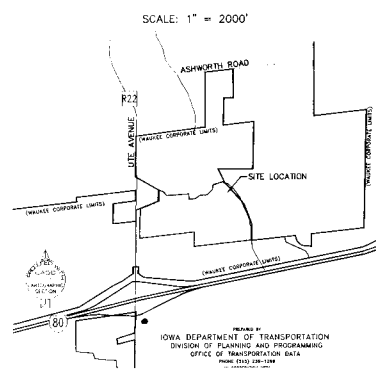


PLANS FOR PUBLIC IMPROVEMENTS
PAINTED WOODS PLATS 2 & 3
WAUKEE, IOWA
2006

NAI #04155

VICINITY MAP



LEGEND

- EXISTING/PROPOSED
- ▲ SET SECTION CORNER AS NOTED
 - △ SET SECTION CORNER
 - FOUND RIGHT-OF-WAY MONUMENT AS NOTED
 - FOUND MONUMENT AS NOTED
 - SET MONUMENT
 - FOUND MONUMENT
 - ADDRESS
 - SUBJECT PROPERTY BOUNDARY LINE
 - SECTION LINE
 - PROPERTY LINE
 - CONTOUR ELEVATION
 - FLOWLINE SHALE
 - SPOT ELEVATION
 - SANITARY SEWER AND SIZE
 - STORM SEWER AND SIZE
 - WATER MAIN AND SIZE
 - GAS MAIN
 - OVERHEAD WIRES
 - UNDERGROUND ELECTRIC CABLE
 - UNDERGROUND TELEPHONE CABLE
 - UNDERGROUND CABLE TELEVISION
 - DRAIN TILE AND SIZE
 - SANITARY SEWER MANHOLE
 - SANITARY SEWER CLEANOUT
 - STORM SEWER MANHOLE
 - STORM SEWER INTAKE
 - MONITORING WELL
 - MISCELLANEOUS MANHOLE
 - ROOF DOWN SPOUTS
 - FIRE HYDRANT
 - WATER VALVE
 - WATER SHUT OFF
 - GAS VALVE
 - POWER/UTILITY POLE
 - STREET LIGHT
 - SITE LIGHT
 - TRAFFIC SIGNAL POLE
 - UTILITY BOX AND TYPE
 - AIR-CONDITIONING UNIT
 - TRAFFIC SIGN
 - DIRECTIONAL SIGN
 - DECIDUOUS TREE
 - AND SIZE
 - CONIFEROUS TREE
 - AND SIZE
 - SHRUB

SPECIFICATION REFERENCE

THE CURRENT STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS FOR THE CITY OF WAUKEE SHALL APPLY TO ALL ASPECTS OF CONSTRUCTION.

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
2. PRIOR TO INSTALLING UTILITIES, THE CONTRACTOR SHALL EXCAVATE AND FIELD VERIFY THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC/PRIVATE UTILITIES WITHIN.
3. ALL CONTRACTORS SHALL ABIDE BY THE STORM WATER POLLUTION PREVENTION PLAN PREPARED FOR THIS SITE.
4. EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE CONNECTED TO PROPOSED STORM SEWER SYSTEM WHERE POSSIBLE, OR REPAIRED TO ENSURE PROPER OPERATION.

GRADING NOTES

1. TAKE ALL NECESSARY MEASURES TO PROTECT AGAINST EROSION AND DUST POLLUTION ON AND AROUND THE PROJECT SITE TO INCLUDE ALL OFF-SITE BORROW AND SPOIL AREAS.
2. ALL GRADING OPERATIONS SHALL ABIDE BY PART 3-"EARTHWORK AND INCIDENTALS FOR PAVEMENT", WAUKEE STANDARD SPECIFICATIONS.
3. FOR ALL AREAS INDICATING PROPOSED CONSTRUCTION, REMOVE ALL ORGANIC MATERIAL TO A 1' MINIMUM DEPTH.
4. SPOT ELEVATIONS AT BACK OF CURB REPRESENT TOP OF CURB (/TC). ALL OTHER SPOT ELEVATIONS AND CONTOURS REPRESENT FINISHED GRADE.
5. NATIVE SOILS MAY BE REUSED FOR COMMON FILL AFTER THEY ARE SORTED TO REMOVE ALL DELETERIOUS MATERIALS SUCH AS CONCRETE, BRICKS AND OTHER RUBBLE. DELETERIOUS MATERIALS SHALL BE REMOVED FROM PROJECT SITE. ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
6. A MINIMUM OF 6-INCHES OF TOPSOIL SHALL BE PLACED ON ALL NON-PAVED DISTURBED SURFACES.
7. CONTRACTOR SHALL READ AND FOLLOW THE GEOTECHNICAL SOILS REPORT IF ONE IS PREPARED FOR THIS PROJECT.
8. 3:1 MAX SLOPE ON FINISHED GRADING.

BENCH MARK

- DALLAS COUNTY GPS CONTROL MONUMENTS:
- G115: SOUTH SIDE INTERSECTION OF 340TH TRAIL (F&A) AND U LANE WHERE COUNTY ROAD RIGHT OF WAY WIDENS, WEST OF NORTH SOUTH FENCE. ALUMINUM ROD W/CAP STAMPED G115 & NGS STYLE ACCESS COVER 4" DEEP. ELEVATION: 1017.980
 - G116: NORTH SIDE 335TH STREET IN TOP NORTHWEST WIND DAM AT BRIDGE OVER SUGAR CREEK. ALUMINUM ROD W/CAP STAMPED G116 & NGS STYLE ACCESS COVER 3" DEEP. ELEVATION: 875.710
 - G119: SOUTH SIDE OF UNIVERSITY AVENUE 0.2 WEST OF WACO PLACE IN THE CITY OF WAUKEE. ALUMINUM ROD W/CAP STAMPED G119 & NGS STYLE ACCESS COVER 4" DEEP. ELEVATION: 1055.905
 - G120: EAST SIDE OF U PLACE ABOUT 150 FEET SOUTH OF 300TH STREET. ALUMINUM ROD W/CAP STAMPED G120 & NGS STYLE ACCESS COVER 4" DEEP. ELEVATION: 1011.755

INDEX OF SHEETS

	SHEET NO.
TITLE SHEET	1/19
DIMENSION PLAN	2/19
GRADING AND STORM WATER POLLUTION PREVENTION PLAN	3/19
INDIAN RIDGE DRIVE (10+00 TO 16+00)	4/19
INDIAN RIDGE DRIVE (16+00 TO 22+00)	5/19
INDIAN RIDGE DRIVE (22+00 TO 28+00)	6/19
INDIAN RIDGE DRIVE (28+00 TO 34+00)	7/19
INDIAN RIDGE DRIVE (34+00 TO 40+08)	8/19
ROSE GLEN (10+00 TO 12+50)	9/19
EAGLE DRIVE (10+00 TO 16+00)	10/19
BLACK BEAR POINTE (10+00 TO 12+50)	11/19
FOX LANDING (10+00 TO 14+00)	12/19
HIDDEN MEADOW DRIVE (10+00 TO 13+00)	13/19
HIDDEN MEADOW DRIVE (13+00 TO 15+75)	14/19
LOOTS SEWER EXTENSION (0+00 TO 3+25)	15/19
SANITARY OUTLET (0+00 TO 5+50)	16/19
HIGHWAY R22 IMPROVEMENTS (19+00 TO 24+00)	17/19
LANDSCAPE BUFFER	18/19
DETAIL SHEET	19/19

ESTIMATED QUANTITIES

ITEM #	DESCRIPTION	QUANTITY
EARTHWORK		
GR 1	SUBGRADE COMPACTION	21,671 SY
GR 2	SEEDING/FERTILIZING/MULCHING	1 LS
GR 3	EROSION CONTROL	1 LS
GR 4	SEDIMENT CONTROL	1 LS
DRAINAGE		
DR 1	8" SUMPLINE	1114 LF
DR 2	15" STORM SEWER	3228 LF
DR 3	18" STORM SEWER	553 LF
DR 4	24" RCP STORM SEWER	206 LF
DR 5	42" RCP STORM SEWER	202 LF
DR 6	48" RCP STORM SEWER	190 LF
DR 7	TYPE A CURB INTAKE	1 EA
DR 8	TYPE B CURB INTAKE	1 EA
DR 9	TYPE C CURB INTAKE	8 EA
DR 10	TYPE D CURB INTAKE	1 EA
DR 11	SHALLOW STORM MANHOLE	11 EA
DR 12	STANDARD STORM MANHOLE	9 EA
DR 13	SPECIAL STORM MANHOLE	3 EA
DR 14	SUMPLINE CLEANOUT	4 EA
DR 15	15" FES W/ FTC	3 EA
DR 16	42" FES W/ FTC	2 EA
DR 17	48" FES W/ FTC	2 EA
DR 18	TYPE B AREA INTAKE	1 EA
DR 19	4" FOUNDATION SERVICES	68 EA
PAVING		
PA 1	8" NON-REINFORCED P.C.C.	523 SY
PA 2	7" NON-REINFORCED P.C.C.	18761 SY
WATER		
WA 1	12" WATER MAIN	380 LF
WA 2	8" WATER MAIN	5090 LF
WA 3	12" VALVE	2 EA
WA 4	8" VALVE	15 EA
WA 5	HYDRANT (COMPLETE)	19 EA
WA 6	12" X 8" TEE	1 EA
WA 7	8" X 8" TEE	5 EA
WA 8	TEMPORARY BLOWOFF HYDRANT	1 EA
WA 9	1" WATER SERVICES	68 EA
WA 10	DIRECTIONAL SOBE - 8" WATER MAIN CROSSING	50 LF
SANITARY		
SA 1	8" SANITARY SEWER	5642 LF
SA 2	SANITARY MANHOLE	37 EA
SA 3	4" SANITARY SERVICES	68 EA

ALL QUANTITIES LISTED ARE FOR CONTRACTOR CONVENIENCE ONLY. THE DETAILED PLANS SHALL GOVERN IF DISCREPANCIES EXIST BETWEEN THE PLANS AND THIS ESTIMATE.

