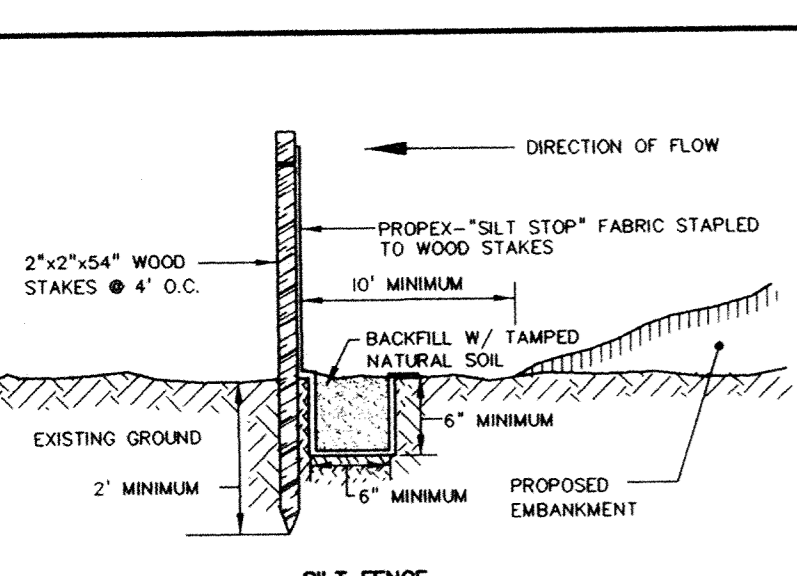
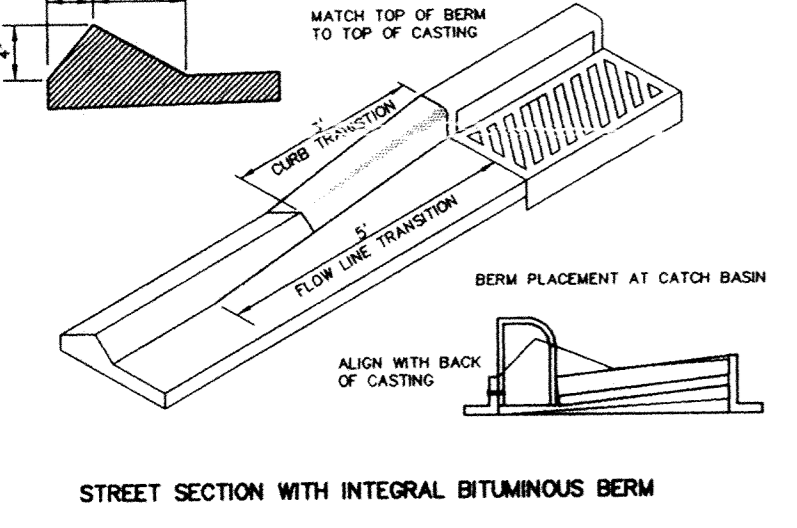
