

HYDROMULCH THROUGHOUT ACCESS ROUTE AND STAGING AREA UNLESS OTHERWISE INDICATED IN PROJECT DOCUMENTS

SEE REVEGETATION PLAN 2 OF 3 FOR PLANTING IN THIS AREA

MULCH BED BENEATH INSTALLED PLANT MATERIALS

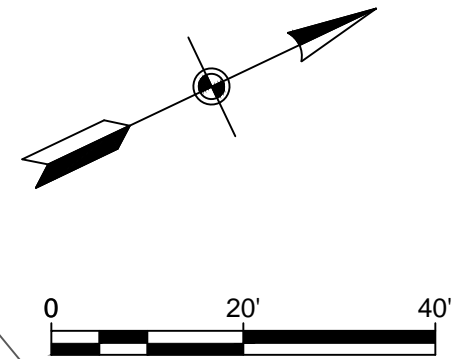
STAGING AREA

MULCH BED BENEATH INSTALLED PLANT MATERIALS

MULCH BED BENEATH INSTALLED PLANT MATERIALS

**SHEET NOTES**

1. REFER TO SHEET 81 OF 82 FOR PLANT MATERIALS, NOTES, DETAILS, ETC.
2. REFER TO SHEET 82 OF 82 FOR TREE LIST AND MITIGATION INFORMATION.
3. ALL PERVIOUS AREAS IMPACTED BY CONSTRUCTION OF THIS PROJECT WILL BE REVEGETATED UNLESS OTHERWISE NOTED HEREIN.
4. SOD AND/OR HYDROMULCH ONLY IN AREAS WITH PERVIOUS SURFACES. SOME SURFACE AREAS WITHIN THE L.O.C. ARE ROCK AND SHOULD NOT BE PLANTED WITH SOD OR SEED.



PERMIT #

REV. NO.	BY	DATE	REVISION DESCRIPTION



**K FRIESE & ASSOCIATES, INC.**  
**CITY OF AUSTIN**  
**NORTH WALNUT CREEK BIKE TRAIL**  
 REVEGETATION PLAN  
 (1 of 3)  
 ACCESS ROUTE AND STAGING AREA

