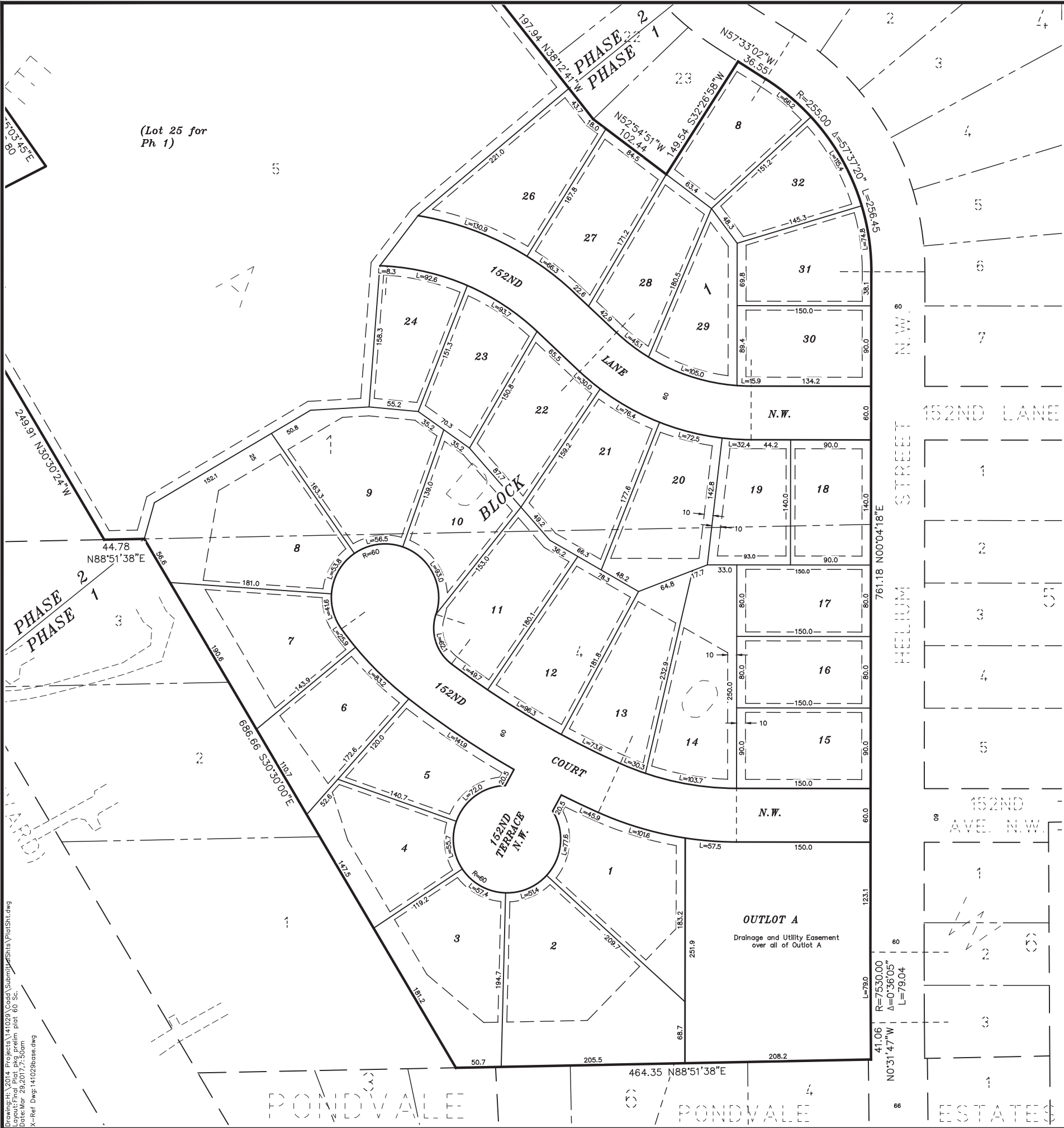


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 Layout: Final Plat Pkg Site Plan 60 Sc.
 Date: Mar 29, 2017 7:46am
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 (-Ref Dwg: 141029base.dwg
 (-Ref Dwg: 141029topo.dwg

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Layout: Final Plot, plg, prelim plat 60 Sc.
Date: Mar 29, 2017 7:50am
X-Ref Dwg: 141029base.dwg



HARVEST ESTATES

City of Ramsey
Anoka County, Minnesota

LEGAL DESCRIPTION:

Lots 4 and 5, MEADOW, City of Ramsey, Anoka County, Minnesota.

PROJECT NUMBER			
141029			
REVISIONS	REMARKS	DATE	BY
	Final plan sheet set	4/14/15	apk
	Revise Lot Blk #1's to match Ph. 1 plat	4/29/15	gbl

CERTIFICATION:
I hereby certify that this survey, plan, report, or description was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Jeffrey D. Lindgren
Date: MN. L.C. NO. 14376

PREPARED BY:
HEDLUND
PLANNING ENGINEERING SURVEYING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: **HARVEST ESTATES**
FINAL PRELIMINARY PLAT

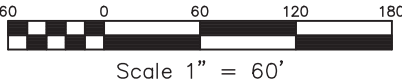
PREPARED FOR: **GS LAND LLC**
Phone: (612) 868-0662

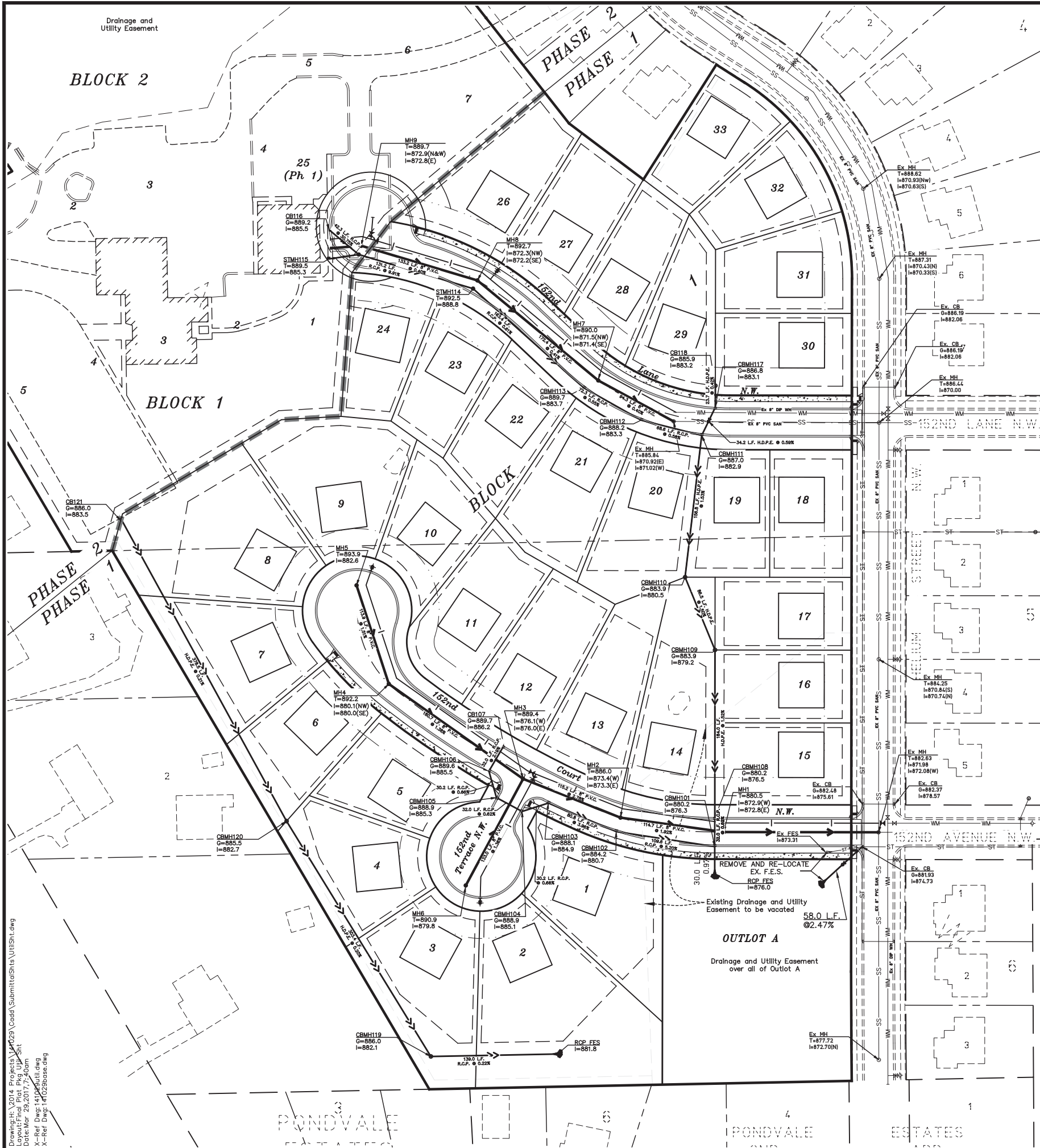
DRAWN	CHECKED	DESIGN
SHEET NUMBER		
C-2		
DATE	3/5/2015	
REV.	4/29/15	

Drainage and Utility Easements are shown thus:

Being 5 feet in width and adjoining lot lines, unless otherwise shown, and 10 feet in width and adjoining street lines as shown on the plat.

