALE: 1" = 20'

G:\CIVIL\99257\DWG\LANDSCAPE\99257LS4

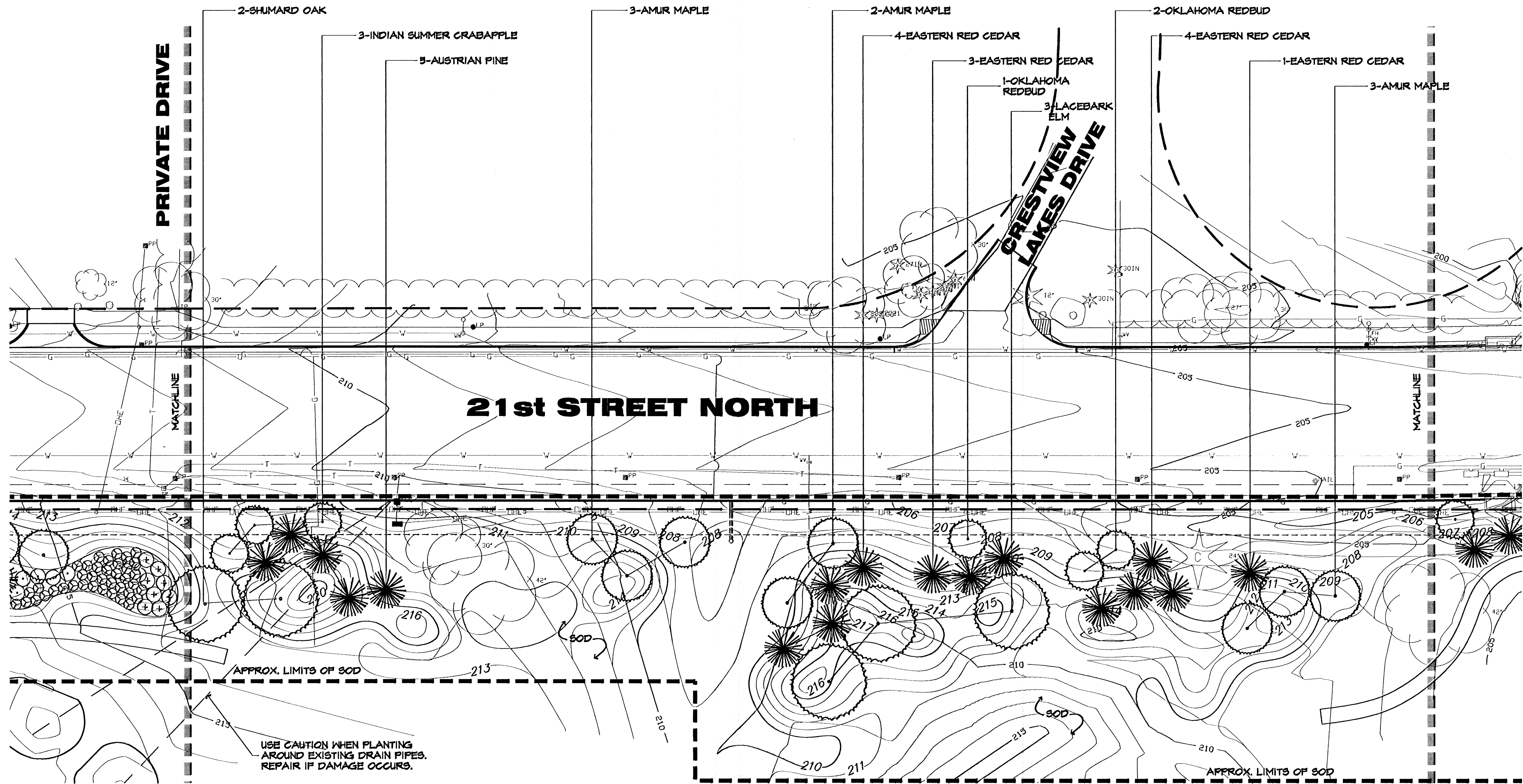
MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