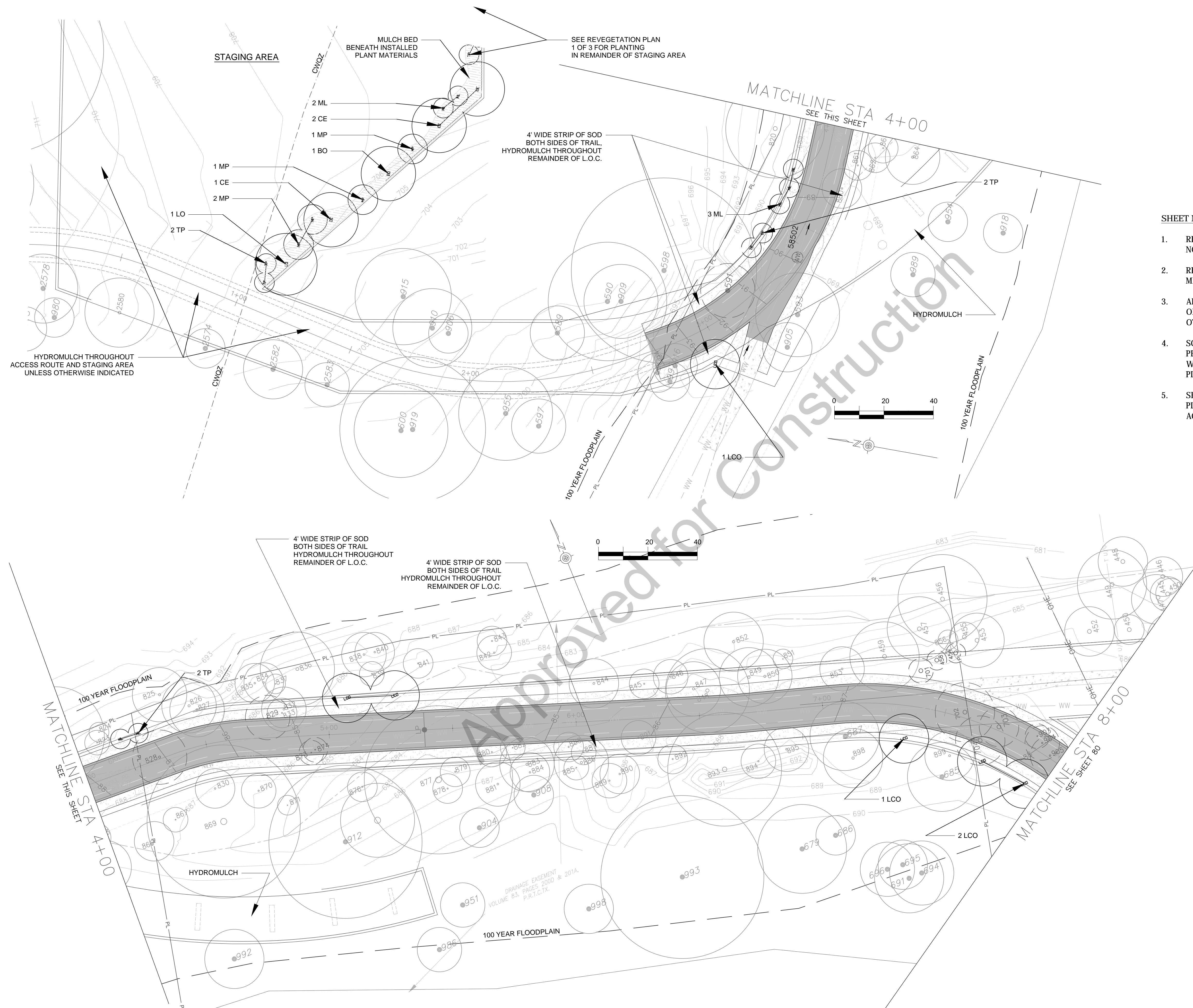
**K FRIESE & ASSOCIATES**  
 PUBLIC PROJECT ENGINEERING  
 1120 S. Capital of Texas Highway  
 CityView 2, Suite 100  
 Austin, Texas 78746  
 P - 512.338.1704 F - 512.338.1784  
 TBPE Firm #6535  
 www.kfriese.com



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 Austin, Texas 78720-1285  
 512/478-6888

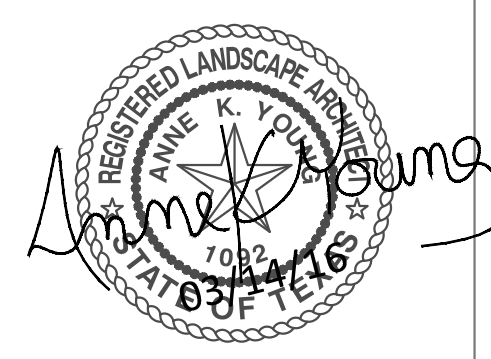


SCALE	
DATE	12/04/15
SHEET NUMBER	78 OF 82



- SHEET NOTES**
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  - SEE PREVIOUS REVEGETATION PLAN SHEET FOR PLANTING PROPOSED WITHIN REMAINDER OF ACCESS ROUTE AND STAGING AREA.

REV. NO.	BY	DATE	REVISION DESCRIPTION



**K FRIESE & ASSOCIATES, INC.**

**CITY OF AUSTIN**

**NORTH WALNUT CREEK BIKE TRAIL**

**REVEGETATION PLAN**

(2 of 3)