Bearings shown are based upon an assumed datum.





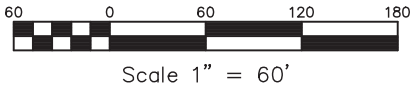
HARVEST ESTATES
City of Ramsey
Anoka County, Minnesota

LEGEND:

- SS SS EXISTING SANITARY SEWER
- WM WM EXISTING WATERMAIN
- ST EXISTING STORM SEWER
- X X EXISTING FENCE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED STORM SEWER
- PROPOSED PHASE LINE

GENERAL CONSTRUCTION NOTES:

- Existing Utility Locations As-Per As-Built Plans Provided By the City of Ramsey and Hedlund Engineering.
- All Existing Utilities or Improvements, Including Walks, Curbs Pavement and Parkways Damaged or Removed During Construction Shall be Promptly Restored to Their Respective Original Condition.
- The Contractor Shall Notify all Utility Companies Prior to Construction to Verify in the Field all Existing and Underground Utilities Adjacent to the Project, and be Responsible for Protection of the same.
- For on Site Location of all Under-ground Utilities Call Gopher State One Call System (651)454-0002
- The Contractor Shall Beware of Potential Conflicts with Existing Utilities as Indicated on the Plans. The Contractor Shall Excavate Around Utilities to Determine Elev. Before Beginning Construction.
- The Contractor Shall Be Responsible To Lower Watermain During Install. Where Necessary To Avoid Service Conflicts.
- This sheet is for Design Reference Only. Information is Subject to Change. Use Final Plan and Profile Sheets for Construction.



PROJECT NUMBER
141029

REVISIONS	DATE	BY
Final plan sheet set	4/14/15	gph
Revised Lot Blk #2 to match Ph. 1 plan	4/29/15	gph
Revisions Per City Comments	6/12/15	tpk

CERTIFICATION: I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Randall C. Hedlund
Randall C. Hedlund
Date: 6/12/15
MN. LIC. NO. 19576

HEDLUND
PLANNING ENGINEERING SURVEYING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

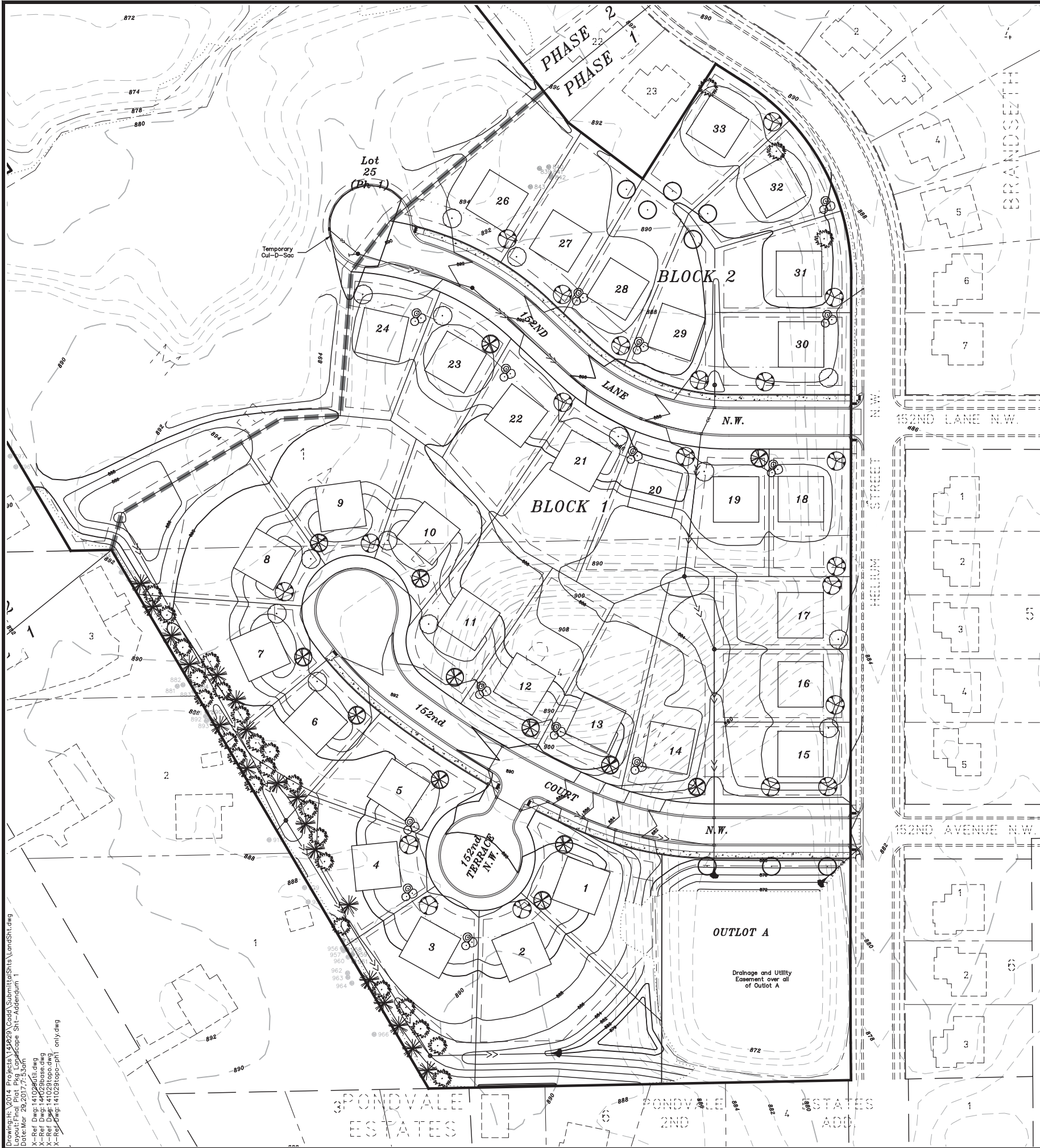
SHEET TITLE: **HARVEST ESTATES
FINAL UTILITY PLAN PH-1**

PREPARED FOR: **GS LAND LLC.**
Phone: (612) 868-0662

DRAWN	CHECKED	DESIGN

SHEET NUMBER
C-3

DATE	4/14/15
REV.	6/12/15



HARVEST ESTATES

City of Ramsey

Anoka County, Minnesota

PLANTING NOTES:

Contractor shall provide one year guarantee of all plant materials. The guarantee begins on the date of the Landscape Architect's written acceptance of the initial planting. Replacement plant materials shall also have a one year guarantee commencing upon planting.

All plants to be northern-grown and hardy.

Plants to be installed as per standard AAN planting practices.

Use minimum 12" loose planting soil on trees.

Contractor shall verify locations with all utilities prior to installation of plants.

Staking of trees optional; reposition if not plumb after one year.

Wrap all smooth-barked trees-taken top and bottom. Remove by April 1.

Open top of burlap on PB materials; remove pot on potted plants; split and break apart peat pots.

Only prune old dead/ broken/ deformed branches at installation - per standard nursery practice.

Owner shall be responsible for maintenance after acceptance of the work by the Owner.

Plants shall be immediately planted upon arrival at site. Properly hee-in materials if necessary; temporary only.

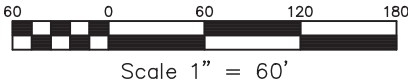
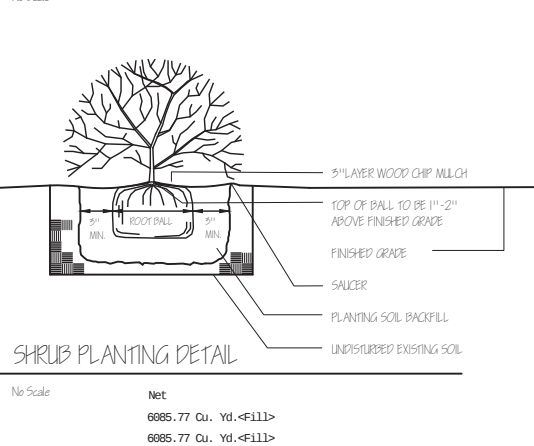
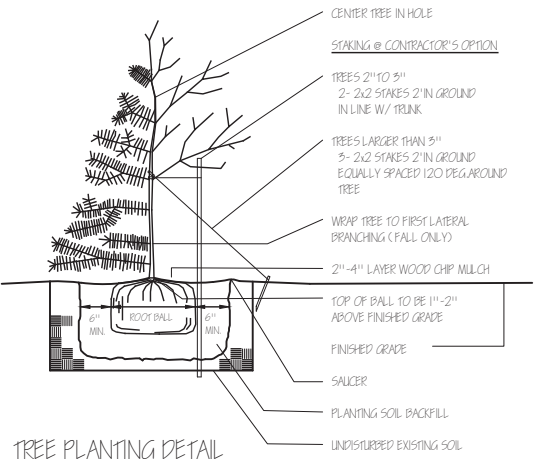
Planting depth shall be such that the 1st set of primary roots is at finished grade.