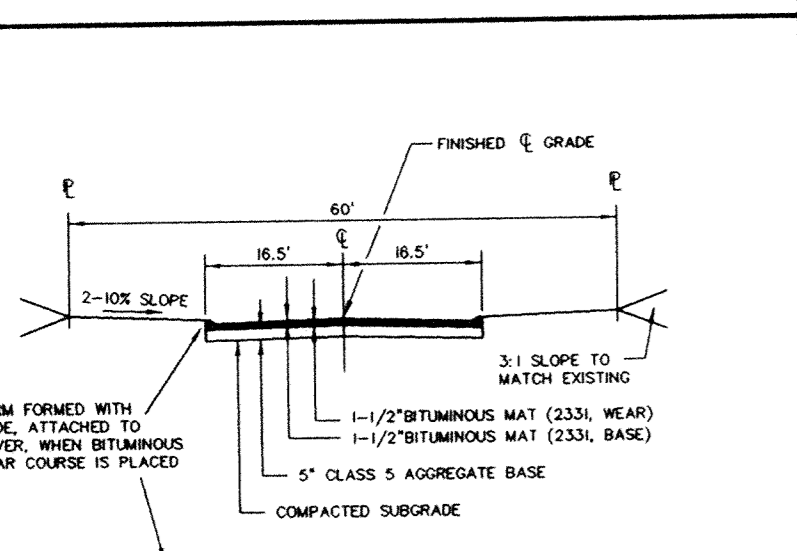
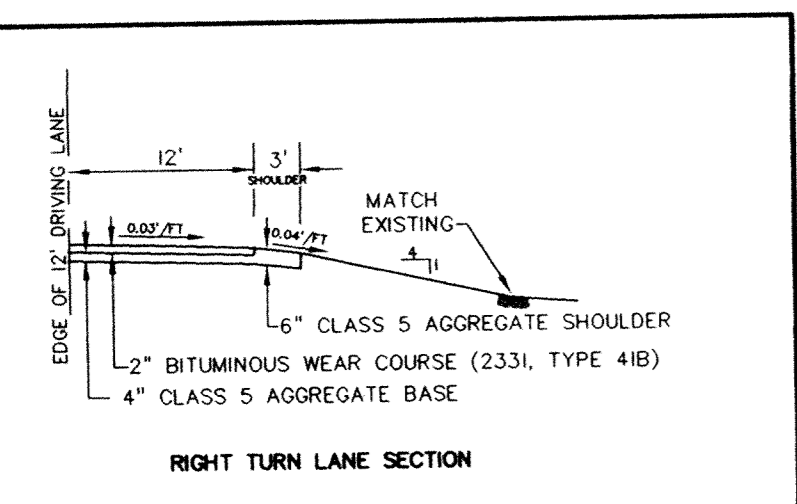
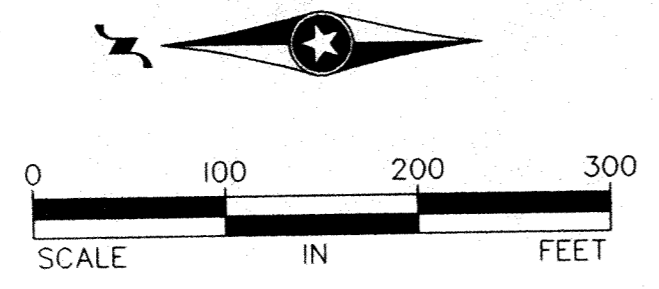