EXISTING UTILITY NOTE

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL 800/292-8989 IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

CERTIFICATION

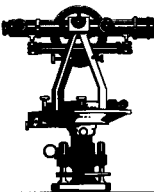
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: _____ DATE: _____

GREGORY M. PIERCE, P.E. No. 16321

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2007.

PAGES OF SHEETS COVERED BY THIS SEAL: SHEETS 1 THROUGH 17



NILLES ASSOCIATES, INC.
306 S. ANKENY BLVD., ANKENY, IOWA 50023 (515) 965-0123 (515) 965-3322 fax
CIVIL ENGINEERING - LAND SURVEYING - LANDSCAPE ARCHITECTURE

NILLES ASSOCIATES, INC.
306 S. ANKENY BLVD., ANKENY, IOWA 50023 (515) 965-0123 (515) 965-3322 fax
CIVIL ENGINEERING - LAND SURVEYING - LANDSCAPE ARCHITECTURE

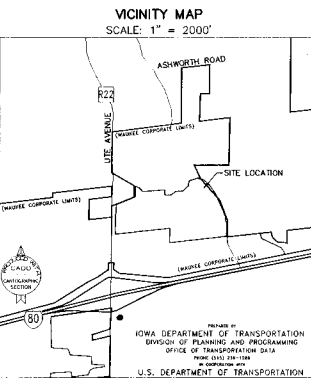
**PUBLIC IMPROVEMENTS
PAINTED WOODS 2 & 3
WAUKEE, IOWA**

04155

PAINTED WOODS PLATS 2 & 3

BENCHMARKS
DALLAS COUNTY GPS CONTROL MONUMENTS:
G115: SOUTH SIDE INTERSECTION OF 340TH TRAIL (F&I) AND U LANE WHERE COUNTY ROAD RIGHT OF WAY WOODS. WEST OF NORTH SOUTH FENCE.
ALUMINUM ROD W/CAP STAMPED G115 & NGS STYLE ACCESS COVER 4" DEEP. ELEVATION: 1017.980
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G120: EAST SIDE OF U PLACE ABOUT 150 FEET SOUTH OF 300TH STREET.
ALUMINUM ROD W/CAP STAMPED G120 & NGS STYLE ACCESS COVER 4" DEEP. ELEVATION: 1011.755

LEGAL DESCRIPTION:
OUTLOT "V" OF HUNSBERGER PROPRIETOR PLAT 3 AN OFFICIAL PLAT IN WAUKEE, DALLAS COUNTY, IOWA; MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SE CORNER OF THE NE1/4 OF THE SW1/4, SAID POINT ALSO BEING THE SE CORNER OF LOT 2 OF SAID HUNSBERGER PROPRIETOR PLAT 1; THENCE N00°35'15"E ALONG THE EAST LINE OF SAID LOT 2, 330.00 FEET TO A POINT ON THE NE CORNER OF SAID LOT 2; THENCE S83°39'35"W ALONG THE NORTH LINE OF SAID LOT 2, 1247.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF UTE AVENUE; THENCE N00°52'02"W ALONG SAID RIGHT-OF-WAY LINE, 17.92 FEET TO A POINT; THENCE N01°45'54"W ALONG SAID RIGHT-OF-WAY LINE, 100.13 FEET TO A POINT; THENCE N01°07'46"E ALONG SAID RIGHT-OF-WAY LINE, 360.00 FEET TO A POINT; THENCE S88°52'14"E ALONG SAID RIGHT-OF-WAY LINE, 10.00 FEET TO A POINT; THENCE N01°08'25"E ALONG SAID RIGHT-OF-WAY LINE, 191.64 FEET TO A POINT ON THE NW CORNER OF LOT 1 OF SAID HUNSBERGER PROPRIETOR PLAT 1; THENCE N67°37'35"E ALONG THE NORTH LINE OF SAID LOT 1, 461.72 FEET TO A POINT ON THE SE CORNER OF A PARCEL AS RECORDED IN A PLAT OF SURVEY DATED 04-19-1963 AND RECORDED IN BOOK 7 ON PAGE 271 OF THE RECORDS OF THE DALLAS COUNTY RECORDER; THENCE N00°00'30"W ALONG THE EAST LINE OF SAID PARCEL, 189.21 FEET TO A POINT ON THE NORTH LINE OF THE NE1/4 OF SAID SECTION 8; THENCE N00°35'21"E ALONG THE EAST LINE OF SAID PARCEL, 60.00 FEET TO A POINT ON THE NE CORNER OF SAID PARCEL; THENCE S67°15'15"E ALONG THE SOUTH LINE OF PAINTED WOODS, A SUBDIVISION IN AND FORMING A PART OF THE CITY OF WAUKEE, DALLAS COUNTY, IOWA, 122.00 FEET TO A POINT; THENCE S37°21'35"W ALONG SAID SOUTH LINE, 97.06 FEET TO A POINT; THENCE N85°59'28"E ALONG SAID SOUTH LINE, 507.63 FEET TO A POINT; THENCE S00°00'00"W ALONG SAID SOUTH LINE, 114.52 FEET TO A POINT, THENCE N88°25'10"E ALONG SAID SOUTH LINE, 136.32 FEET TO A POINT; THENCE N54°51'41"E ALONG SAID SOUTH LINE, 138.56 FEET TO A POINT; THENCE N86°38'59"E ALONG SAID SOUTH LINE, 154.68 FEET TO A POINT; THENCE N48°14'53"E ALONG SAID SOUTH LINE, 172.61 FEET TO A POINT; THENCE N09°25'23"E ALONG SAID SOUTH LINE, 120.20 FEET TO A POINT; THENCE N74°25'28"E ALONG SAID SOUTH LINE, 234.14 FEET TO A POINT ON THE SE CORNER OF SAID SUBDIVISION, SAID POINT ALSO BEING ON THE WEST LINE OF A REPLAT OF OAKWOOD ESTATES, AN OFFICIAL PLAT LOCATED IN SAID SECTION 8; THENCE S25°54'34"E ALONG SAID WEST LINE OF, 34.81 FEET TO A POINT; THENCE S85°55'28"E ALONG SAID WEST LINE OF, 84.79 FEET TO A POINT; THENCE S30°24'28"E ALONG SAID WEST LINE, 156.37 FEET TO A POINT; THENCE S36°24'28"E ALONG SAID WEST LINE, 268.06 FEET TO A POINT; THENCE S23°16'01"E ALONG SAID WEST LINE, 205.78 FEET TO A POINT; THENCE S24°00'03"E ALONG SAID WEST LINE, 203.32 FEET TO A POINT; THENCE S21°08'00"E ALONG SAID WEST LINE, 178.21 FEET TO A POINT; THENCE S05°38'03"W ALONG SAID WEST LINE, 79.50 FEET TO A POINT; THENCE S44°23'33"E ALONG SAID WEST LINE, 48.98 FEET TO A POINT ON THE EAST LINE OF THE NW1/4 OF THE SE1/4 OF SAID SECTION 8, SAID POINT ALSO BEING THE SE CORNER OF SAID REPLAT OF OAKWOOD ESTATES; THENCE S00°52'52"W ALONG THE EAST LINE OF THE NW1/4 OF THE SE1/4 OF SAID SECTION 8, 319.57 FEET TO A POINT ON THE SE CORNER OF THE NW1/4 OF THE SE1/4 OF SAID SECTION 8, THENCE S83°34'56"W ALONG THE SOUTH LINE OF THE NW1/4 OF THE SE1/4 OF SAID SECTION 8, 1304.29 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS 57.19 ACRES, SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.