Remove upper 1/3 of wire basket and burlap after being placed in planting hole.

Shredded hardwood mulch (2" - 4" deep) shall be shall be placed around all new trees and shrub clusters. Mulch shall not be piled against the trunks of trees. Diameter of mulched areas shrubs shall be a minimum of 4' from the trunk or stem of all trees and shrubs. Trench edging shall be used around all mulched areas.

PLANT LIST:

QTY.	KEY	SYM	COMMON NAME	BOTANICAL NAME	SIZE / ROOT
19	AP		Austrian Pine	Pinus nigra	6' B&B
27	BHS		Black Hills Spruce	Picea glauca densata	6' B&B
13	NM		Norway Maple	Acer platanoides	2.5" B&B
14	LL		Legend Linden	Tilia americana	2.5" B&B
14	BP		River Birch	Betula nigra	2.5" B&B
19	HB		Common Hackberry	Celtis occidentalis	2.5" B&B
10	SWO		Swamp White Oak	Quercus bicolor	2.5" B&B



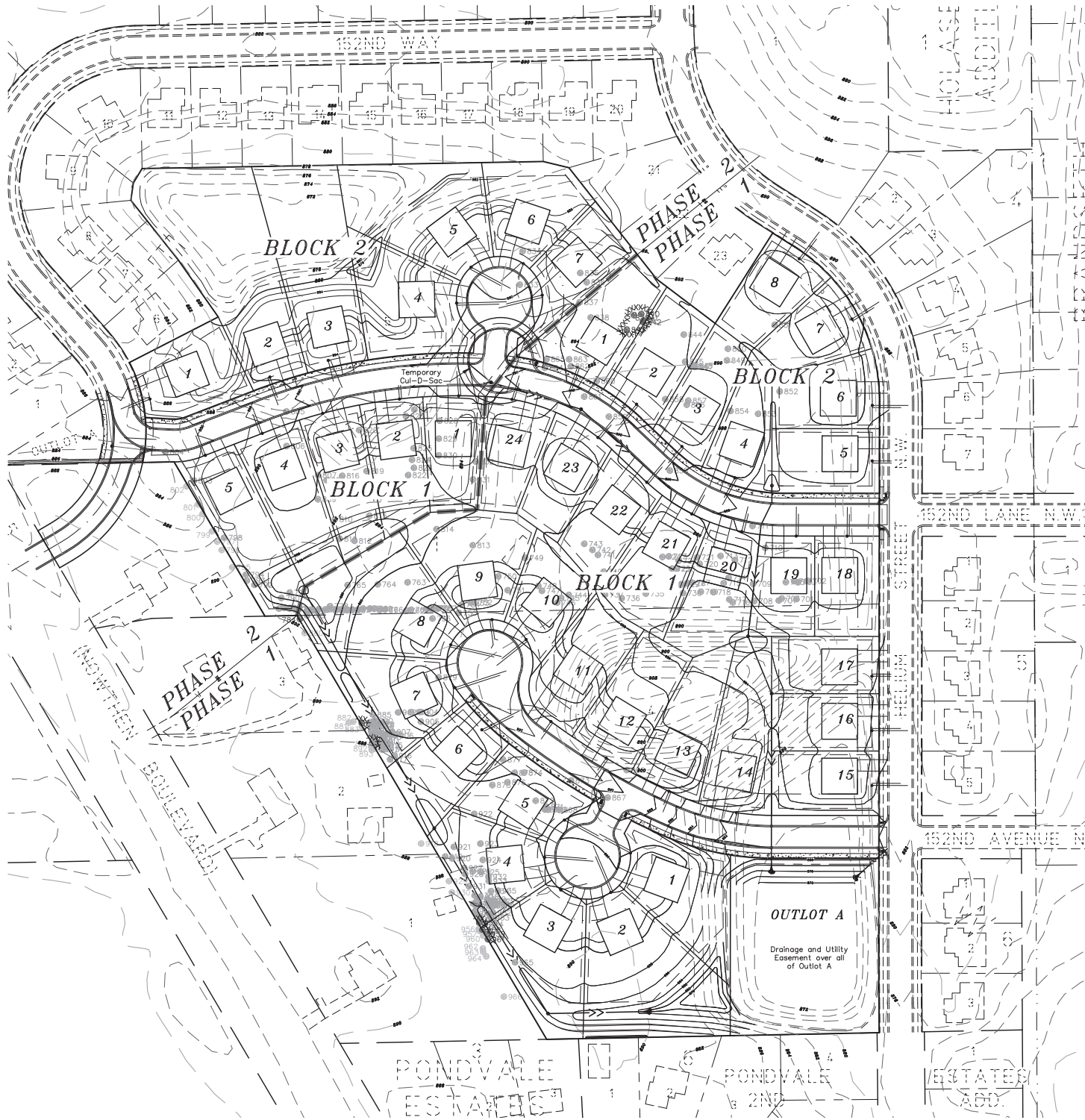
PROJECT NUMBER		141029
REVISIONS	BY	gbl
	DATE	8/5/15
REMARKS	Addendum 1	
CERTIFICATION:	I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Minnesota.	
	Randall C. Hedlund, Minn. No. 19576	

HEDLUND
ENGINEERING SURVEYING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: HARVEST ESTATES FINAL LANDSCAPE PLAN PH 1		
PREPARED FOR: GS LAND LLC		
Phone: (612) 868-0662		
DRAWN	CHECKED	DESIGN
SHEET NUMBER		
C-4		
DATE		
4/14/15		
REV.		
8/5/15		

Drawing: 2014 Projects\141029\City of Ramsey\Shots\Land\Sh1.dwg
Drawing: Final Plot Plan
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X-Ref Dwg: 141029topo-ph only.dwg

Drawing H: \\2014 Projects\\141029\\Good\\Submitted\\Shits\\TreePresShit.dwg
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X-Ref Dwg: 141029topo.dwg
X-Ref Dwg: 141029topo-ph only.dwg



Trees Removed from Inventory (Not on property)									
Tree #	Species	DBH	Condition	Stems	Tree #	Species	DBH	Condition	Stems
795	Maple, silver	27.0	Fair	1	882	Pine, red	12.5	Good	1
796	Maple, silver	18.0	Fair	2	883	Pine, red	6.0	Fair	1
797	Maple, silver	9.5	Good	1	918	Elm, Siber	21.0	Fair	1
799	Maple, silver	26.0	Fair	4	929	Elm, Siber	10.0	Fair	1
800	Maple, silver	30.0	Fair	4	930	Elm, Siber	22.0	Fair	1
801	Maple, silver	31.0	Fair	3	956	Pine, red	6.5	Good	1
802	Maple, silver	15.0	Fair	1	957	Pine, red	7.5	Good	1
880	Elm, Siberian	30.0	Fair	1	960	Pine, red	5.5	Good	1
881	Spruce, white	7.0	Fair	1	962	Pine, red	8.5	Good	1
882	Spruce, white	11.0	Good	1	963	Pine, red	4.0	Good	1
883	Elm, Siberian	9.5	Fair	1	964	Pine, red	10.0	Good	1
881	Pine, red	10.0	Good	1	966	Pine, red	5.5	Good	1