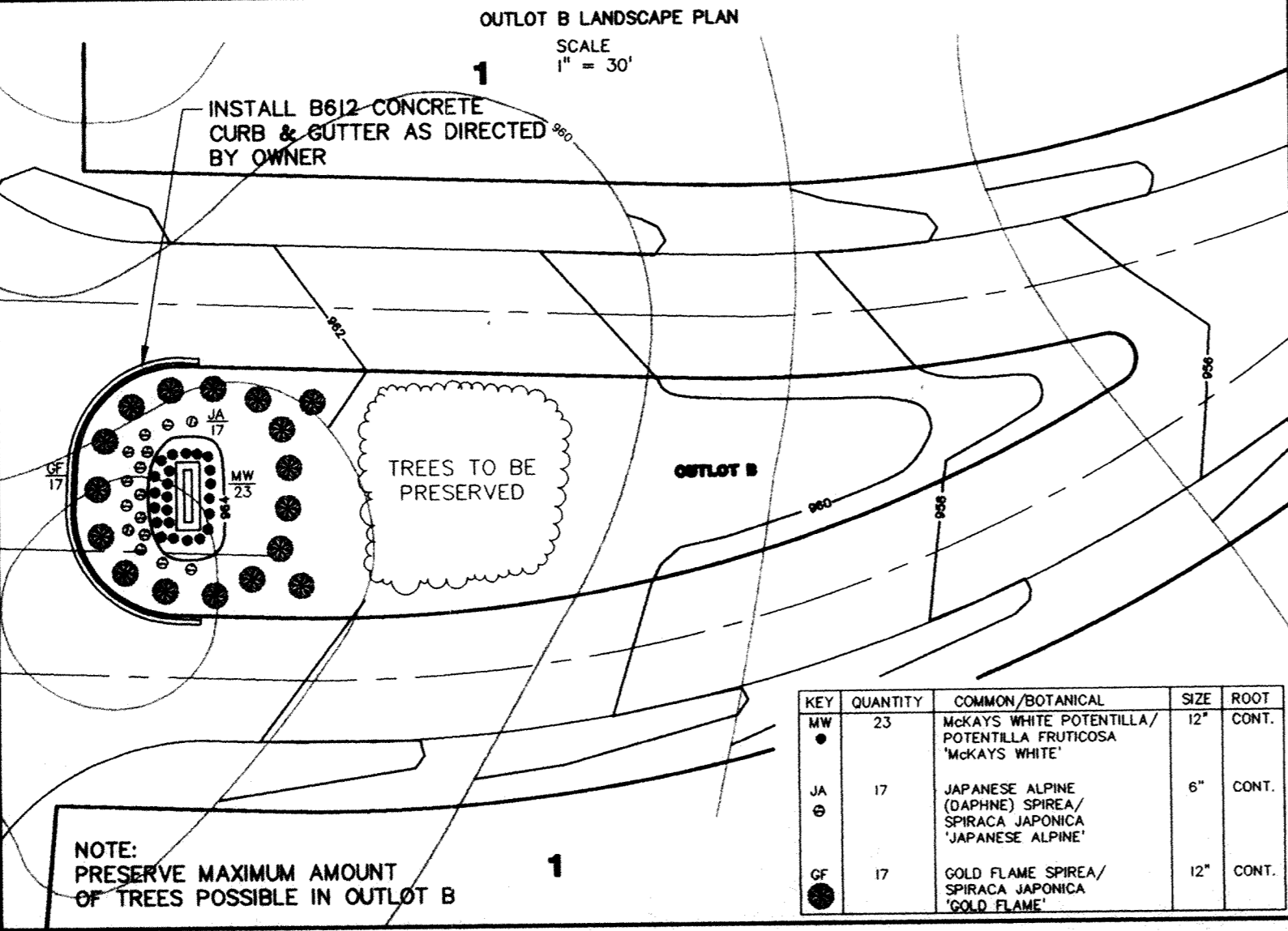
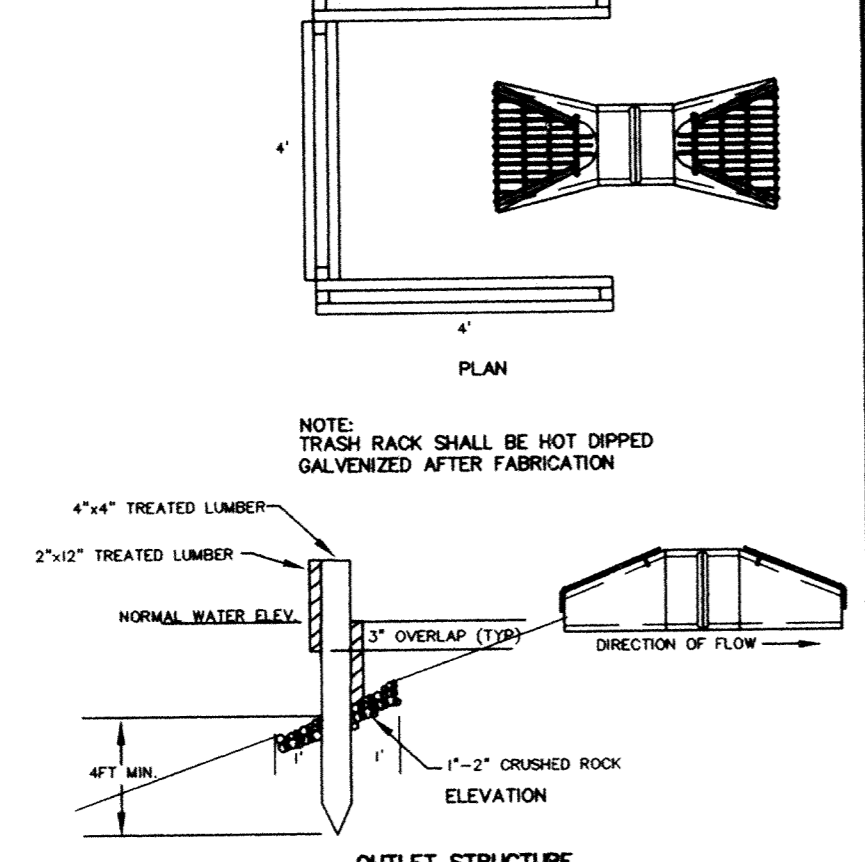