OWNER/DEVELOPER
PAINTED WOODS DEVELOPMENT COMPANY JOINT VENTURE
6151 THORNTON AVENUE
DES MOINES, IOWA 50321
(515) 331-2201 FAX (515) 331-2201 FAX

PREPARED BY
NILES ASSOCIATES, INC.
306 S. ANKENY BOULEVARD
ANKENY, IOWA 50021-3727
(515) 965-0123 OFFICE (515) 965-3322 FAX

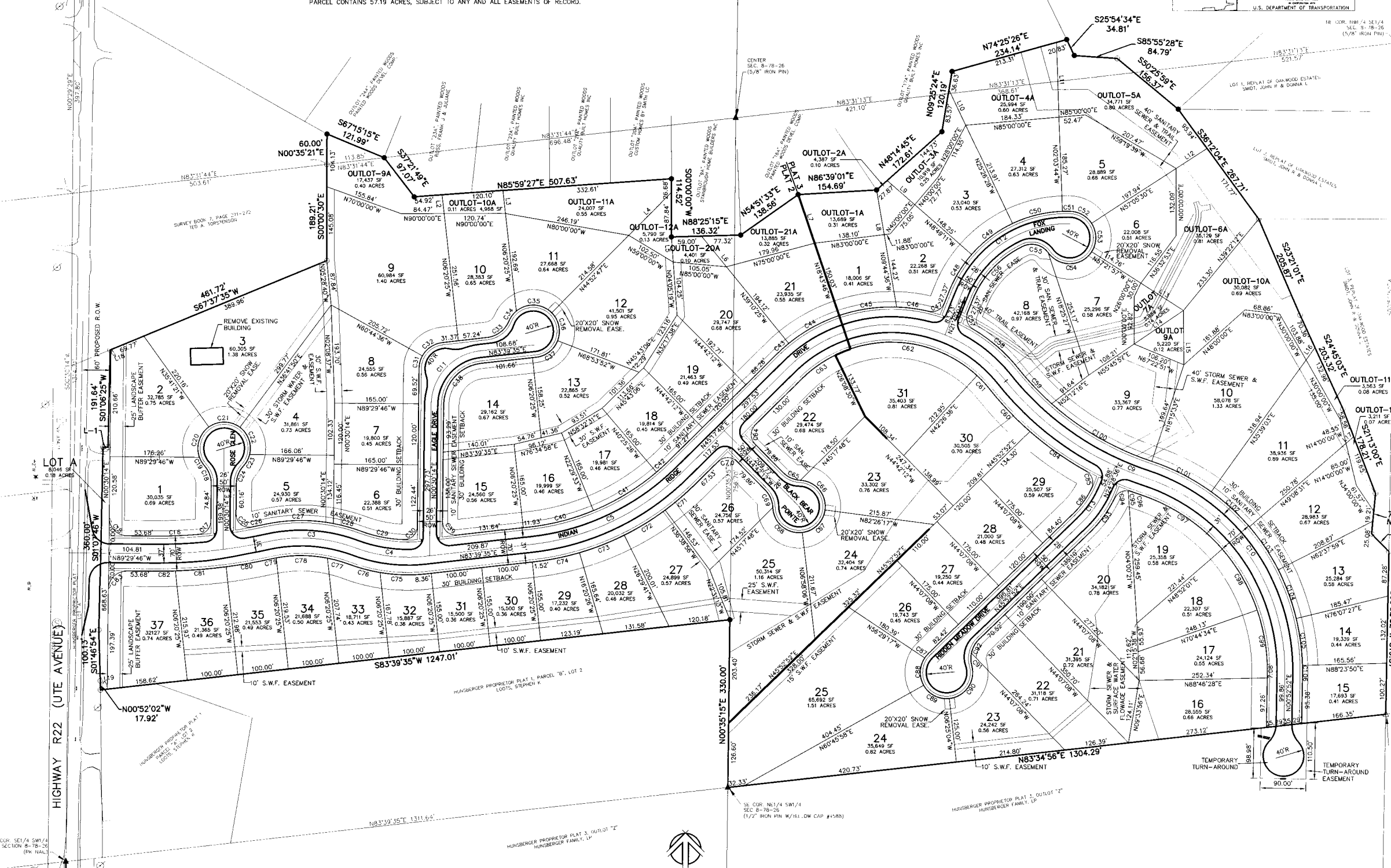
ZONING
R-1 (SINGLE FAMILY RESIDENTIAL)

BULK REGULATIONS
FRONT YARD SETBACK: 30 FEET
SIDE YARD SETBACK: 15 FEET
REAR YARD SETBACK: 35 FEET
* (ZERO SETBACK AGAINST PROPOSED OUTLOTS)
MAX. HEIGHT: 35 FEET
MAX. STORIES: 25 STORIES

FIRM INFORMATION
ZONES A AND X AS DELINEATED ON PLAT.
COMMUNITY PANEL NUMBER: 1904902250
EFFECTIVE DATE: JANUARY 19, 2000

NOTE
MOE = MINIMUM OPENING ELEVATION WITHOUT PROTECTION FROM FLOODING

NOTE
UTE AVENUE IS PLANNED TO BE WIDENED TO A BOULEVARD CROSS-SECTION IN THE FUTURE. STREET TREES SHALL BE REQUIRED ALONG UTE AVENUE AT THAT TIME.



LEGEND
EXISTING/PROPOSED

FOUND SEC. CORNER AS NOTED
SET SECTION CORNER
REAR W/CAP #2106
UNLESS NOTED OTHERWISE
FD, RIGHT-OF-WAY MONUMENT
AS NOTED
FOUND MONUMENT AS NOTED
SET MONUMENT
REAR W/CAP #2106
UNLESS NOTED OTHERWISE
ADDRESS
SUBJECT PROP. BOUNDARY LINE
SECTION LINE
PROPERTY LINE
CONTOUR ELEVATION
FLOWLINE SWALE
SPOT ELEVATION
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STORM SEWER AND SIZE
WATER MAIN AND SIZE
GAS MAIN
OVERHEAD WIRES
UNDERGROUND ELECTRIC CABLE
USE
UNDERGROUND TELEPHONE CABLE
CTV
UNDERGROUND CABLE TELEVISION
DRAIN TILE AND SIZE
SANITARY SEWER MANHOLE
SANITARY SEWER CLEANOUT
STORM SEWER MANHOLE
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UTILITY BOX AND TYPE
AIR-CONDITIONING UNIT
TRAFFIC SIGN
DIRECTIONAL SIGN
DECIDUOUS TREE
AND SIZE
CONIFEROUS TREE
AND SIZE
SHRUB

CURVE AND LINE TABLE
SEE SHEET 2/2

NILES ASSOCIATES, INC.
306 S. ANKENY BLVD., ANKENY, IOWA 50021
(515) 965-0123 FAX (515) 965-3322
Civil Engineering and Land Surveying

PAINTED WOODS PLATS 2 AND 3
WAUKEE, IOWA

PRELIMINARY PLAT - DIMENSION PLAN

NOTES:
1. NILES ASSOCIATES, INC. HAS BEEN RETAINED BY THE DEVELOPER TO PREPARE THIS PRELIMINARY PLAT FOR THE CITY OF WAUKEE, IOWA. THE CITY OF WAUKEE, IOWA, IS THE OWNER OF THE LAND SHOWN HEREON. THE CITY OF WAUKEE, IOWA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE CITY OF WAUKEE, IOWA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE CITY OF WAUKEE, IOWA, IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON.