Trees Saved					Trees Lost				
Tree #	Species	DBH	Condition	Stems	Tree #	Species	DBH	Condition	Stems
840	Juniper	6.0	Good	1	814	Maple, silver	13.0	Good	1
841	Juniper	7.0	Good	1	815	Spruce, blue	12.0	Good	1
842	Juniper	7.0	Good	1	816	Ash, green	10.5	Good	1
884	Spruce, white	7.0	Fair	1	817	Ash, green	8.0	Good	1
880	Pine, red	10.0	Good	1	818	Ash, green	10.0	Fair	1
955	Pine, red	11.5	Good	1	819	Ash, green	10.0	Good	1
958	Pine, red	6.0	Good	1	820	Crabapple	8.0	Good	1
959	Pine, red	7.0	Good	1	821	Hackberry	9.0	Good	1
961	Pine, red	13.0	Good	1	822	Pine, Scots	14.0	Good	1
Trees Lost					823	Pine, Scots	16.0	Good	1
Tree #	Species	DBH	Condition	Stems	824	Pine, Scots	16.5	Good	1
702	Pine, red	7.0	Good	1	825	Ash, green	12.0	Good	1
703	Pine, red	7.5	Good	1	826	Maple, Norway	10.5	Good	1
704	Pine, red	7.0	Good	1	827	Maple, Norway	9.5	Good	1
705	Pine, red	10.0	Good	1	828	Ash, green	11.0	Good	1
708	Juniper	5.0	Good	1	829	Maple, silver	18.0	Fair	2
709	Pine, red	7.5	Good	1	830	Birch, paper	15.0	Good	3
710	Juniper	15.0	Good	1	834	Juniper	9.0	Good	1
711	Juniper	14.0	Good	1	845	Juniper	7.0	Good	1
713	Juniper	12.0	Good	1	846	Juniper	17.0	Fair	5
715	Pine, red	6.5	Good	1	847	Juniper	7.0	Good	1
727	Pine, red	7.0	Good	1	848	Juniper	11.0	Fair	1
728	Pine, red	4.5	Good	1	849	Juniper	7.0	Good	1
729	Pine, red	7.5	Good	1	851	Juniper	5.5	Good	1
730	Pine, white	10.5	Good	1	855	Juniper	6.0	Good	1
731	Pine, red	7.0	Fair	1	865	Juniper	13.0	Fair	1
732	Pine, red	6.0	Good	1	886	Pine, red	9.5	Good	1
733	Pine, red	6.5	Good	1	887	Pine, red	8.0	Good	1
734	Pine, red	8.0	Good	1	888	Pine, red	8.5	Fair	1
736	Spruce, white	4.0	Good	1	889	Pine, red	10.0	Good	1
738	Pine, red	10.0	Fair	1	894	Pine, red	6.0	Good	1
739	Pine, red	8.0	Good	1	895	Pine, red	7.0	Good	1
748	Pine, red	9.0	Good	1	896	Pine, red	6.0	Good	1
750	Juniper	7.5	Good	1	897	Pine, red	6.0	Good	1
751	Juniper	8.0	Good	1	898	Pine, red	7.0	Good	1
752	Pine, Scots	7.5	Good	1	899	Pine, red	7.5	Good	1
753	Pine, Scots	8.0	Good	1	900	Pine, red	8.0	Good	1
754	Pine, Scots	7.0	Good	1	901	Pine, red	9.5	Good	1
757	Pine, Scots	9.5	Good	1	908	Pine, red	7.0	Fair	1
758	Pine, Scots	7.0	Good	1	909	Pine, red	7.0	Good	1
759	Pine, Scots	13.0	Fair	1	910	Pine, red	5.0	Fair	1
760	Pine, Scots	8.5	Good	1	911	Pine, red	6.5	Good	1
761	Pine, Scots	4.0	Fair	1	912	Pine, red	7.0	Good	1
762	Spruce, blue	5.5	Good	1	913	Pine, red	10.5	Good	1
763	Ash, green	8.5	Good	1	914	Pine, red	10.0	Good	1
764	Maple, silver	16.5	Good	1	915	Pine, red	8.0	Good	1
765	Ash, green	9.5	Good	1	924	Pine, red	13.1	Good	1
766	Spruce, blue	4.0	Fair	1	925	Pine, red	12.5	Good	1
767	Spruce, blue	4.5	Good	1	926	Pine, red	10.5	Good	1
768	Spruce, blue	5.5	Good	1	927	Pine, red	14.0	Good	1
769	Spruce, blue	7.5	Good	1	928	Pine, red	12.5	Good	1
770	Spruce, blue	8.0	Good	1	931	Pine, red	13.0	Good	1
771	Spruce, blue	5.0	Good	1	932	Pine, red	12.5	Good	1
772	Spruce, blue	6.0	Good	1	933	Pine, red	11.5	Good	1
773	Spruce, blue	7.0	Fair	2	934	Pine, red	10.5	Good	1
775	Spruce, blue	4.5	Fair	1	935	Pine, red	12.0	Good	1
776	Spruce, blue	6.0	Good	1	936	Pine, red	10.5	Good	1
777	Spruce, blue	7.0	Good	1	937	Pine, red	9.5	Good	1
778	Spruce, blue	5.0	Good	1	938	Pine, red	9.5	Good	1
779	Pine, Scots	9.0	Good	1	939	Pine, red	14.0	Fair	2
780	Spruce, blue	4.0	Fair	1	940	Pine, red	6.5	Fair	1
781	Spruce, white	5.0	Good	1	941	Pine, red	8.0	Good	1
782	Spruce, white	4.5	Good	1	942	Pine, red	5.5	Good	1
786	Spruce, white	5.0	Good	1	943	Pine, red	8.5	Good	1
787	Spruce, white	5.0	Good	1	944	Pine, red	6.5	Good	1
788	Spruce, white	7.0	Good	1	945	Pine, red	12.0	Good	1
789	Spruce, white	5.0	Good	1	946	Pine, red	9.0	Good	1
790	Oak, red	7.5	Good	1	947	Pine, red	8.0	Fair	1
791	Ash, green	10.0	Good	1	948	Pine, red	9.0	Good	1
792	Basswood	13.1	Fair	2	949	Pine, red	9.5	Good	1
793	Basswood	9.0	Good	1	950	Pine, red	10.0	Good	1
794	Basswood	8.0	Good	1	951	Pine, red	11.5	Good	1
798	Maple, sugar	8.0	Good	1	952	Pine, red	10.0	Good	1
803	Maple, Norway	8.5	Good	1	953	Pine, red	10.5	Good	1
804	Maple, silver	28.0	Fair	4	954	Pine, red	17.0	Fair	2
805	Honeylocust	11.5	Good	1	955	Pine, red	7.0	Good	1
806	Spruce, white	13.0	Good	1	Total DBH= 1494.7				
807	Basswood	10.0	Good	1	DBH Saved= 74.5				
808	Ash, green	11.5	Good	1	DBH Lost= 1360.2				
809	Ash, green	11.5	Good	1	Allowable Removal=1435 X 60%= 861				
810	Ash, green	12.0	Good	1	Excess removed= 499				
811	Maple, sugar	11.5	Fair	1	Required replanting= 499 in. x 1.25= 624 in. - 225 in. (90				
812	Hackberry	8.0	Good	1	trees, 2 per lot required per ordinance)= 400 in.				
813	Ash, green	11.5	Good	1	= 160 Trees @ 2.5 inches				

HARVEST ESTATES

City of Ramsey

Anoka County, Minnesota

Siberian Elms (Not included in calculations)					Siberian Elms (Not included in calculations)				
Tree #	Species	DBH	Condition	Stems	Tree #	Species	DBH	Condition	Stems
784	Elm, Siberian	16.0	Fair	2	850	Elm, Siberian	11.0	Fair	1
839	Elm, Siberian	21.0	Fair	1	852	Elm, Siberian	9.0	Good	1
843	Elm, Siberian	25.0	Fair	1	853	Elm, Siberian	14.0	Fair	1
701	Elm, Siberian	27.0	Fair	1	854	Elm, Siberian	14.0	Good	1
705	Elm, Siberian	12.5	Fair	1	856	Elm, Siberian	9.0	Good	1
707	Elm, Siberian	8.5	Fair	1	857	Elm, Siberian	13.0	Good	1
716	Elm, Siberian	17.0	Good	1	858	Elm, Siberian	14.0	Fair	1
717	Elm, Siberian	12.0	Fair	1	859	Elm, Siberian	8.0	Good	1
718	Elm, Siberian	14.0	Good	1	860	Elm, Siberian	12.0	Fair	2
719	Elm, Siberian	19.0	Good	1	861	Elm, Siberian	9.0	Fair	1
720	Elm, Siberian	11.5	Fair	1	862	Elm, Siberian	10.0	Fair	1
721	Elm, Siberian	12.0	Fair	1	863	Elm, Siberian	8.0	Fair	1
722	Elm, Siberian	12.0	Fair	1	864	Elm, Siberian	9.0	Fair	1
723	Elm, Siberian	12.0	Fair	1	866	Elm, Siberian	16.0	Fair	2
724	Elm, Siberian	15.0	Fair	1	867	Elm, Siberian	15.0	Fair	4
725	Elm, Siberian	15.0	Fair	1	868	Elm, Siberian	15.0	Fair	4
726	Elm, Siberian	10.0	Fair	1	869	Elm, Siberian	10.0	Fair	2
712	Elm, Siberian	10.0	Good	1	870	Elm, Siberian	13.0	Fair	1
714	Elm, Siberian	9.5	Good	1	871	Elm, Siberian	9.0	Fair	2
735	Elm, Siberian	17.0	Fair	1	872	Elm, Siberian	14.0	Fair	1
737	Elm, Siberian	20.0	Fair	1	873	Elm, Siberian	14.0	Fair	1
740	Elm, Siberian	13.5	Fair	1	874	Elm, Siberian	9.0	Fair	2
741	Elm, Siberian	10.0	Fair	1	875	Elm, Siberian	8.0	Fair	2
742	Elm, Siberian	8.0	Fair	1	876	Elm, Siberian	9.0	Fair	1
743	Elm, Siberian	18.0	Fair	1	877	Elm, Siberian	20.0	Fair	1
744	Elm, Siberian	13.0	Fair	1	878	Elm, Siberian	20.0	Fair	1
745	Elm, Siberian	16.0	Fair	1	879	Elm, Siberian	15.0	Fair	1
746	Elm, Siberian	15.0	Fair	1	885	Elm, Siberian	9.0	Fair	1
747	Elm, Siberian	10.0	Fair	1	902	Elm, Siberian	8.0	Fair	1
749	Elm, Siberian	16.0	Fair	1	903	Elm, Siberian	9.0	Fair	1
755	Elm, Siberian	8.0	Good	1	904	Elm, Siberian	12.0	Fair	1
756	Elm, Siberian	9.0	Fair	1	905	Elm, Siberian	9.0	Fair	1
774	Elm, Siberian	16.0	Fair	2	906	Elm, Siberian	11.0	Fair	1
783	Elm, Siberian	20.0	Fair	2	907	Elm, Siberian	11.0	Fair	2
785	Elm, Siberian	11.0	Fair	2	916	Elm, Siberian	17.0	Fair	3
831	Elm, Siberian	19.0	Fair	1	917	Elm, Siberian	16.0	Fair	1
832	Elm, Siberian	34.0	Fair	1	919	Elm, Siberian	16.0	Fair	1
833	Elm, Siberian	9.5	Fair	1	920	Elm, Siberian	10.0	Fair	1
835	Elm, Siberian	15.0	Fair	2	921	Elm, Siberian	10.0	Fair	1
836	Elm, Siberian	8.0	Fair	1	922	Elm, Siberian	10.0	Fair	1
837	Elm, Siberian	16.0	Fair	1	923	Elm, Siberian	12.0	Fair	1
838	Elm, Siberian	11.0	Fair	1	Elms DBH= 1110.0				
844	Elm, Siberian	11.0	Fair	2					