LEGEND

- 892 Existing Contours
- 898 Proposed contours
- - - Silt fence
- Haybale Checks
- Possible House Pad Location
- P/S Possible Primary & Secondary Septic System (2400 sf)
- ⊙ Possible Well Location
- Proposed Storm Sewer
- - - Wetland Delineated by ECO Systems
- ▨ Proposed Mitigation Area
- - - Approximate Location of Existing DrainTile
- ⊙ Soil Boring



DESIGN CRITERIA
 MUST SWIM OR FLOATABLE MATERIAL FROM DISCHARGE FOR RAINFALL EXCEEDS UP TO A ONE YEAR RETURN FREQUENCY. MAXIMUM VELOCITY THROUGH THE STRUCTURE IS 0.5 FT/SEC.
 BURY ENDS OF WIRE INTO THE BANK A MINIMUM OF 6" SO THAT FLOW WILL NOT BE ALLOWED TO PASS UNDER THE WIRE.



WETLAND DATA

ALTERATION	6,900 SF
DIMINUS	5,000 SF
	1,900 SF

WETLAND REPLACEMENT REQUIRED

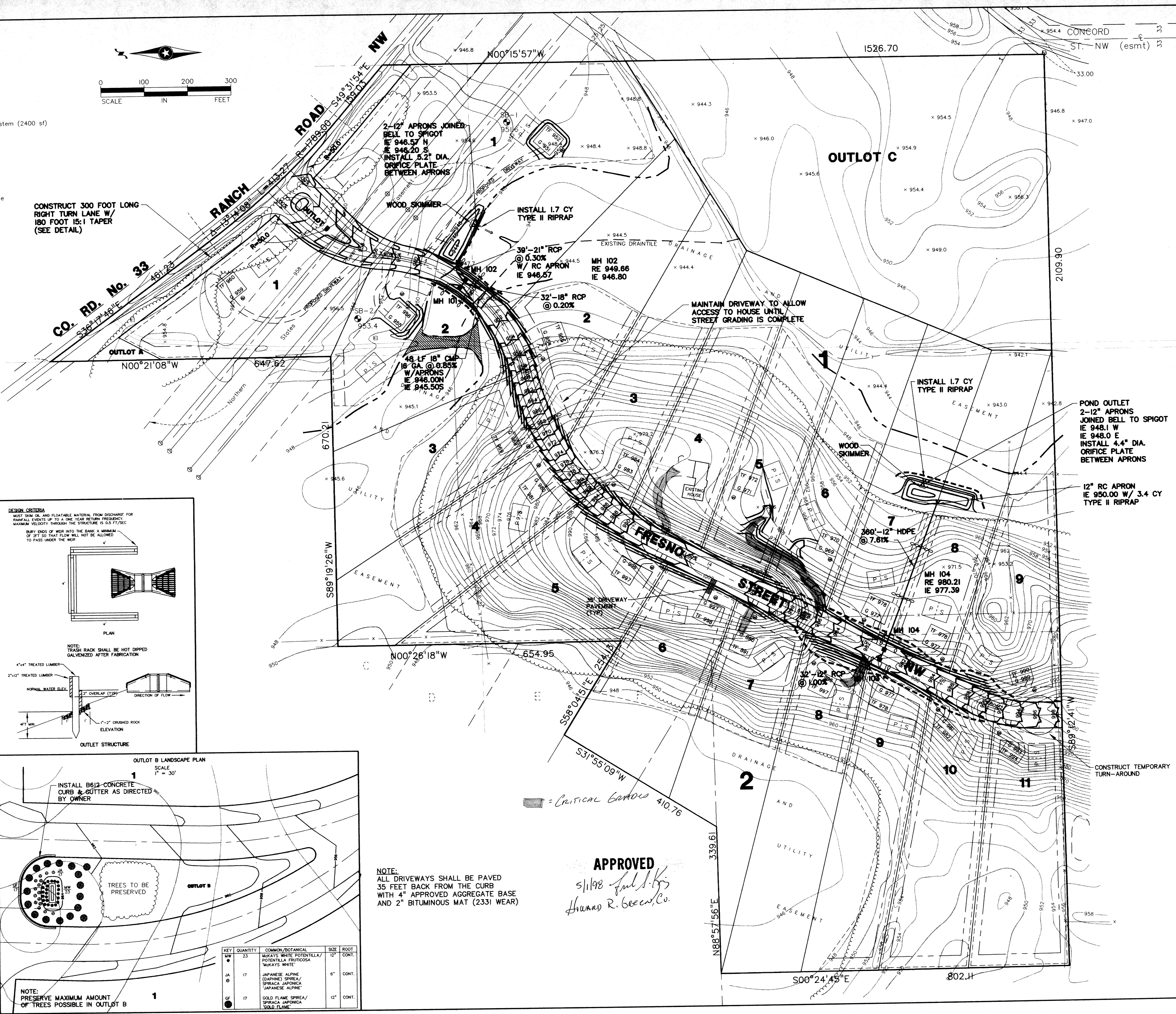
NEW WETLAND	PUBLIC VALUE
Restoration due to prior fill = 3255	Storm Water Pond (75%) = 5420
Credit = -1800	Credit = 3220 SF (to be banked)
(to be banked)	