DATE: 04155
DATE: 12/14/2005
DRAWN BY: GMP
CHECKED BY: GMP
SCALE: AS NOTED
DWG. NO.:
SHEET NO.: 2/19

PAINTED WOODS PLATS 2 AND 3

CURVE TABLE					
CURVE	RADIUS	LENGTH	TANGENT	CHORD	CHORD BRG.
C1	1000.00'	136.74'	68.48'	136.64'	N86°35'12"E
C2	1000.00'	89.89'	44.98'	89.86'	N80°05'39"E
C3	300.00'	173.37'	89.18'	170.96'	N85°55'33"W
C4	300.00'	141.21'	71.94'	139.91'	S89°51'20"E
C5	500.00'	334.78'	173.94'	328.56'	N64°28'41"E
C6	285.00'	330.89'	186.93'	312.61'	S78°33'28"W
C7	285.00'	146.78'	75.05'	145.16'	N53°25'42"W
C8	600.00'	281.16'	143.21'	278.60'	S52°05'56"E
C9	600.00'	65.11'	32.59'	65.08'	S68°37'58"E
C10	400.00'	507.00'	293.95'	473.73'	N35°25'47"W
C11	107.17'	155.54'	95.07'	142.24'	S42°04'58"W
C12	225.00'	273.68'	156.65'	257.12'	S56°39'49"W
C13	200.00'	74.72'	37.80'	74.28'	N35°10'44"E
C14	200.00'	94.21'	48.00'	93.34'	S32°23'12"W
C15	35.00'	54.98'	35.00'	49.50'	S44°29'46"E
C16	965.00'	88.74'	44.40'	88.71'	N87°52'11"E
C17	25.00'	38.97'	22.80'	33.69'	N42°52'11"E
C18	52.00'	38.33'	20.08'	37.47'	N20°36'50"W
C19	52.00'	19.81'	10.03'	19.69'	S30°49'09"E
C20	52.00'	67.36'	39.34'	62.75'	S17°12'08"W
C21	52.00'	65.70'	38.05'	61.41'	N89°29'46"W
C22	52.00'	60.87'	34.47'	57.46'	N19°45'58"W
C23	52.00'	26.29'	13.43'	26.01'	N28°15'19"E
C24	52.00'	38.33'	20.08'	37.47'	S21°37'19"W
C25	205.00'	44.26'	30.56'	38.70'	S50°12'44"E
C26	965.00'	26.15'	13.08'	26.15'	N78°17'43"E
C27	335.00'	137.14'	69.55'	136.19'	S89°14'49"W
C28	335.00'	56.45'	28.29'	56.39'	N74°11'52"W
C29	285.00'	86.94'	43.86'	86.55'	N78°40'08"W
C30	25.00'	39.85'	25.59'	35.76'	N48°10'08"E
C31	52.00'	26.10'	13.33'	25.82'	N14°52'49"E
C32	52.00'	46.37'	26.73'	47.54'	N56°27'29"E
C33	52.00'	55.60'	30.79'	52.99'	N53°01'39"E
C34	52.00'	25.52'	13.02'	25.28'	N36°27'15"E

CURVE TABLE					
CURVE	RADIUS	LENGTH	TANGENT	CHORD	CHORD BRG.
C35	52.00'	76.57'	47.12'	69.84'	N87°18'13"W
C36	52.00'	60.10'	33.91'	56.81'	N12°00'32"W
C37	52.00'	56.78'	31.59'	54.00'	N52°22'51"E
C38	82.17'	119.25'	72.89'	109.08'	N42°04'54"E
C39	25.00'	42.28'	28.18'	37.40'	N47°55'06"W
C40	465.00'	131.09'	65.98'	130.65'	N75°35'01"E
C41	465.00'	145.53'	73.36'	144.94'	N58°32'31"E
C42	465.00'	34.73'	17.37'	34.72'	N47°26'11"E
C43	320.00'	30.88'	15.45'	30.87'	N48°03'42"E
C44	320.00'	114.18'	57.70'	113.58'	N61°02'64"E
C45	320.00'	115.16'	59.21'	114.54'	N81°14'48"E
C46	320.00'	64.76'	32.49'	64.65'	N82°18'46"W
C47	25.00'	35.63'	21.60'	32.69'	N62°39'05"E
C48	250.00'	84.48'	42.65'	84.08'	N31°29'56"E
C49	250.00'	102.01'	51.72'	101.30'	N52°52'10"E
C50	250.00'	102.01'	51.72'	101.30'	N76°14'54"E
C51	250.00'	15.58'	7.79'	15.58'	N89°43'24"E
C52	52.00'	50.45'	27.41'	48.49'	N60°41'59"W
C53	52.00'	59.48'	33.47'	56.29'	N00°08'14"W
C54	52.00'	101.28'	76.51'	86.01'	N88°25'51"E
C55	40.00'	55.81'	33.53'	51.39'	N75°44'41"W
C56	200.00'	148.23'	77.70'	144.86'	N43°03'01"E
C57	25.00'	35.63'	21.60'	32.69'	N19°00'56"W
C58	320.00'	118.26'	59.81'	117.59'	N49°15'42"W
C59	565.00'	96.89'	48.56'	96.77'	N43°53'13"W
C60	635.00'	113.20'	56.75'	113.05'	N43°46'52"W
C61	250.00'	38.76'	19.42'	38.72'	N43°06'56"W
C62	250.00'	299.26'	170.49'	281.71'	N81°50'57"W
C63	250.00'	80.99'	40.85'	80.64'	N54°24'39"E
C64	25.00'	39.27'	25.00'	35.36'	N00°17'48"E
C65	52.00'	38.33'	20.08'	37.47'	N65°49'16"W
C66	52.00'	85.77'	56.25'	76.37'	N39°41'19"W
C67	52.00'	68.49'	40.24'	63.65'	N45°17'48"E
C68	52.00'	85.77'	56.25'	76.37'	N49°43'05"W

CURVE TABLE					
CURVE	RADIUS	LENGTH	TANGENT	CHORD	CHORD BRG.
C69	52.00'	38.33'	20.08'	37.47'	N23°35'07"W
C70	25.00'	39.27'	25.00'	35.36'	N89°42'12"W
C71	535.00'	75.21'	37.67'	75.15'	N49°19'28"E
C72	535.00'	94.81'	47.53'	94.69'	N58°25'41"E
C73	535.00'	94.81'	47.53'	94.69'	N68°34'56"E
C74	535.00'	93.38'	46.81'	93.26'	N78°39'34"E
C75	535.00'	92.83'	46.71'	92.53'	N88°24'08"W
C76	335.00'	64.66'	32.53'	64.76'	N74°55'02"W
C77	265.00'	42.98'	21.54'	42.93'	N74°00'59"W
C78	265.00'	101.31'	51.28'	100.69'	N89°36'52"W
C79	265.00'	8.85'	4.43'	8.85'	N78°38'34"E
C80	1035.00'	91.39'	45.73'	91.36'	N80°02'55"E
C81	1035.00'	100.08'	50.08'	100.04'	N85°20'54"E
C82	1035.00'	43.09'	22.15'	43.09'	N89°18'41"E
C83	35.00'	54.98'	35.00'	49.50'	N45°30'14"E
C84	835.00'	136.18'	68.35'	135.92'	S55°01'55"E
C85	25.00'	37.91'	23.68'	34.38'	N17°44'05"W
C86	175.00'	61.62'	31.13'	61.30'	N35°47'37"E
C87	52.00'	11.23'	5.63'	11.20'	N39°41'48"E
C88	52.00'	56.95'	31.71'	54.14'	N02°38'20"E
C89	52.00'	60.97'	34.54'	57.54'	N62°49'33"W
C90	24.00'	89.82'	60.85'	79.08'	N34°35'58"E
C91	52.00'	24.25'	12.35'	24.04'	N02°01'16"W
C92	52.00'	31.35'	16.17'	30.87'	N28°36'40"W
C93	225.00'	81.16'	41.02'	80.72'	N35°32'53"E
C94	25.00'	32.05'	18.65'	29.90'	N61°56'26"W
C95	25.00'	5.00'	2.51'	5.00'	N75°36'00"W
C96	635.00'	20.78'	10.39'	20.77'	N70°48'13"W
C97	365.00'	194.90'	99.88'	192.68'	N56°20'13"W
C98	365.00'	139.36'	70.54'	138.51'	N30°11'42"W
C99	365.00'	128.29'	64.81'	127.63'	N09°11'17"W
C100	565.00'	329.18'	116.19'	327.62'	N60°07'13"W
C101	435.00'	132.04'	66.53'	131.53'	N63°02'42"W
C102	435.00'	102.43'	51.45'	102.19'	N47°36'13"W
C103	435.00'	102.43'	51.45'	102.19'	N34°06'45"W
C104	435.00'	102.43'	51.45'	102.19'	N20°37'17"W
C105	435.00'	93.18'	46.77'	93.00'	N07°44'21"W
C106	435.00'	18.86'	9.43'	18.86'	N00°21'39"W

LINE TABLE		
LINE	LENGTH	BEARING
L1	10.00'	N88°52'14"W
L2	37.18'	N06°20'25"W
L3	45.63'	N06°20'25"W
L4	118.49'	N44°52'47"E
L5	49.75'	N04°05'19"W
L6	77.92'	N39°10'25"W
L7	101.06'	N18°43'40"W
L8	89.21'	N09°44'40"W
L9	72.20'	N48°49'11"W
L10	77.14'	N25°26'28"W
L11	147.10'	N02°03'44"W
L12	72.71'	N57°05'30"E
L13	99.64'	N57°21'57"W
L14	117.41'	N55°45'57"E
L15	106.90'	N00°31'11"W
L16	30.00'	N35°39'03"E
L17	19.97'	N49°08'31"E
L18	1.98'	N67°39'12"E
L19	13.45'	N83°39'50"E

PROJECT NAME

PAINTED WOODS

PURPOSE OF LAND DISTURBING ACTIVITY

CONSTRUCTION OF SINGLE FAMILY RESIDENTIAL PROJECT

DEVELOPER

PAINTED WOODS DEVELOPMENT COMPANY JOINT VENTURE
6151 THORNTON AVE., SUITE 700
DES MOINES, IOWA 50321
(515) 331-2200

SITE DESCRIPTION

SITE AREA: 57 ACRES

AREA BEING DISTURBED: 37 AC

NUMBER OF POINT DISCHARGES: 4

RECEIVING WATERS: SUGAR CREEK
SUGAR CREEK IS LOCATED AT THE EASTERN
BOUNDARY OF THIS SITE.