Note:
All reforestation perimeter plantings (excluding required front yard trees) shall be installed as a stage I improvement by the developer.

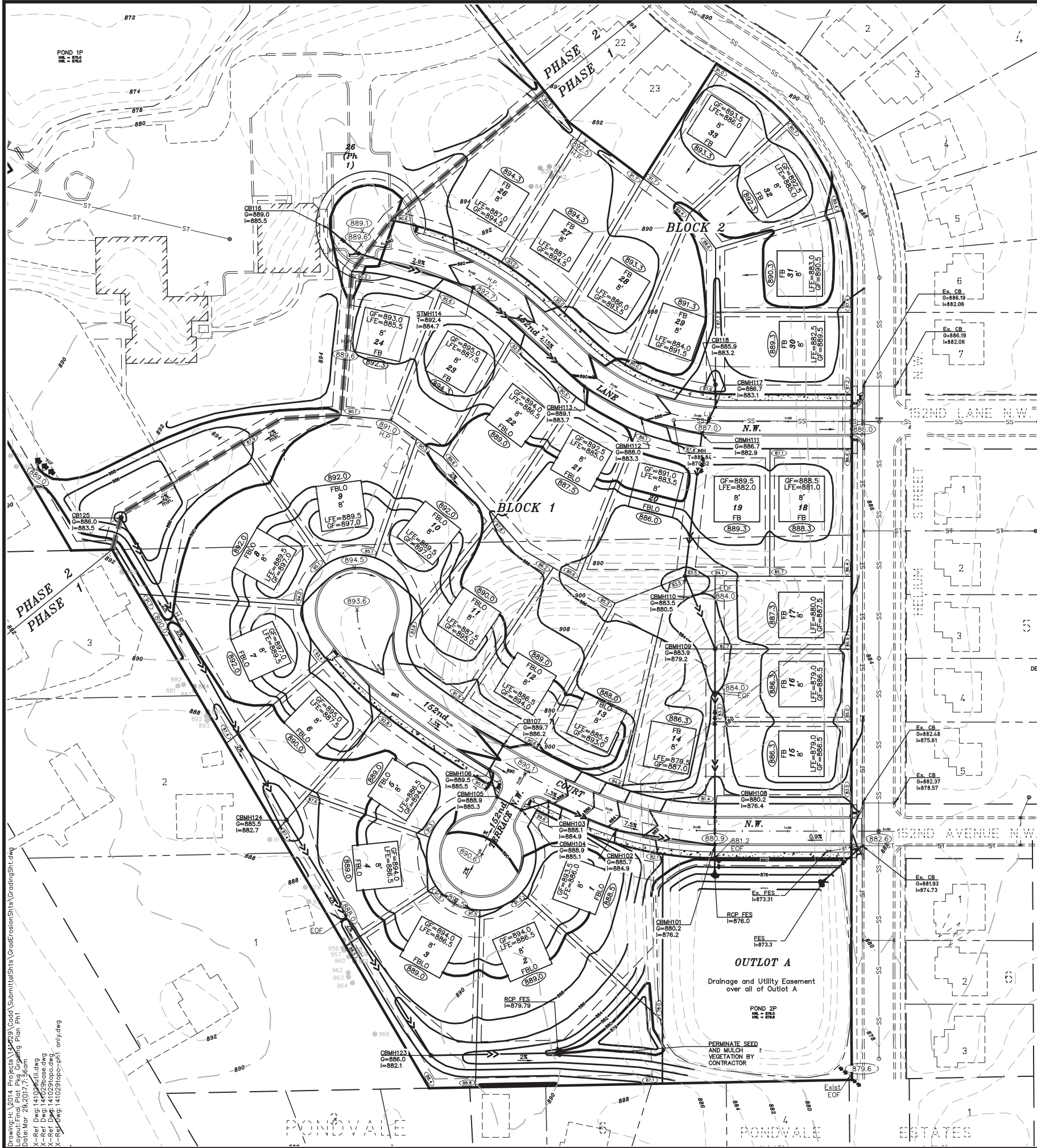
XXXXXXXXXXXX TREE PROTECTION

NOT FOR CONSTRUCTION



Scale 1" = 100'

PROJECT NUMBER
141029



HARVEST ESTATES

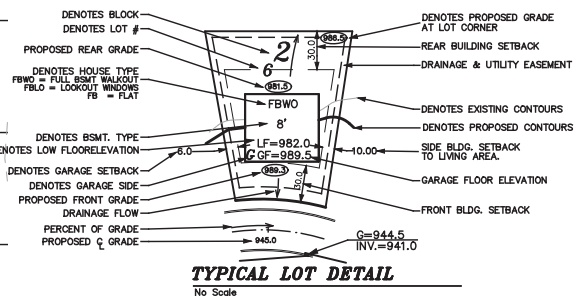
City of Ramsey
Anoka County, Minnesota

GENERAL GRADING NOTES:

- 1.) UNDERLYING TOPOGRAPHY FROM INFORMATION PROVIDED BY ANOKA COUNTY AND FIELD SHOTS BY HEDLUND ENGINEERING.
- 2.) EXISTING UTILITY LOCATIONS AS-PER PLANS PROVIDED BY THE CITY OF RAMSEY AND FIELD SHOTS BY HEDLUND ENGINEERING.
- 3.) SEE GRADING AND EROSION CONTROL DETAIL SHEET FOR DETAILED INFORMATION.

LEGEND:

- | | | |
|----------|----------|--------------------------------|
| EXISTING | PROPOSED | |
| | | BEEHIVE |
| | | CATCH BASIN |
| | | FLARED END |
| | | GATE VALE |
| | | HYDRANT |
| | | MANHOLES |
| | | REDUCER |
| | | STREET LIGHT |
| | | CABLE TV PEDESTAL |
| | | ELECTRIC TRANSFORMER |
| | | POWER POLE |
| | | SIGN |
| | | TELEPHONE PEDESTAL |
| | | EXISTING CONTOUR |
| | | EXISTING GRADE ELEVATION |
| | | EXISTING TREE LINE |
| | | EXISTING RETAINING WALL |
| | | EXISTING SANITARY SEWER |
| | | EXISTING WATERMAIN |
| | | EXISTING STORM SEWER |
| | | EXISTING FENCE |
| | | EXISTING UNDERGROUND ELECTRIC |
| | | EXISTING OVERHEAD ELECTRIC |
| | | EXISTING UNDERGROUND GASLINE |
| | | EXISTING UNDERGROUND TELEPHONE |
| | | EXISTING OVERHEAD TELEPHONE |
| | | PROPOSED CONTOUR |
| | | PROPOSED CONTOUR BY OTHERS |
| | | PROPOSED STORM SEWER |
| | | EROSION CONTROL BARRIER |
| | | PROPOSED GRADE |
| | | RETAINING WALL |
| | | DENOTES AS-BUILT GRADE |
| | | EMERGENCY OVERFLOW |
| | | PROPOSED PHASE LINE |