STA 2+75 TO 8+00

**K FRIESE & ASSOCIATES**

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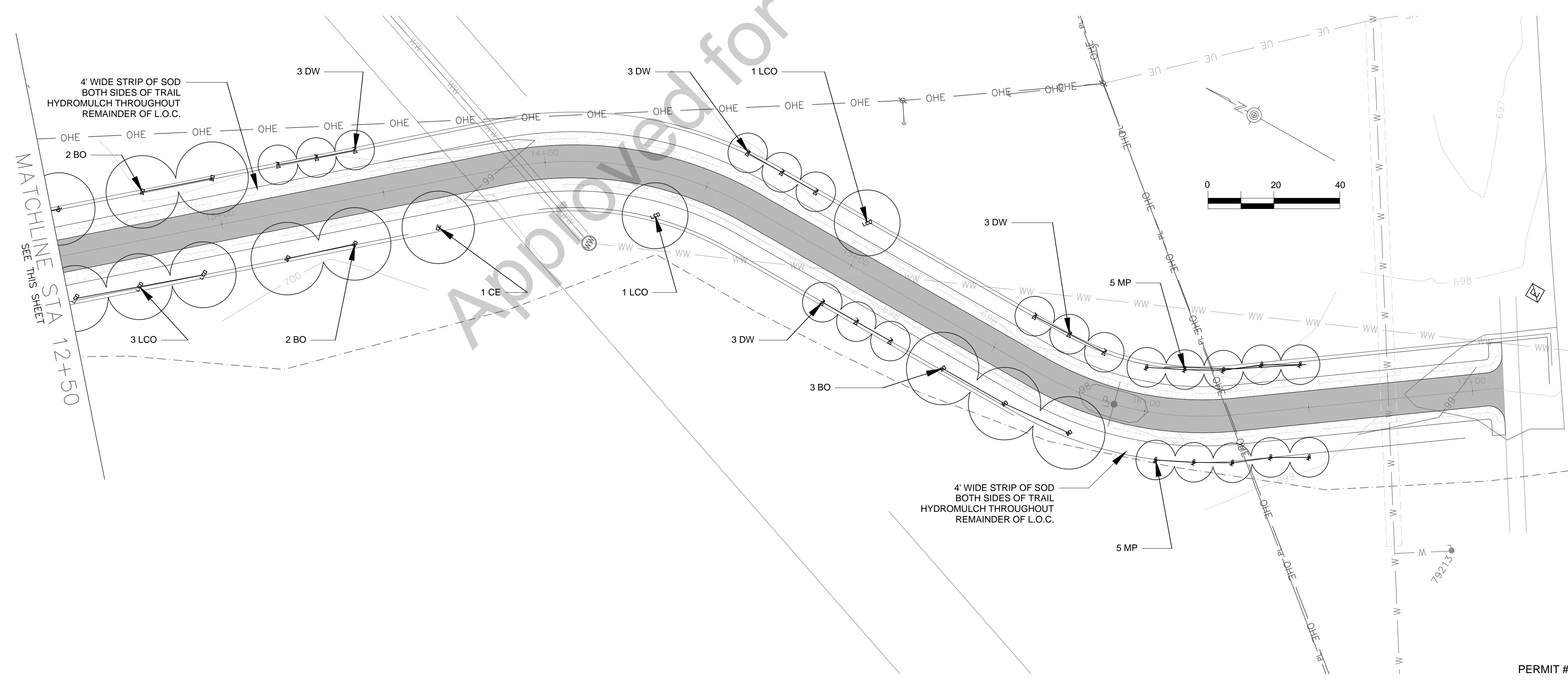
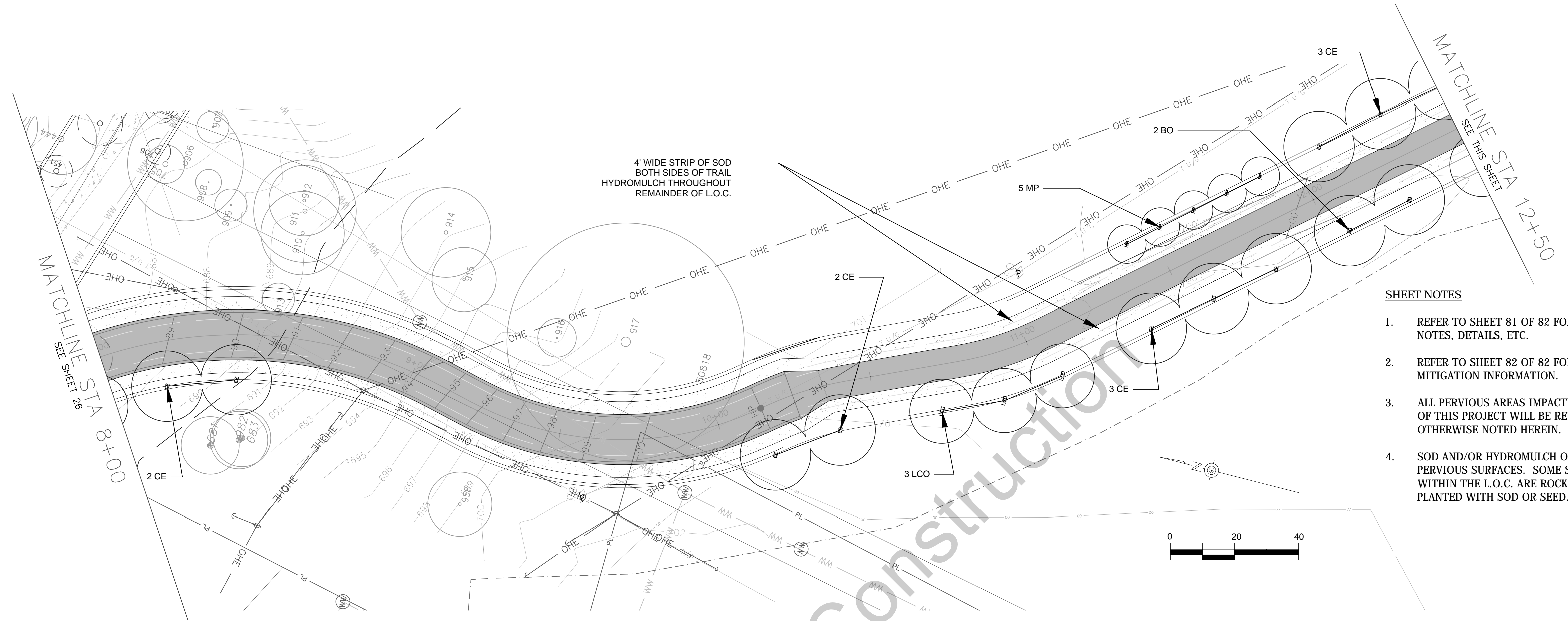