STABILIZATION MEASURES

NOTE: UNDER IOWA'S GENERAL PERMIT NO. 2, DISTURBED AREAS OF CONSTRUCTION SITE THAT WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE MUST INITIATE STABILIZATION MEASURES BY THE 14TH DAY AFTER THE LAST DISTURBANCE, EXCEPT AS PRECLUDED BY SNOW COVER. IN THE EVENT OF SNOW COVER, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

MEASURES TO BE USED AT THIS SITE:

TEMPORARY SEEDING
PERMANENT SEEDING AND PLANTING
MULCHING (1/2 - 2# TONS/ACRE)
SOIL STABILIZATION (FINAL HOMESITE CONSTRUCTION)
VEGETATIVE BUFFER STRIPS

STRUCTURAL CONTROL MEASURES

MEASURES TO BE USED AT THIS SITE:

SILT FENCES
DRAINAGE SWALES
STORM DRAIN INLET PROTECTION
ROCK OUTLET PROTECTION (AS SHOWN ON PLANS)

INSPECTION AND MAINTENANCE PLAN

1. QUALIFIED PERSONNEL (PROVIDED BY THE PERMITEE) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT REACHED "FINAL STABILIZATION" AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER.

2. AN INSPECTION AND MAINTENANCE CHECKLIST FOR EACH OF THE CONTROL MEASURES PROPOSED SITE SHOULD BE INCLUDED IN THE STORM WATER POLLUTION PREVENTION PLAN PRIOR TO STARTING CONSTRUCTION.

3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED, REPLACED, OR ADDED AS DICTATED BY SITE CONDITIONS. FOLLOW RECOMMENDED GUIDELINES FOR CONTROL MAINTENANCE OR REPLACEMENT.

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL DOWN SLOPE AND SIDE SLOPE PERIMETER CONTROLS BEFORE THE LAND DISTURBING ACTIVITY OCCURS.

2. COMMENCE INITIAL SITE GRADING. DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.

3. INSTALL INTERNAL SEDIMENT CONTROL MEASURES THAT WILL NOT BE DISTURBED BY IMMEDIATE UTILITY, PAVING, OR BUILDING CONSTRUCTION.

4. COMMENCE UTILITY AND PAVING CONSTRUCTION.

5. INSTALL REMAINING EROSION CONTROLS.

6. FOR HOMESITE CONSTRUCTION: REMOVE SEDIMENT CONTROLS ONLY AS NECESSARY FOR EACH BUILDING SITE.

7. INSTALL SITE LANDSCAPING AND SOO AT EARLIEST DATE ALLOWED BY SITE CONSTRUCTION. REPAIR ANY OFF-SITE SEDIMENT CONTROLS DISTURBED BY INDIVIDUAL HOME CONSTRUCTION.

8. REMOVE SEDIMENT CONTROLS AS FINAL STABILIZATION OF UPSTREAM AREAS OCCURS THROUGH SOODING OR ESTABLISHMENT LAWN AREAS BY SEEDING.