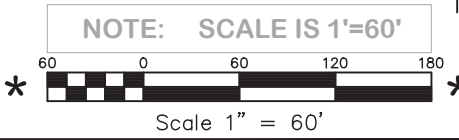


LOT BY LOT TABULATION-PHASE 1																			
LOT	BLOCK	HOUSE TYPE	GARAGE FLOOR ELE	DRIVEWAY GRADE (%)	LOWEST FLOOR ELE	LOWEST OPENING ELE	100 YEAR FLOOD ELE	EMERGENCY OVERFLOW ELE	HIGHEST ANTICIPATED WATER TABLE OR MOTTLED SOIL	LOT	BLOCK	HOUSE TYPE	GARAGE FLOOR ELE	DRIVEWAY GRADE (%)	LOWEST FLOOR ELE	LOWEST OPENING ELE	100 YEAR FLOOD ELE	EMERGENCY OVERFLOW ELE	HIGHEST ANTICIPATED WATER TABLE OR MOTTLED SOIL
PHASE 1																			
1	1	FBLO	893.5	7.1	886.0	889.2	879.6	879.6		23	1	FB	895.0	6.7	887.5	895.0	N/A	884	
2	1	FBLO	894.0	5.8	886.5	889.7	879.6	879.6		24	1	FB	893.0	5.1	885.5	893.0	N/A	889	
3	1	FBLO	894.0	6.0	886.5	889.7	879.6	879.6		1	2	FB	894.5	5.6	887.0	894.5	N/A	887.5	
4	1	FBLO	894.0	5.8	886.5	889.7	N/A	880.0		2	2	FB	894.5	5.6	887.0	894.5	N/A	887.5	
5	1	FBLO	894.0	8.7	886.5	889.7	N/A	880.0		3	2	FB	893.5	7.6	886.0	893.5	N/A	887.5	
6	1	FBLO	895.0	6.4	887.5	890.7	N/A	880.0		4	2	FB	891.5	7.8	884.0	891.5	N/A	887.5	
7	1	FBLO	897.0	7.3	889.5	892.7	N/A	880.0		5	2	FB	889.5	3.6	882.5	889.5	N/A	887.5	
8	1	FBLO	897.0	6.7	889.5	892.7	N/A	889.0		6	2	FB	890.5	3.3	883.0	890.5	N/A	887.5	
9	1	FBLO	897.0	6.2	889.5	892.7	N/A	889.0		7	2	FB	892.5	5.3	885.0	892.5	N/A	887.5	
10	1	FBLO	897.0	6.7	889.5	892.7	N/A	884.0		8	2	FB	893.5	4.4	886.0	893.5	N/A	887.5	
11	1	FBLO	895.0	6.7	887.5	890.7	N/A	884.0											
12	1	FBLO	894.0	5.1	886.5	889.7	N/A	884.0											
13	1	FBLO	893.0	7.8	885.5	888.7	N/A	884.0											
14	1	FB	887.0	6.7	879.5	887.0	N/A	884.0											
15	1	FB	886.5	5.8	879.0	886.5	N/A	N/A											
16	1	FB	886.5	4.0	879.0	886.5	N/A	N/A											
17	1	FB	887.5	4.2	880.0	887.5	N/A	884.0											
18	1	FB	888.5	1.3	881.0	888.5	N/A	884.0											
19	1	FB	889.5	5.1	882.5	889.5	N/A	884.0											
20	1	FBLO	891.0	6.9	883.5	886.7	N/A	884.0											
21	1	FBLO	892.5	5.8	885.0	888.2	N/A	884.0											
22	1	FBLO	894.0	8.2	886.5	889.7	N/A	884.0											

PH 1-Cut/Fill Summary - Prelim-Contour to Contour-No Ho!ddowns-Run Date 3-1-2015					
Name	Cut Factor	Fill Factor	2d Area	Cut	Fill
Surface1	1.000	1.000	655867.54 Sq. Ft.	38985.94 Cu. Yd.	45671.71 Cu. Yd.
Totals			655867.54 Sq. Ft.	38985.94 Cu. Yd.	45671.71 Cu. Yd.

PH1-DISTURBED AREA = 14.7 ACRES
PH1-IMPERVIOUS SURFACE = 3.8 ACRES

BENCHMARK
ANOKA COUNTY BENCHMARK DISK, BENCHMARK NO. 2088,
LOCATED ON THE NORTHWESTERLY CORNER OF
15133 NORTHERN BLVD NW, RAMSEY, MN 55303
ELEVATION = 886.831



PROJECT NUMBER
141029

REVISIONS	DATE	BY
Final plan sheet set	4/14/15	ghh
Grading Revisions	5/19/15	ghh

CERTIFICATION: I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Randall C. Hedlund Date: 6/19/15
Randall C. Hedlund MN. LIC. NO. 19576

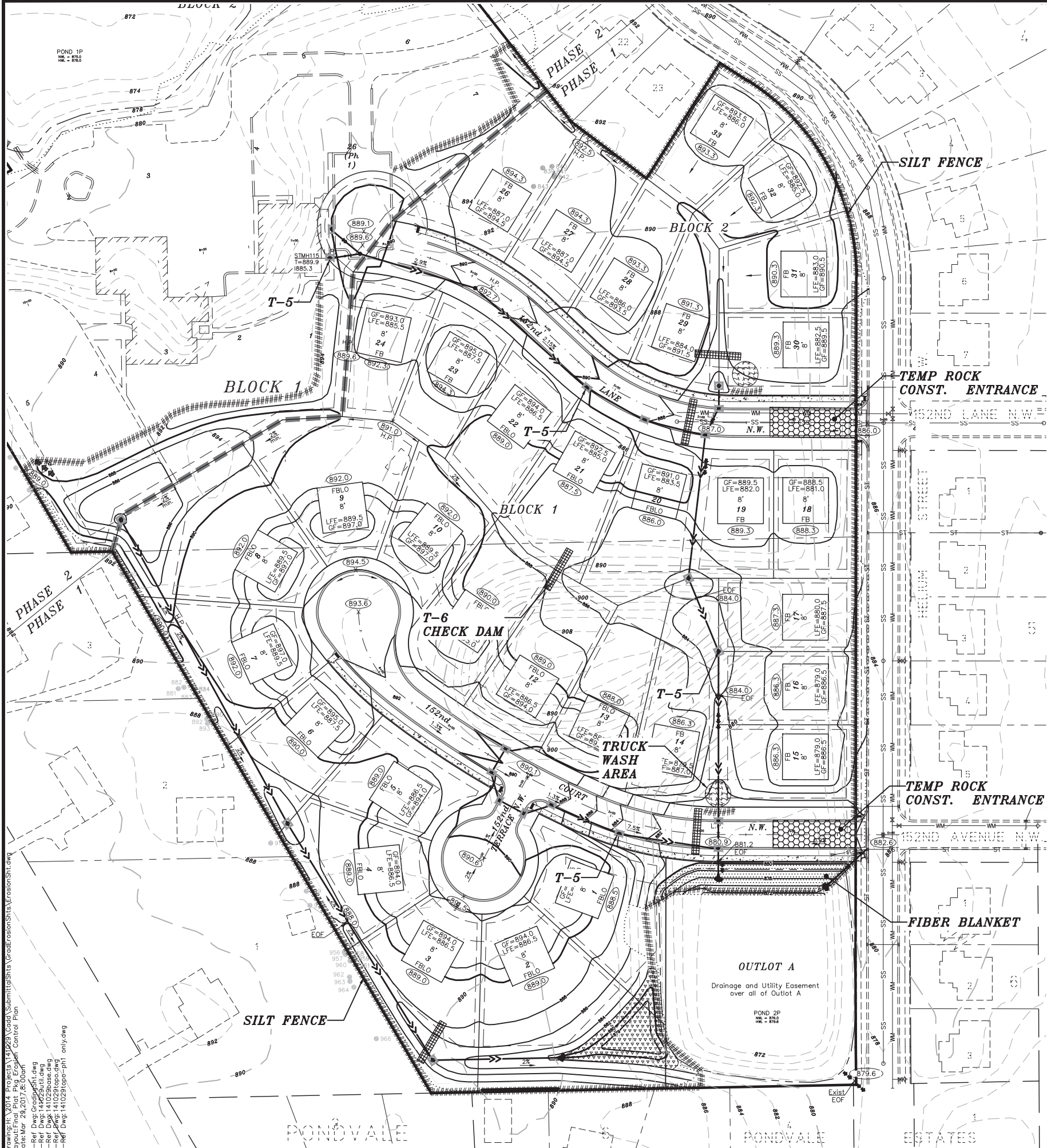
HEDLUND
ENGINEERING
SURVEYING
PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