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SCALE	1" = 40'
DATE	12/04/15
SHEET NUMBER	79 OF 82

PERMIT # \_\_\_\_\_



4' WIDE STRIP OF SOD  
BOTH SIDES OF TRAIL  
HYDROMULCH THROUGHOUT  
REMAINDER OF L.O.C.

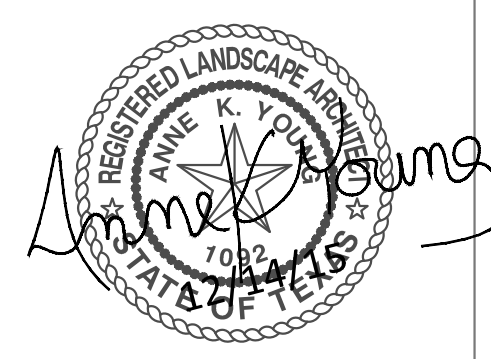
4' WIDE STRIP OF SOD  
BOTH SIDES OF TRAIL  
HYDROMULCH THROUGHOUT  
REMAINDER OF L.O.C.

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BOTH SIDES OF TRAIL  
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REMAINDER OF L.O.C.

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K FRIESE & ASSOCIATES, INC.

CITY OF AUSTIN  
NORTH WALNUT CREEK BIKE TRAIL  
REVEGETATION PLAN  
(3 of 3)  
TRAIL STA 8+00 TO END

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SCALE	1" = 40'
DATE	12/04/15
SHEET NUMBER	80 OF 82