LANDSCAPE PLAN
SHEET TITLE

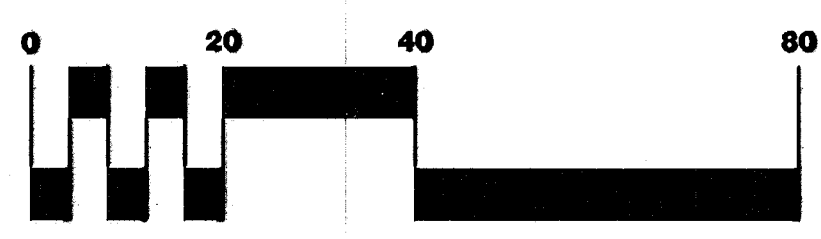
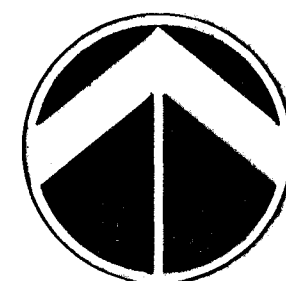
DESIGN BY:	DMU	DRAWN BY:	JAG
DATE:	MARCH 2002	JOB NO.:	99257LS4
		SHEET OF:	8 / 11

G:\CIVIL\99257\DWG\landscape\99257LS5.dwg P1: Mar 29 11:26:06 2002



PLANT LIST FOR THIS SHEET

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
LARGE DECIDUOUS TREES				
2	SHUMARD OAK	<i>Quercus shumardii</i>	3" cal.	Balled-in-Burlap
3	LACEBARK ELM	<i>Ulmus parvifolia</i>	3" cal.	Balled-in-Burlap
LARGE EVERGREEN TREES				
12	EASTERN RED CEDAR	<i>Juniperus virginiana</i>	8'	B-B/Tresapade Female
5	AUSTRIAN PINE	<i>Pinus nigra</i>	8'	Balled-in-Burlap
ORNAMENTAL TREES				
3	FLAME AMUR MAPLE	<i>Acer ginnata 'Flame'</i>	8'	Balled-in-Burlap/Multi-trunk
3	INDIAN SUMMER CRABAPPLE	<i>Malus sp. 'Indian Summer'</i>	2" cal.	Balled-in-Burlap
3	OKLAHOMA REDBUD	<i>Cercis reniformis 'Oklahoma'</i>	2" cal.	Balled-in-Burlap
LAWN GRASS				
8,172	KANSAS PREMIUM FESCUE GRASS	<i>Festuca arundinacea 'Kansas Premium'</i>	8od	-



SCALE: 1" = 20'