HARVEST ESTATES
FINAL GRADING PLAN-PH 1
CS LAND LLC
Phone: (612) 868-0662

SHEET TITLE:	DRAWN	CHECKED	DESIGN
	ghh	rch	

PREPARED FOR:
CG-1

DATE	REV.
4/14/15	6/19/15



HARVEST ESTATES

City of Ramsey
Anoka County, Minnesota

GENERAL EROSION CONTROL NOTES:

EROSION CONTROL SCHEDULE:

- 1.) INSTALL EROSION CONTROL MEASURES PRIOR TO ANY LAND DISTURBANCE. INSTALL SEDIMENT FILTERS IMMEDIATELY FOLLOWING INSTALLATION OF STRUCTURE.
- 2.) SLOPES MUST BE STABILIZED BY BEING SEEDED AND COVERED WITH AN EROSION CONTROL BLANKET OR MULCHED WITH A TACKIFYING AGENT AS SOON AS POSSIBLE AFTER COMPLETION OF GRADING
- 3.) ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR/PERMITEE UNTIL THE SITE HAS BEEN RE-VEGETATED, AT WHICH TIME THEY SHALL BE REMOVED. FOR PROPOSED PAVED SURFACE AREA, THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAY WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS.
- 4.) SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS THAT ARE TO BE REVEGETATED.
- 5.) THE CONTRACTOR/PERMITEE SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINAL GRADING OR AFTER 14 DAYS OF GRADING INACTIVITY. ALL MULCH MATERIAL SHALL BE DISCED INTO THE SOIL IN DIRECTION PERPENDICULAR TO THE STORMWATER FLOW OVER SUCH AREAS.
- 6.) REVEGETATE WITH MNDOT MIX 50B OR 60B AT 75 LBS/ACRE WITH TYPE 1 MULCH AT 2000 LBS/ACRE.

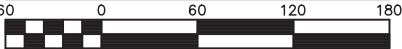
EROSION CONTROL MAINTENANCE PROGRAM:

- 1.) INSPECT CONSTRUCTION SITE ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF MORE THAN 1/2 INCHES IN 24 HOUR PERIOD.
- 2.) SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- 3.) SILT FENCE FABRIC SHALL BE REPLACED PROMPTLY WHEN IT DECOMPOSES OR BECOMES INEFFECTIVE BEFORE THE BARRIER IS NO LONGER NECESSARY.
- 4.) ALL SOILS TRACKED ONTO PAVEMENT SHALL BE REMOVED DAILY.
- 5.) ANY SEDIMENT REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED WITH THE APPROPRIATE SEED MIX.
- 6.) IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHOD HAS FAILED, THE SLOPE SHALL BE REESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.
- 7.) SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPWARD SLOPE AREA HAS BEEN PERMANENTLY STABILIZED. REMOVAL IS REQUIRED WITH ALL TEMPORARY EROSION CONTROL FACILITIES (SEDIMENT FILTERS, HAY BALES, ETC.) ONCE SITE IS PERMANENTLY STABILIZED BY THE BUILDER.
- 8.) ALL PERMANENT SEDIMENTATION BASINS MUST BE RESTORED TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING PERMANENT STABILIZATION OF THE SITE.

EROSION CONTROL LEGEND:

- WOOD FIBER BLANKET
- ROCK CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- SILT FENCE
- CHECK DAM
- INLET PROTECTION
- TRUCK WASH AREA

NOTE: SCALE IS 1"=60'



Scale 1" = 60'

PROJECT NUMBER
141029

REVISIONS	DATE	BY
Final plan sheet set	4/14/15	gsh
Revised Lot Blk #s to match Ph 1 plat	4/29/15	gsh
Revisions Per City Comments	6/12/15	lak
Grading Plan Revisions	6/19/15	gsh

CERTIFICATION:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Randall C. Hedlund
Date: 6/19/15
MN. LIC. NO. 19576

PREPARED BY:

HEDLUND
SURVEYING
ENGINEERING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE:
HARVEST ESTATES
FINAL EROSION PLAN (PH 1)

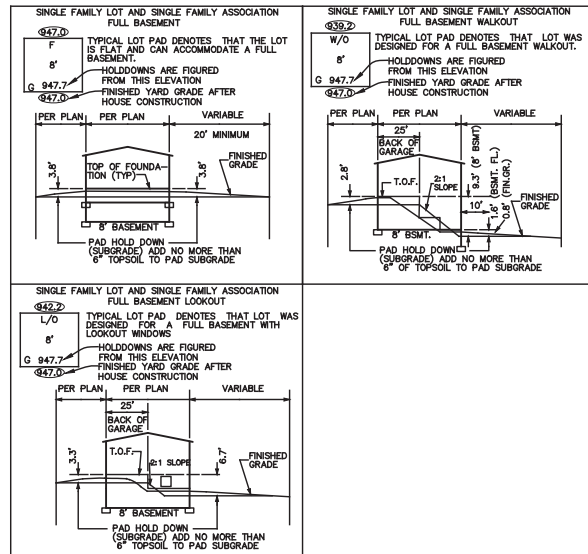
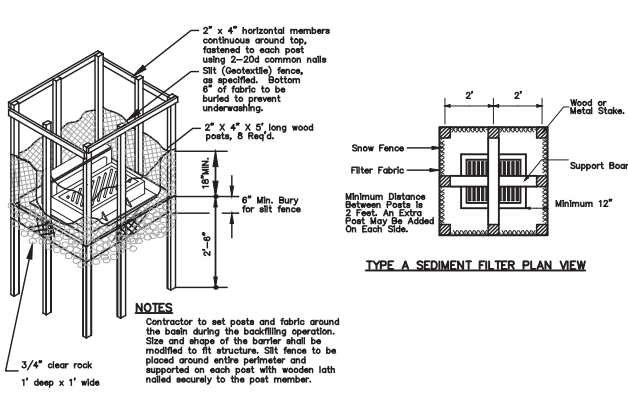
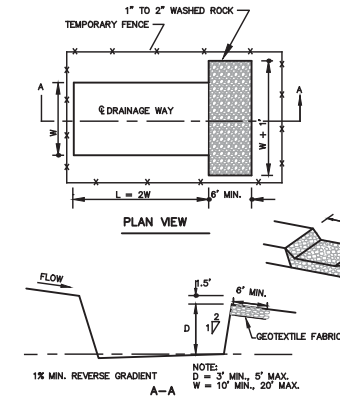
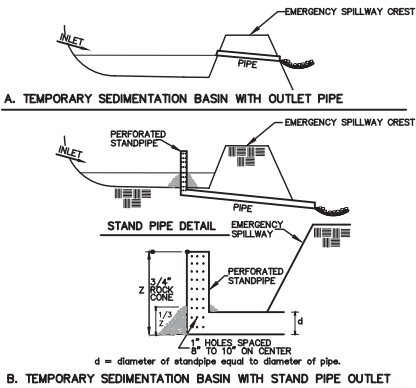
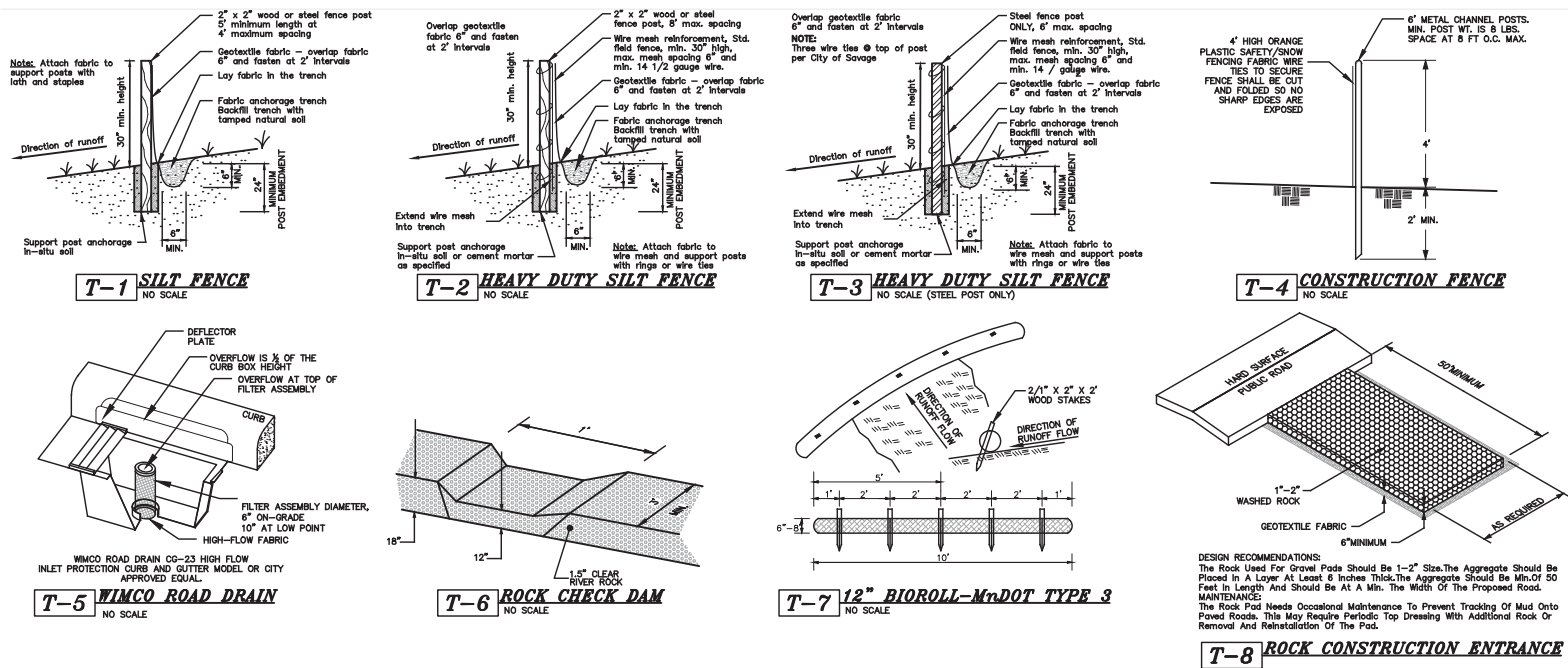
PREPARED FOR:
CS LAND LLC
Phone: (612) 868-0662