PERMIT # \_\_\_\_\_

PLAN NOTES

1. ALL QUESTIONS REGARDING THESE REVEGETATION PLANS SHOULD BE REFERRED TO THE LANDSCAPE ARCHITECT, A. K. YOUNG ASSOCIATES, AT 512/476-6686.
2. THE PLANS ARE NOT TO BE CONSIDERED FINAL UNTIL APPROVED BY THE CITY AND/OR OTHER GOVERNMENTAL AGENCY WITH JURISDICTION. CHANGES MAY BE REQUIRED PRIOR TO APPROVAL.
3. REFER TO ENGINEERING DOCUMENTS FOR FULL SCOPE OF PROJECT, INCLUDING DIMENSIONS, LOCATIONS, AND PROJECT INFORMATION.
4. REFER TO FULL PROJECT DOCUMENTS PRIOR TO BIDDING OR CONSTRUCTION, INCLUDING SPECIFICATIONS IN THE PROJECT MANUAL AND PROJECT DOCUMENTS FOR RELATED PIPELINE PROJECT.
5. ALL REVEGETATION ELEMENTS ARE TO BE INSTALLED WITHIN THE LIMITS OF CONSTRUCTION APPROVED IN SITE DEVELOPMENT PERMIT DOCUMENTS. ALL REVEGETATION ACTIVITIES ARE TO BE CONTAINED WITHIN THE LIMITS OF CONSTRUCTION APPROVED IN SITE DEVELOPMENT PERMIT DOCUMENTS.
6. LOCATION OF PLANT MATERIALS SHOULD BE AS SHOWN ON THE REVEGETATION PLAN. ANY DISCREPANCY BETWEEN FIELD CONDITIONS AND THE PROJECT DOCUMENTS WHICH LIMIT THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO PLANT MATERIAL INSTALLATION.
7. ALL PERVIOUS PROJECT AREAS IMPACTED DURING CONSTRUCTION WILL BE HYDROMULCHED WITH A NATIVE SEED MIX UNLESS OTHERWISE INDICATED IN THE PROJECT DOCUMENTS.
8. MULCH BEDS SHOWN IN REVEGETATION PLANS INDICATE AREAS WHICH SHOULD RECEIVE A 6" DEPTH OF MULCH CREATED BY SHREDDING TREES REMOVED FROM THIS PROJECT SITE. PERMANENT MULCH BEDS SHOULD NOT BE CONFUSED WITH MULCH USED DURING CONSTRUCTION AS TEMPORARY PROTECTION FOR ROOT ZONES OF EXISTING TREES.