9. REMOVE PERIMETER CONTROLS UPON "FINAL STABILIZATION" OF ALL UPSTREAM AREAS.

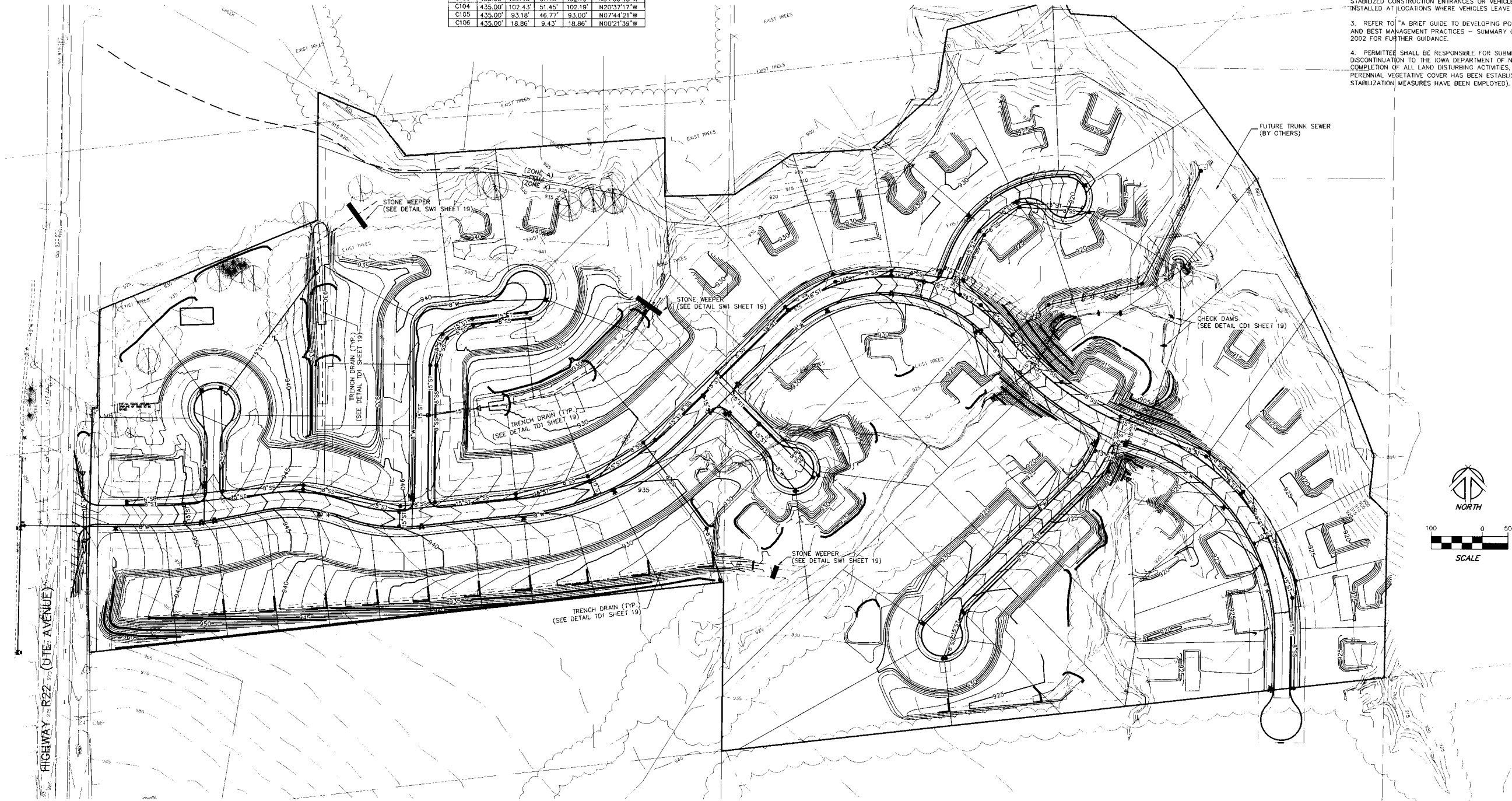
GENERAL NOTES

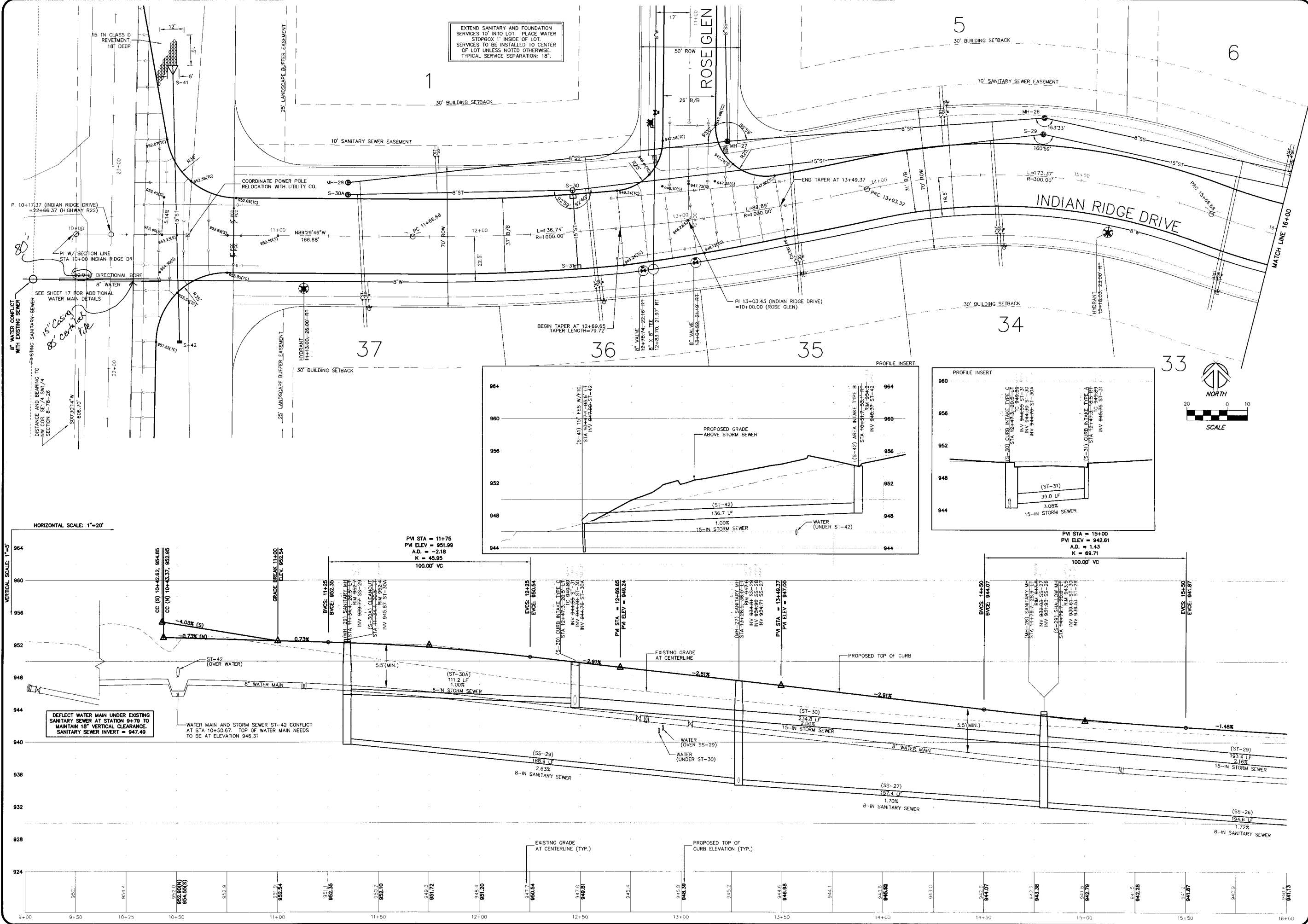
1. ALL CONTRACTORS SHALL FOLLOW THE STATE OF IOWA EROSION CONTROL LAW, AND SHALL ABIDE BY PROVISIONS AND GUIDELINES SET FORTH BY THE NPDES GENERAL PERMIT NO.2 ISSUED FOR THIS SITE.

2. ALL CONTRACTORS SHALL PREVENT OFF-SITE TRACKING OF SEDIMENTS. STABILIZED CONSTRUCTION ENTRANCES OR VEHICLE WASHING RACKS SHOULD BE INSTALLED AT LOCATIONS WHERE VEHICLES LEAVE THE SITE.

3. REFER TO "A BRIEF GUIDE TO DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES - SUMMARY GUIDANCE", DATED OCTOBER 2002 FOR FURTHER GUIDANCE.

4. PERMITTEE SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE OF DISCONTINUATION TO THE IOWA DEPARTMENT OF NATURAL RESOURCES, UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES, AND AFTER A UNIFORM PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED (OR EQUIVALENT STABILIZATION) MEASURES HAVE BEEN EMPLOYED).





EXTEND SANITARY AND FOUNDATION SERVICES 10' INTO LOT. PLACE WATER STOPBOX 1' INSIDE OF LOT. SERVICES TO BE INSTALLED TO CENTER OF LOT UNLESS NOTED OTHERWISE. TYPICAL SERVICE SEPARATION: 18".

HORIZONTAL SCALE: 1"=20'

VERTICAL SCALE: 1"=5'

DEFLECT WATER MAIN UNDER EXISTING SANITARY SEWER AT STATION 9+79 TO MAINTAIN 18" VERTICAL CLEARANCE. SANITARY SEWER INVERT = 947.49

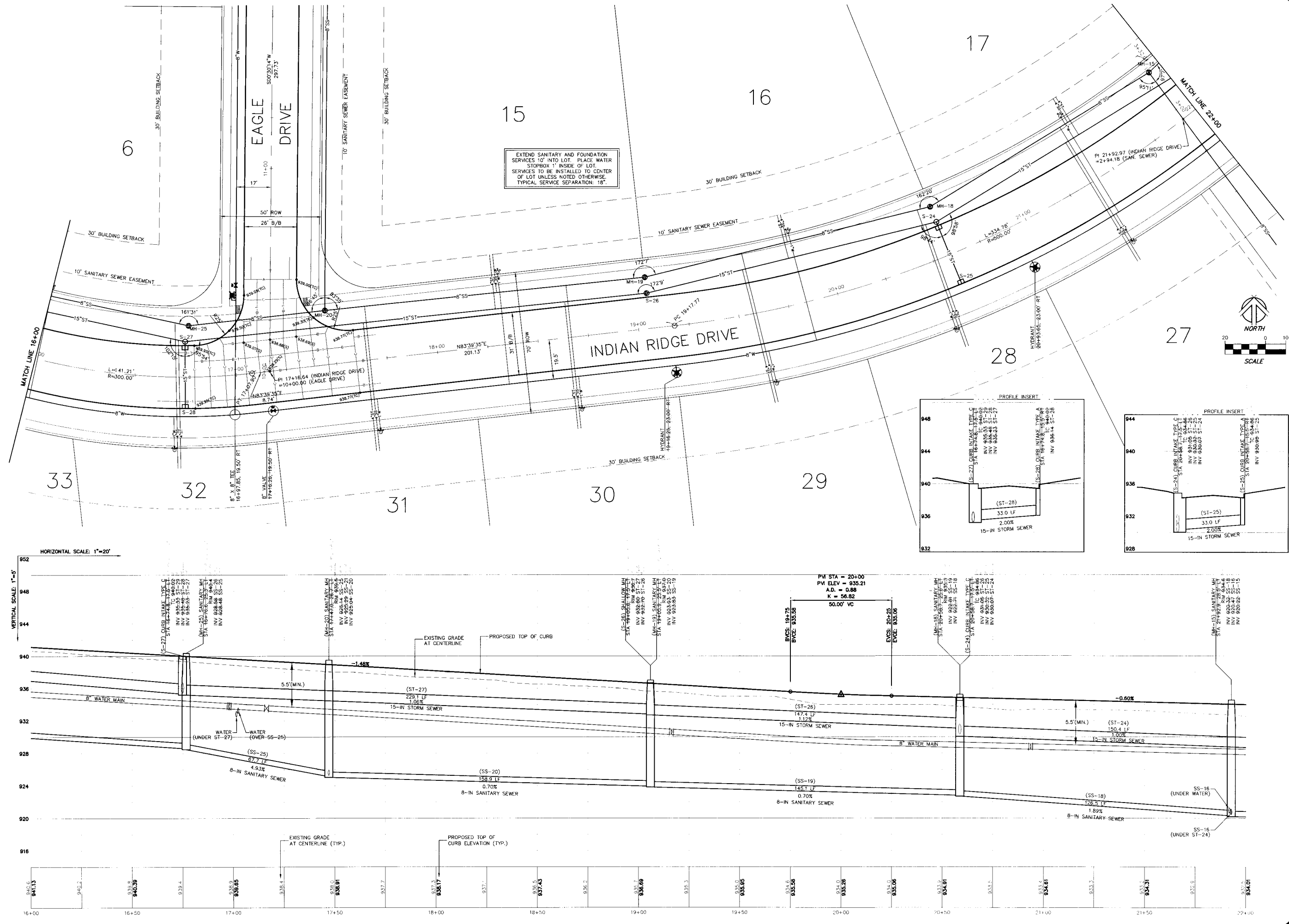
WATER MAIN AND STORM SEWER ST-42 CONFLICT AT STA 10+50.67. TOP OF WATER MAIN NEEDS TO BE AT ELEVATION 946.31

NILLES ASSOCIATES, INC.
308 S. ANKENY BLVD., ANKENY, IOWA 50021
(515) 965-0123 FAX (515) 965-3322
Civil Engineering and Land Surveying