DRAWN	CHECKED	DESIGN

SHEET NUMBER
CE-1

DATE	4/14/15
REV.	6/19/15

Drawing: 2014 Projects\141029\Add\Submittal\Site\Grading\Shit.dwg
Layout: Final Plot Pkg Erosion Control Plan
Date: Mar 28, 2017 8:00am
X-Ref Dwg: Grading.dwg
X-Ref Dwg: Grading.dwg
X-Ref Dwg: 141029base.dwg
X-Ref Dwg: 141029topo-ph1 only.dwg



"TYPICAL" HOUSE TYPE OPTIONS

T-9 TEMPORARY SEDIMENTATION BASIN

T-12

PERMANENT SOD REVEGETATION

SEEDING RECOMMENDATIONS:
The seedbed must be prepared to a depth of approx. 3 inches, on areas where the exposed or underlying soil will not support vegetation, apply min. 4 inches of topsoil. Seedbeds should not be prepared under excessively wet or frozen soil conditions. Prior to seeding, the seedbed should be firmed with a roller or cultipacker. Avoid compaction that will increase runoff and erosion, deter seed germination or prevent proper anchoring of mulch. For example, the soil should support the weight of an adult without sinking more than 1/2 inch.

- GENERAL SEED & MULCH (MIN. 6" TOPSOIL)
a. Seed: MnDOT Seed Mix # 25-141 @ rate of 50 PLS.
b. Fertilizer: 22-5-10 BOK WLN, OR @ a Rate of 350 lbs/Acre.
c. Mulch: MnDOT Type 1 @ a Rate of 2 Tons/Acre.

P-1

PERMANENT SOD REVEGETATION

SODDING RECOMMENDATIONS:
The soil must be prepared in the same way that it would for seeding. The upper 4 inches must be loosened and relatively free of clods, rocks, etc. The area to be seeded should be fertilized with 25 pounds per 1000 sq.ft. (1000 lb/ac) of 10-0-10 fertilizer and worked into the loosened topsoil. Prior to laying the sod, dampen the soil bed. The joints in the sod should be staggered, and the edges butted together tightly. On slopes of 3:1 or greater, or in areas of concentrated flows, the sod should be pegged down. On steep slopes w/ sheet flows, the sod should be laid with the length perpendicular to the water flow. After the sod is laid, it should be tamped or rolled to provide good contact between sod and soil. After rolling, the sod should be watered so that the soil is moistened 4 inches below the soil bed.
MAINTENANCE:
In the absence of adequate rainfall, water during the 30 day period following sod placement to keep soil moist. Following this initial 30 day establishment period, water as necessary to maintain adequate moisture in the root zone. Where mowing is desired, maintain grass height of 3 inches and should not be attempted until the sod is firmly rooted, usually two to three weeks after sod is laid. Intense storms, make need repair and reveg. promptly.

GENERAL GRADING NOTES:

- UNDERLYING TOPOGRAPHY FROM INFORMATION PROVIDED BY ANOKA COUNTY AND FIELD SHOTS BY HEDLUND ENGINEERING.
- EXISTING UTILITY LOCATIONS AS PER PLANS PROVIDED BY THE CITY OF RAMSEY AND FIELD SHOTS BY HEDLUND ENGINEERING.
- SEE GRADING AND EROSION CONTROL DETAIL SHEET FOR DETAILED INFORMATION.

P-2

PERMANENT SOD REVEGETATION

SEEDING RECOMMENDATIONS:
The seedbed must be prepared to a depth of approx. 3 inches, on areas where the exposed or underlying soil will not support vegetation, apply min. 4 inches of topsoil. Seedbeds should not be prepared under excessively wet or frozen soil conditions. Prior to seeding, the seedbed should be firmed with a roller or cultipacker. Avoid compaction that will increase runoff and erosion, deter seed germination or prevent proper anchoring of mulch. For example, the soil should support the weight of an adult without sinking more than 1/2 inch.

- WETLAND & POND SEED & MULCH (MIN. 6" TOPSOIL)
a. Seed: MnDOT Seed Mix # 34-282 @ rate of 14.5 PLS.
b. Fertilizer: 18-0-8 Natural Base @ a Rate of 120 lbs/Acre
c. Mulch: MnDOT Type 3 @ a Rate of 2 Tons/Acre.
- UPLAND BUFFER SEED & MULCH (MIN. 6" TOPSOIL)
a. Seed: MnDOT Seed Mix # 33-281 @ rate of 35 PLS.
b. Fertilizer: 18-0-8 Natural Base @ a Rate of 150 lbs/Acre
c. Mulch: MnDOT Type 3 @ a Rate of 2 Tons/Acre.

Note: Mulch To Be Discarded Anchored In Place.

GENERAL EROSION CONTROL NOTES:

EROSION CONTROL SCHEDULE:

- INSTALL EROSION CONTROL MEASURES PRIOR TO ANY LAND DISTURBANCE. INSTALL SEDIMENT FILTERS IMMEDIATELY FOLLOWING INSTALLATION OF STRUCTURE.
- THE CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RESEEDED SOON AFTER DISTURBANCE. ALL DISTURBED AREAS SHALL BE SEED AND MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINAL GRADING OR AFTER 14 DAYS OF GRADING INACTIVITY.
- ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR/PERMITEE UNTIL THE SITE HAS BEEN RE-VEGETATED. AT WHICH TIME THEY SHALL BE REMOVED. FOR PROPOSED PAVED SURFACE AREA, THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAY WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS.
- SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS THAT ARE TO BE REVEGETATED.
- THE CONTRACTOR/PERMITEE SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. ALL DISTURBED AREAS SHALL BE SEED AND MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINAL GRADING OR AFTER 14 DAYS OF GRADING INACTIVITY. ALL MULCH MATERIAL SHALL BE DISSED INTO THE SOIL IN DIRECTION PERPENDICULAR TO THE STORMWATER FLOW OVER SUCH AREAS.
- REVEGETATE WITH MNDOT MIX 508 OR 608 AT 75 LBS/ACRE WITH TYPE 1 MULCH AT 2000 LBS/ACRE.

EROSION CONTROL MAINTENANCE PROGRAM:

- INSPECT CONSTRUCTION SITE ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF MORE THAN 1/4 INCHES IN 24 HOUR PERIOD.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- SILT FENCE FABRIC SHOULD BE REPLACED PROMPTLY WHEN IT IMPOSES OR BECOMES INEFFECTIVE BEFORE THE BARRIER IS NO LONGER NECESSARY.
- ALL SOILS TRACKED ONTO PAVEMENT SHALL BE REMOVED DAILY.
- ANY SEDIMENT REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED WITH THE APPROPRIATE SEED MIX.
- IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHOD HAS FAILED, THE SLOPE SHALL BE REESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.
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- ALL PERMANENT SEDIMENTATION BASINS MUST BE RESTORED TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING PERMANENT STABILIZATION OF THE SITE.

City of Ramsey Anoka County, Minnesota

PROJECT NUMBER
141029

REVISIONS	DATE	BY
Final plot sheet set	4/14/15	spk
Revisions Per City Comments	6/12/15	lak
Added Holddown Information	6/19/15	gsh

CERTIFICATION:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Randall C. Hedlund* Date: 6/19/15
Randall C. Hedlund MN. LIC. NO. 19576

PREPARED BY:
HEDLUND SURVEYING
ENGINEERING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: **HARVEST ESTATES
FINAL EROSION CONTROL PLAN**

PREPARED FOR: **GS LAND LLC**

Phone: (612) 868-0662

DRAWN	CHECKED	DESIGN
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SHEET NUMBER		
CE-2		
DATE	3/5/2015	
REV.	6/19/15	