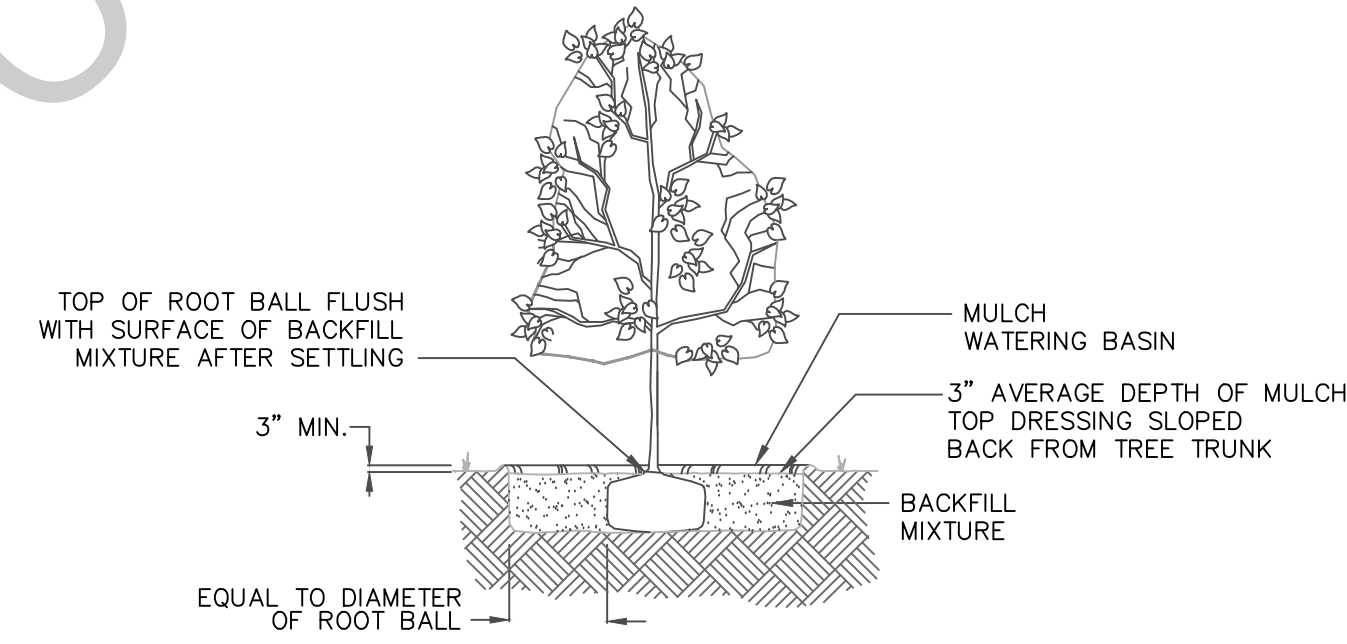
PLANT MATERIALS

- BO**  
Bur Oak - *Quercus macrocarpa*  
3" cal., single straight trunk, container grown
- CE**  
Cedar Elm - *Ulmus crassifolia*  
3" cal. min., single straight trunk, container grown
- DW**  
Desert Willow - *Chilopsis linearis "Bubba"*  
2" cal., container grown
- LCO**  
Lacey Oak - *Quercus glaudoides (Q. laceyi)*  
2" cal., single straight trunk, container grown
- LO**  
Live Oak - *Quercus virginiana*  
3" cal., single straight trunk
- ML**  
Mountain Laurel - *Sophora secundiflora*  
1.5" cal., multi-trunk, container grown
- MP**  
Mexican Plum - *Prunus mexicana*  
2" cal., single straight trunk, container grown
- PH**  
Possumhaw, Deciduous Holly - *Ilex decidua*  
1.5" cal., multi-trunk
- TP**  
Texas Persimmon - *Diospyros texana*  
1.5" cal., multi-trunk acceptable
- SEED**  
Native Mix:  
CoA Item No. 604S,  
Tables 4 through 8, depending on specific project site conditions
- SOD**  
Laid Solid:  
Density Buffalograss - *Buchloe dactyloides "Density"*

BASE SPECIFICATIONS INCLUDE:

- CITY OF AUSTIN STANDARD SPECIFICATION  
ITEM NO. 602S - SODDING FOR EROSION CONTROL 6-16-08
- CITY OF AUSTIN STANDARD SPECIFICATION  
ITEM NO. 604S - SEEDING FOR EROSION CONTROL 12-30-14
- CITY OF AUSTIN STANDARD SPECIFICATION  
ITEM NO. 608S - PLANTING 9-26-12
- APPENDIX P-6  
REMEDIAL TREE CARE FOR TREES WITHIN CONSTRUCTION AREAS  
(SPECIAL PROVISION TO ITEM NO. 610S)

Approved for Construction



**TREE PLANTING DETAIL**  
NO SCALE

**NOTE:**  
COVER INDIVIDUAL TREE OR SHRUB PLANTINGS WITH THREE INCH DEPTH OF MULCH BEGINNING AT TOP OF ROOTBALL ADJACENT TO THE TRUNK, THEN SLOPED GENTLY BACK FROM CONTACT WITH THE TRUNK. AVOID CONTACT WITH TRUNK. EACH BASIN SHALL HAVE A CLEAN, ROUND, EDGED OUTLINE.

REV. NO.	BY	DATE	REVISION DESCRIPTION



**K FRIESE & ASSOCIATES, INC.**  
**CITY OF AUSTIN**  
**NORTH WALNUT CREEK BIKE TRAIL**  
PLANTING DETAILS AND NOTES

**K FRIESE & ASSOCIATES**  
PUBLIC PROJECT ENGINEERING  
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SCALE	N/A
DATE	12/04/15
SHEET NUMBER	81 OF 82

PERMIT # \_\_\_\_\_

ABBREVIATION	TREE TYPE	APPENDIX F
AM ELM	American Elm	Y
ASH	Ash, presumed Green	Y
BDA	Bois d' Arc	Y
BE	Boxelder	Y
CB	Chinaberry	INVASIVE
CDR	Cedar (Juniperus virginiana)	Y
CE	Cedar Elm	Y
ELM	Elm, presumed American	Y
HB	Hackberry	Y
LO	Oak, Live	Y
OO	Osage Orange	N
PCN	Pecan	Y
RED OAK	Oak	Y
SP OAK	Oak	Y
WIL	Willow, presumed Black	Y