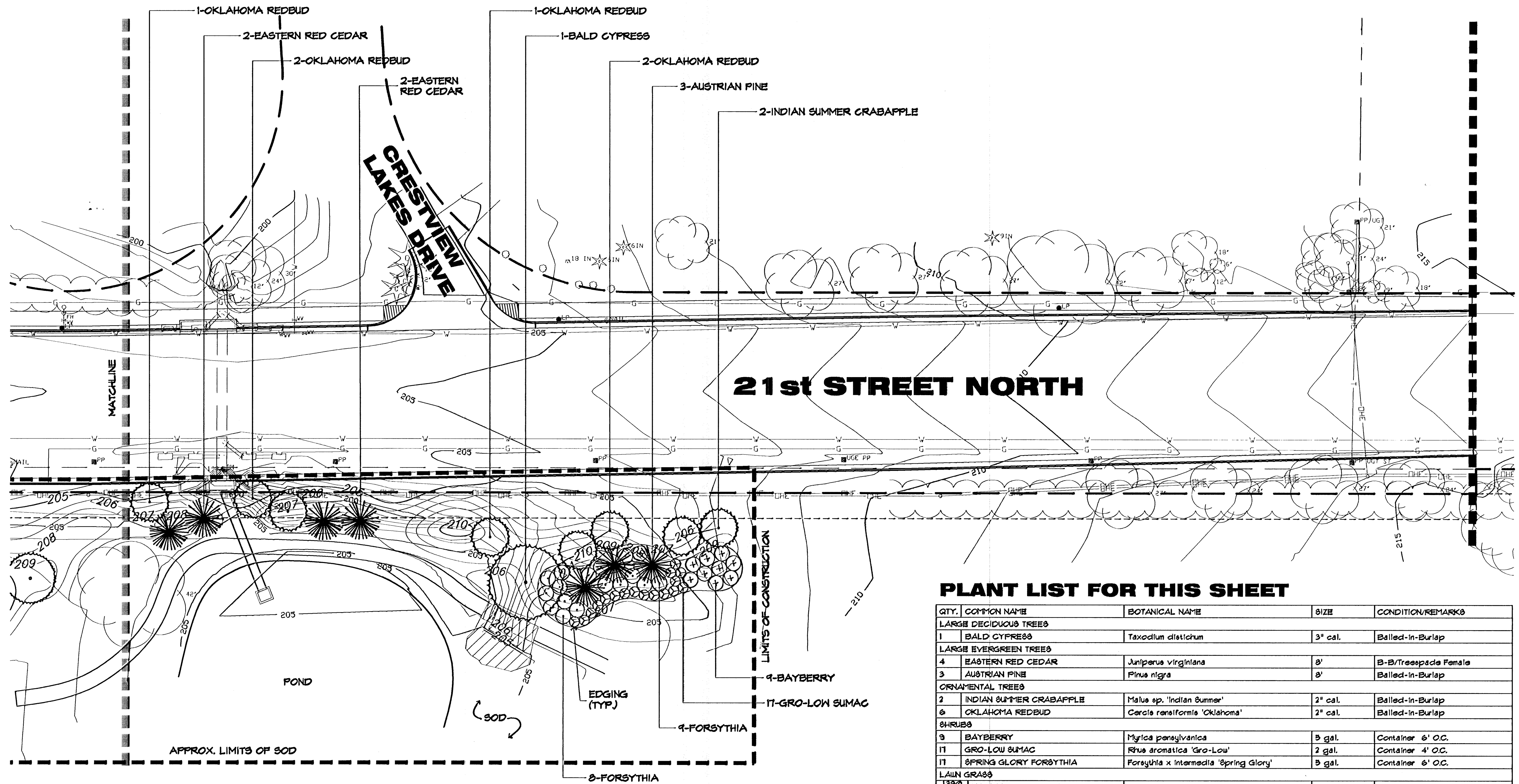
G:\CIVIL\99257\DWG\LANDSCAPE\99257LS5



**21ST STREET
HILLSIDE TO OLIVER**
PROJECT NAME

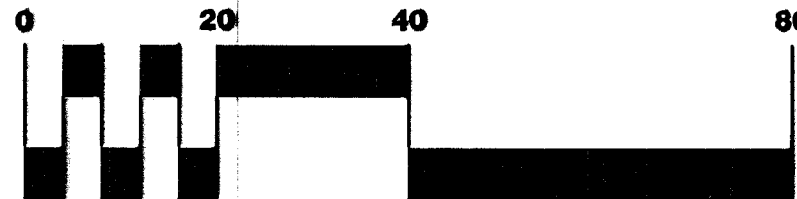
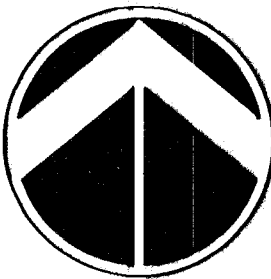
LANDSCAPE PLAN
SHEET TITLE

LAB	DMU	JAG
DESIGN BY:	DRAWN BY:	CHECKED BY:
MARCH 2002	99257LS5	9 / 11
DATE	JOB NO.	SHEET/OT



PLANT LIST FOR THIS SHEET

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION/REMARKS
LARGE DECIDUOUS TREES				
1	BALD CYPRESS	Taxodium distichum	3" cal.	Balled-in-Burlap
LARGE EVERGREEN TREES				
4	EASTERN RED CEDAR	Juniperus virginiana	8'	B-B/Treescape Female
3	AUSTRIAN PINE	Pinus nigra	8'	Balled-in-Burlap
ORNAMENTAL TREES				
2	INDIAN SUMMER CRABAPPLE	Malus sp. 'Indian Summer'	2" cal.	Balled-in-Burlap
6	OKLAHOMA REDBUD	Cercis reniformis 'Oklahoma'	2" cal.	Balled-in-Burlap
SHRUBS				
9	BAYBERRY	Myrica pennsylvanica	5 gal.	Container 6' O.C.
17	GRO-LOW SUMAC	Rhus aromatica 'Gro-Low'	2 gal.	Container 4' O.C.
17	SPRING GLORY FORSYTHIA	Forsythia x intermedia 'Spring Glory'	5 gal.	Container 6' O.C.
LAWN GRASS				
1330	KANSAS PREMIUM FESCUE GRASS	Festuca arundinacea 'Kansas Premium'	80d	-



SCALE: 1" = 20'

C:\CIVIL\99257\DWG\LANDSCAPE\99257.LSG



21ST STREET
HILLSIDE TO OLIVER
PROJECT NAME

LANDSCAPE PLAN
SHEET TITLE

LAB DESIGN BY:	DMU DRAWN BY:	JAG CHECKED BY:
MARCH 2002 DATE	99257LS6 JOB NO.	10 / 11 SHEET/TOT