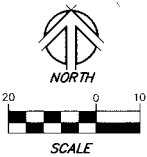
PAINTED WOODS 2 & 3
WALKEE, IOWA

INDIAN RIDGE DRIVE, STATION 10+00 TO 16+00

PROJECT: 04155
DATE: 12/14/05
DRAWN BY: JNK
CHECKED BY: GMP
SCALE: AS NOTED
DWG No.:
SHEET No.: 4/19

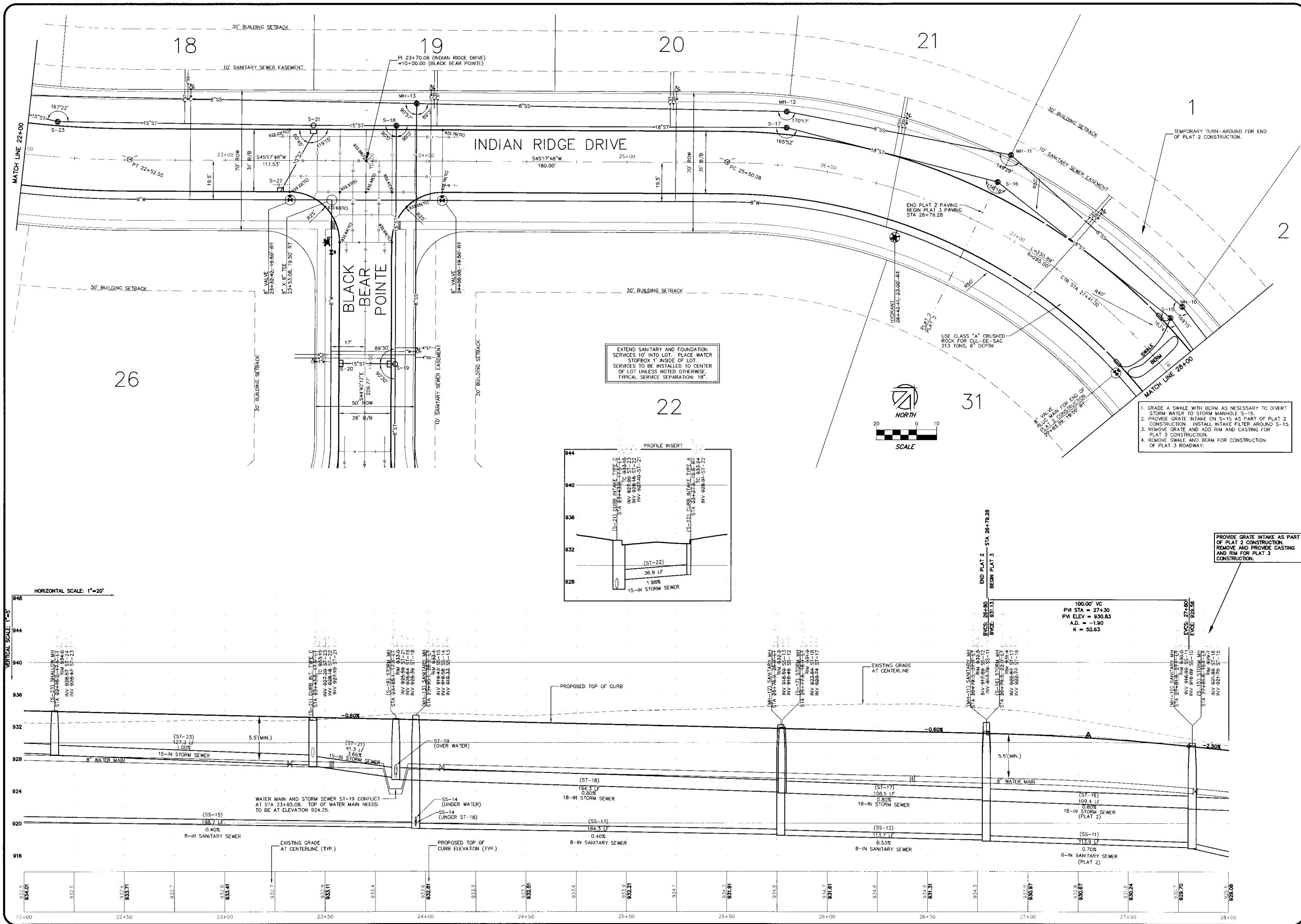


EXTEND SANITARY AND FOUNDATION SERVICES 10' INTO LOT. PLACE WATER STOPBOX 1' INSIDE OF LOT. SERVICES TO BE INSTALLED TO CENTER OF LOT UNLESS NOTED OTHERWISE. TYPICAL SERVICE SEPARATION: 18".



NOTES: 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND THE IOWA DEPARTMENT OF PUBLIC SAFETY STANDARD SPECIFICATIONS FOR TRAILERS AND TRAILER TRAILERS. 2. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE EXISTING CONDITIONS AND HAS FOUND THEM TO BE IN ACCORDANCE WITH THE INFORMATION PROVIDED BY THE CONTRACTOR. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR OBTAINING ALL NECESSARY INFORMATION FROM THE IOWA DEPARTMENT OF TRANSPORTATION AND THE IOWA DEPARTMENT OF PUBLIC SAFETY. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE IOWA DEPARTMENT OF TRANSPORTATION AND THE IOWA DEPARTMENT OF PUBLIC SAFETY. 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE IOWA DEPARTMENT OF TRANSPORTATION AND THE IOWA DEPARTMENT OF PUBLIC SAFETY.

REVISIONS
REV. NO. DATE BY
001 12/14/05 JMK
002 12/14/05 JMK
003 12/14/05 JMK
004 12/14/05 JMK
005 12/14/05 JMK
006 12/14/05 JMK
007 12/14/05 JMK
008 12/14/05 JMK
009 12/14/05 JMK
010 12/14/05 JMK



EXTEND SANITARY AND FOUNDATION SERVICES 10' INTO LOT. PLACE WATER STOPBOX 1' INSIDE OF LOT. SERVICES TO BE INSTALLED TO CENTER OF LOT UNLESS NOTED OTHERWISE. TYPICAL SERVICE SEPARATION: 18".

1. GRADE A SWALE WITH BERM AS NECESSARY TO DIVERT STORM WATER TO STORM MANHOLE S-15.
2. PROVIDE GRATE INTAKE ON S-15 AS PART OF PLAT 2 CONSTRUCTION. INSTALL INTAKE FILTER AROUND S-15.
3. REMOVE GRATE AND ADD RIM AND CASTING FOR PLAT 3 CONSTRUCTION.
4. REMOVE SWALE AND BERM FOR CONSTRUCTION OF PLAT 3 ROADWAY.

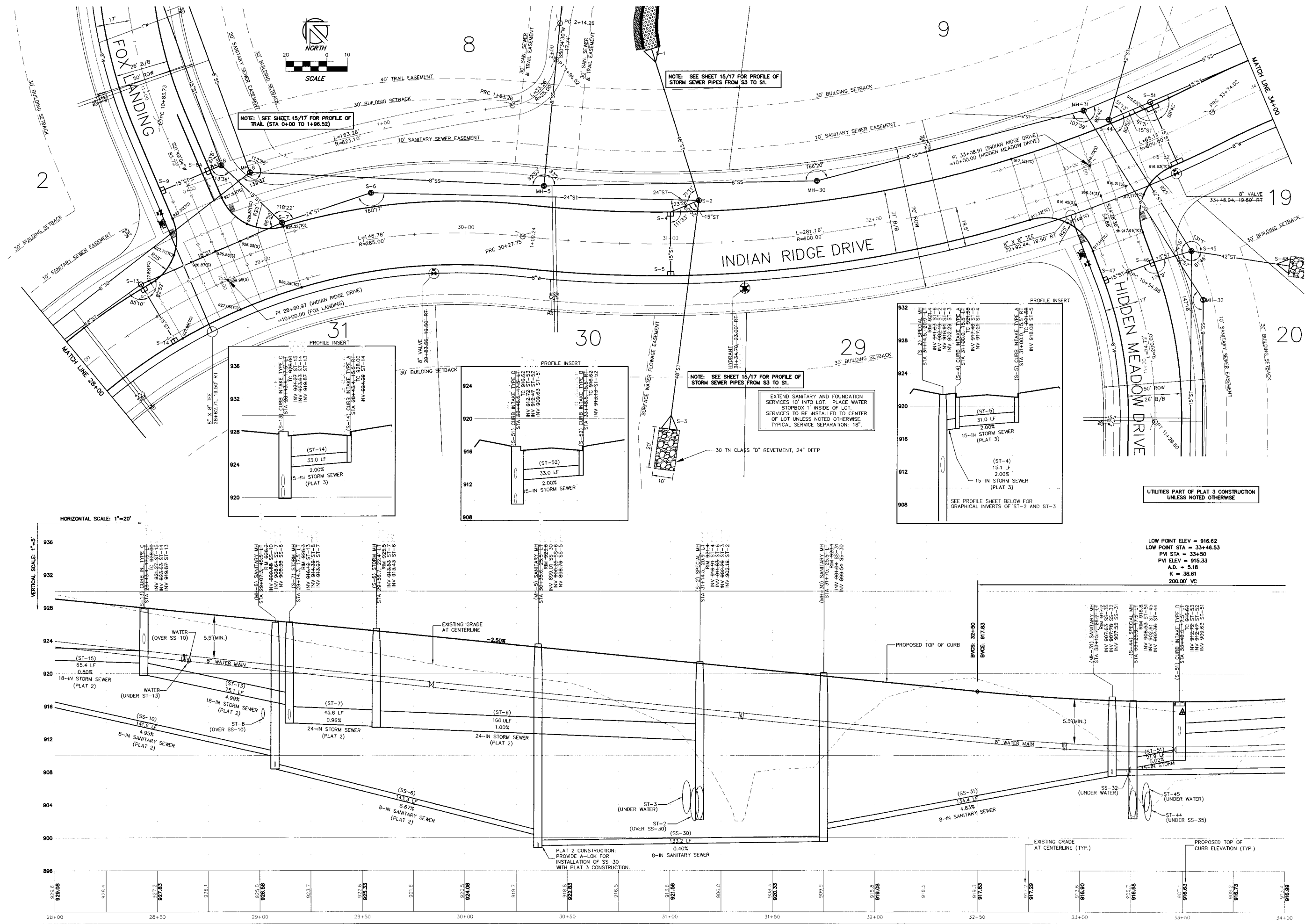
PROVIDE GRATE INTAKE AS PART OF PLAT 2 CONSTRUCTION. REMOVE AND PROVIDE CASTING AND RIM FOR PLAT 3 CONSTRUCTION.