Tree No.	Type	Size	Mitigation Rate	Status
453	CE - MT	11	"	Remain
455	CE	6	"	Remain
456	CE	18	"	Remain
457	CB - MT	13	"	Remain
459	CE	14	"	Remain
589	CE	11	"	Remain
590	LO	24	"	Remain
591	CE	11	50%	Remove
593	CE	17	"	Remain
597	SP OAK	11	"	Remain
598	LO	37.5	"	Remain
600	LO	19	"	Remain
679	CB	18	"	Remain
681	CE	9	"	Remain
683	CE	9	"	Remain
685	CB	14	"	Remain
686	PCN	8	"	Remain
687	CB	12.5	"	Remain
691	HB	14	"	Remain
694	CE	13	"	Remain
695	HB	10	"	Remain
696	HB	11	"	Remain
701	HB	5	"	Remain
702	HB	12	50%	Remove
703	HB	8	50%	Remove
704	CB	10	0%	Remove
801	LO	28	"	Remain
802	LO - MT	35	"	Remain
803	LO - MT	29	"	Remain
804	CE - MT	17	"	Remain
805	LO - MT	21	"	Remain
806	CB	5	"	Remain
807	CB	7	"	Remain
808	CB	6	"	Remain
809	LO - MT	42	"	Remain
810	RED OAK	7	"	Remain
811	CDR - MT	26	"	Remain
812	WIL - MT	21	"	Remain
813	HB	10	"	Remain
814	ASH	5	"	Remain
815	ASH	6	"	Remain
816	ASH	8	"	Remain
817	DEAD CB - MT	7	"	Remain
818	HB	14	"	Remain
819	ASH	5	"	Remain
820	CE	20	"	Remain
821	CE	5	50%	Remove
822	UKN	9	"	Remain
823	CE	5	"	Remain
824	CE	4	"	Remain
825	CE	11	"	Remain
826	CE	11	"	Remain
827	CE	11	"	Remain
828	CE	14	50%	Remove
829	CE	5	50%	Remove
830-A	CB	8	"	Remain
830-B	ELM	5	50%	Remove

Tree No.	Type	Size	Mitigation Rate	Status
831	ELM	9	"	Remain
832	CE	9	"	Remain
833	CE	6	"	Remain
834	CE	8	"	Remain
835	CE	8	"	Remain
836	CB - MT	15	"	Remain
837	CE	4	"	Remain
838	CB	9	"	Remain
839	CE	5	"	Remain
840	HB - MT	8	"	Remain
841	AM ELM	6	"	Remain
842	BDA - MT	7	"	Remain
843	HB	6	"	Remain
844	ASH	10	"	Remain
845	HB	6	"	Remain
846	CE	7	"	Remain
847	CB	11	"	Remain
848	CB	17	"	Remain
849	CE	12	"	Remain
850	HB	11	"	Remain
851	HB	4	"	Remain
852	HB	12	"	Remain
853	HB	9	"	Remain
854	CE	14	"	Remain
855	CB	13	"	Remain
856	HB	4	"	Remain
857	HB	4	"	Remain
858	HB	6	"	Remain
860	HB	8	"	Remain
861	HB	6	"	Remain
862	HB	6	"	Remain
863	PCN	6	"	Remain
864	HB	11	"	Remain
865	UKN	7	"	Remain
866	AM ELM	8	"	Remain
867	AM ELM	5	"	Remain
868	CB	8	"	Remain
869	LO	31	"	Remain
870	AM ELM	7	"	Remain
871	CE	4	"	Remain
873	CB	5	0%	Remove
874	CB	5	0%	Remove
876	HB	6	"	Remain
877	LO - MT	30	"	Remain
878	CB	6	"	Remain
879	CB	6	"	Remain
880	CB	6	"	Remain
881	CB	9	"	Remain
882	CB	5	"	Remain
883	CB	11	"	Remain
884	CB	8	"	Remain
885	CE	5	"	Remain
886	CE	11	"	Remain
887	CB	5	"	Remain
888	CB	6	"	Remain
889	CE	7	"	Remain
890	HB	8	"	Remain
891	HB	7	"	Remain
892	BOISD'ARK	6	"	Remain
893	HB	23	"	Remain
894	CE	7	"	Remain
895	CB	9	"	Remain
896	CB - MT	14	"	Remain
898	CE	12	"	Remain
899	BOX ELDER	10	"	Remain
900	HB	12	"	Remain
901	HB	8	"	Remain
902	CB	11	"	Remain
903	HB	5	50%	Remove
904-A	CB	8	"	Remain
904-B	AM ELM	7	50%	Remove
905-A	CB	10	"	Remain
905-B	CB	8	0%	Remove