- NOTES:**
- MITIGATION AREA TO BE CONSTRUCTED AFTER ROAD IS IN PLACE.
 - EXISTING DRAIN TILE LOCATION IS APPROXIMATE, CONTRACTOR SHALL VERIFY LOCATION AND REPAIR ANY DAMAGE CAUSED DURING CONSTRUCTION.

KEY	QUANTITY	COMMON/BOTANICAL	SIZE	ROOT
MW	23	MCKAYS WHITE POTENTILLA/POTENTILLA FRUTICOSA 'MCKAYS WHITE'	12"	CONT.
JA	17	JAPANESE ALPINE (DAPHNE) SPIREA/SPIRACA JAPONICA 'JAPANESE ALPINE'	6"	CONT.
GF	17	GOLD FLAME SPIREA/SPIRACA JAPONICA 'GOLD FLAME'	12"	CONT.

NOTE: PRESERVE MAXIMUM AMOUNT OF TREES POSSIBLE IN OUTLET B

CONSTRUCT 300 FOOT LONG RIGHT TURN LANE W/ 180 FOOT 15:1 TAPER (SEE DETAIL)



NOTE: ALL DRIVEWAYS SHALL BE PAVED 35 FEET BACK FROM THE CURB WITH 4" APPROVED AGGREGATE BASE AND 2" BITUMINOUS MAT (2331 WEAR)

APPROVED
 5/11/98
 Howard R. Green, Co.

REV. NO.	DATE	DESCRIPTION
1	3/16/98	CITY COMMENTS - SHARED DR. LOTS 5 & 6 BL 1
2	4/16/98	CITY COMMENTS - SHARED DR. LOTS 5 & 6 BL 1
3	4/29/98	RENAME SHEET & SILT FENCE

DATE: 2/19/98
 DESIGN BY: JK, TH
 DRAWN BY: TGL
 CHECKED BY: TH
 DWG: FL-GRAD.DWG
 TEXT: NONE
 FILE NO.: 7550.10-03

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Engineer under the laws of the State of Minnesota.

Signed: *Ray S. Olmstead*
 Date: 2/19/98 Reg. No. 12689

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 201 W. Travelers Trail, Suite 200
 Burnsville, Minnesota 55337
 (612)894-3045 (FAX)894-3049

WINDSOR WOODS
 ELK RIVER, MN
 FOR
DYNAMICS DESIGN & LAND COMPANY
 GRADING & DEVELOPMENT PLAN

SHEET NO. 1 OF 2