Tree No.	Type	Size	Mitigation Rate	Status
906-A	SP OAK	8	"	Remain
906-B	CB	18	"	Remain
907-A	HB	8	"	Remain
907-B	HB	5	"	Remain
908-A	CB	8	"	Remain
908-B	HB	4	"	Remain
909-A	LO	15	"	Remain
909-B	AM ELM	5	"	Remain
910-A	CE	16	"	Remain
910-B	CB - MT	13	"	Remain
911-B	CE	16	"	Remain
912-A	LO	31	"	Remain
912-B	HB	11	"	Remain
913	AM ELM	5	"	Remain
914	CE - MT	14	"	Remain
915-A	CE	19.5	"	Remain
915-B	CB - MT	10	"	Remain
916-A	CE	9	"	Remain
916-B	CE - MT	6	"	Remain
917	LO	37	"	Remain
918	CE	8	"	Remain
919	LO	29.5	"	Remain
951	CDR	9	"	Remain
954	CE	8	"	Remain
955	SP OAK	19	"	Remain
958	ELM	10	"	Remain
978	CDR	9	"	Remain
980	CDR	8	"	Remain
982	HB	9	"	Remain
986	CE	9	"	Remain
989	CE	9	"	Remain
992	CB	12	"	Remain
993	LO	33	"	Remain
997	CE	8	"	Remain
998	HB	10	"	Remain
2574	CDR	8	"	Remain
2578	CDR	14	"	Remain
2580	CDR	14	"	Remain
2582	CDR	12	"	Remain
2583	CDR	9	"	Remain

### MITIGATION CALCULATIONS

**MITIGATION REQUIRED**  
**WASTEWATER PIPELINE PROJECT:**  
**(WATERS PARK INTERCEPTOR RELIEF MAIN)**  
TOTAL CALIPER INCHES REMOVED  
(EXCLUDING INVASIVES) 304"  
REQUIRED MITIGATION 160"

**GEOTECHNICAL ACCESS CLEARING:**  
PREVIOUSLY APPROVED BY CoA PARD  
REQUIRED MITIGATION 125"


**TRAIL PROJECT:**  
TOTAL REMOVED CALIPER INCHES  
(EXCLUDING INVASIVES) 44"  
TOTAL MITIGATION REQUIRED 36" (REFER TO RATES IN TREE LIST, THIS SHEET)

**MITIGATION PROPOSED**  
TOTAL MITIGATION REQUIRED: 321"  
(ALL THREE "PROJECTS" COMBINED)  
TOTAL MITIGATION PROVIDED:  
(THROUGH PROPOSED TREES\*\*)  
15 BO @ 3" = 45"  
15 CE @ 3" = 45"  
20 DW @ 2" = 40"  
17 LCO @ 2" = 34"  
5 LO @ 3" = 15"  
11 ML @ 1.5" = 16.5"  
25 MP @ 2" = 50"  
5 PH @ 1.5" = 7.5"  
12 TP @ 1.5" = 18"

\*\* REMAINDER OF REQUIRED MITIGATION WILL BE PROVIDED THROUGH ENHANCED MAINTENANCE OF EXISTING TREES IMPACTED BY CONSTRUCTION OF THIS PROJECT AND PAYMENT TO TREE FUND DESIGNATED BY CoA REVIEW STAFF.

REVISION DESCRIPTION

REV. NO. DATE



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**CITY OF AUSTIN**  
**NORTH WALNUT CREEK BIKE TRAIL**  
**TREE LIST AND MITIGATION INFORMATION**

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FOUNDED 1859

SCALE N/A  
DATE 12/04/15  
SHEET NUMBER 82 OF 82