NILES ASSOCIATES, INC.
300 N. WISCONSIN AVE., SUITE 200
WISCONSIN, WI 53081
(414) 965-0200 FAX (414) 965-3921
Civil Engineering and Land Surveying

PAINTED WOODS 2 & 3
WALKEE, IOWA

INDIAN RIDGE DRIVE, STATION 22+00 TO 28+00

PROJECT: 04155
DATE: 12/14/05
DRAWN BY: JKK
CHECKED BY: GMP
SCALE: AS NOTED
DWG No.: 6/19



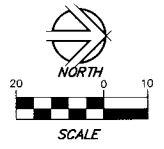
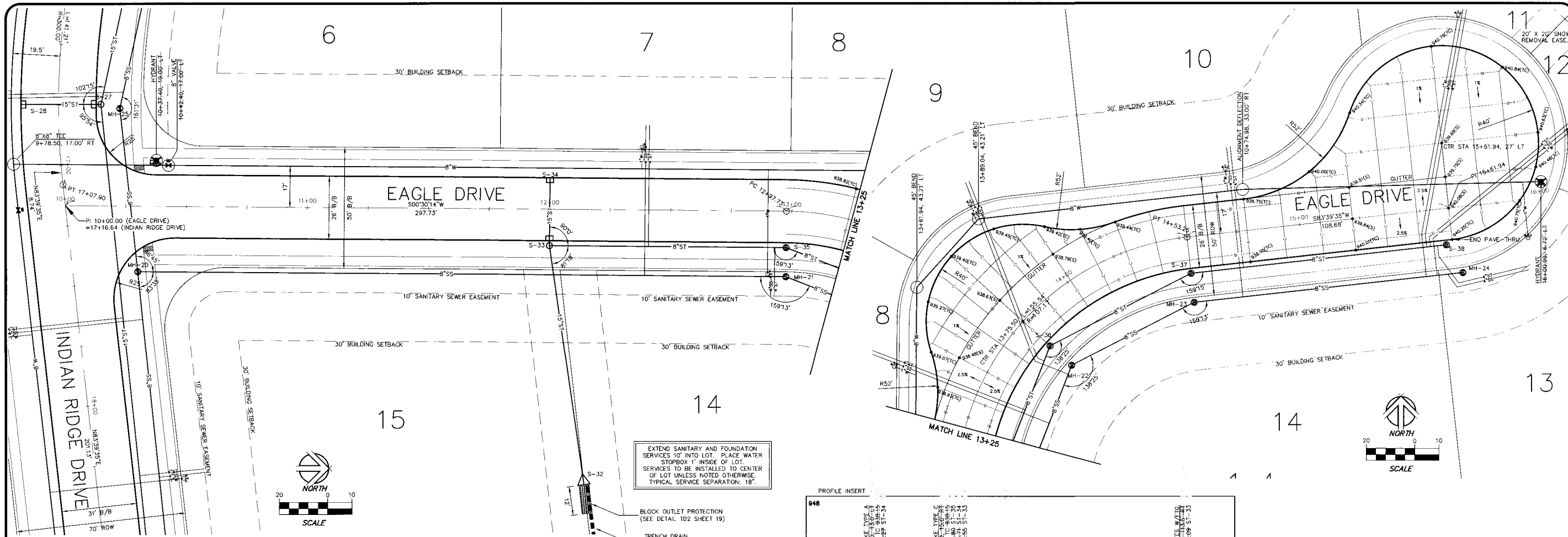
NILES ASSOCIATES, INC.
308 S. ANKENY BLVD., ANKENY, IOWA 50021
(515) 966-1111
Civil Engineering and Land Surveying

PAINTED WOODS 2 & 3
WAKEFEL, IOWA

INDIAN RIDGE DRIVE, STATION 28+00 TO 34+00

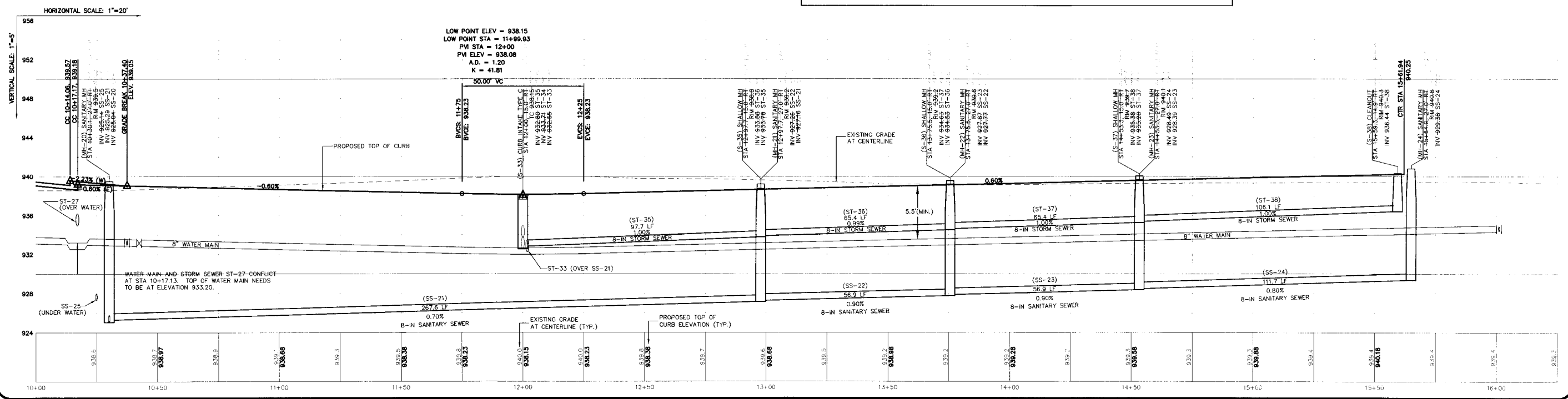
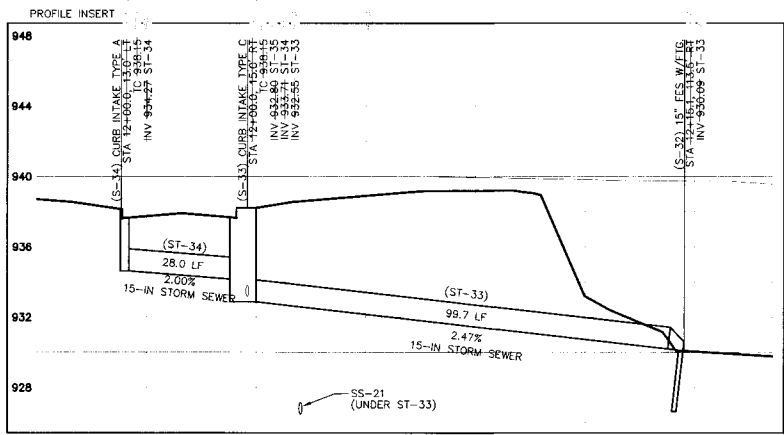
NOTES: NILES ASSOCIATES, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE ENGINEER'S RESPONSIBILITY IS TO PROVIDE A PROFESSIONAL OPINION BASED ON THE INFORMATION PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF ALL FIELD DATA. THE ENGINEER'S RESPONSIBILITY IS TO PROVIDE A PROFESSIONAL OPINION BASED ON THE INFORMATION PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF ALL FIELD DATA.

RECORD DRAWING
DATE: 12/14/05
DRAWN BY: JMK
CHECKED BY: GMP
SCALE: AS NOTED
DWG. NO.:
SHEET NO.: 7/19



EXTEND SANITARY AND FOUNDATION SERVICES 10' INTO LOT. PLACE WATER STOPBOX 1' INSIDE OF LOT. SERVICES TO BE INSTALLED TO CENTER OF LOT UNLESS NOTED OTHERWISE. TYPICAL SERVICE SEPARATION: 18".

BLOCK OUTLET PROTECTION (SEE DETAIL T02 SHEET 19)
TRENCH DRAIN (SEE DETAIL T01 SHEET 19)



NILLES ASSOCIATES, INC.
305 S. ANKENY BLVD., ANKENY, IOWA 50021
Civil Engineering and Land Surveying

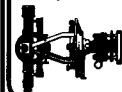
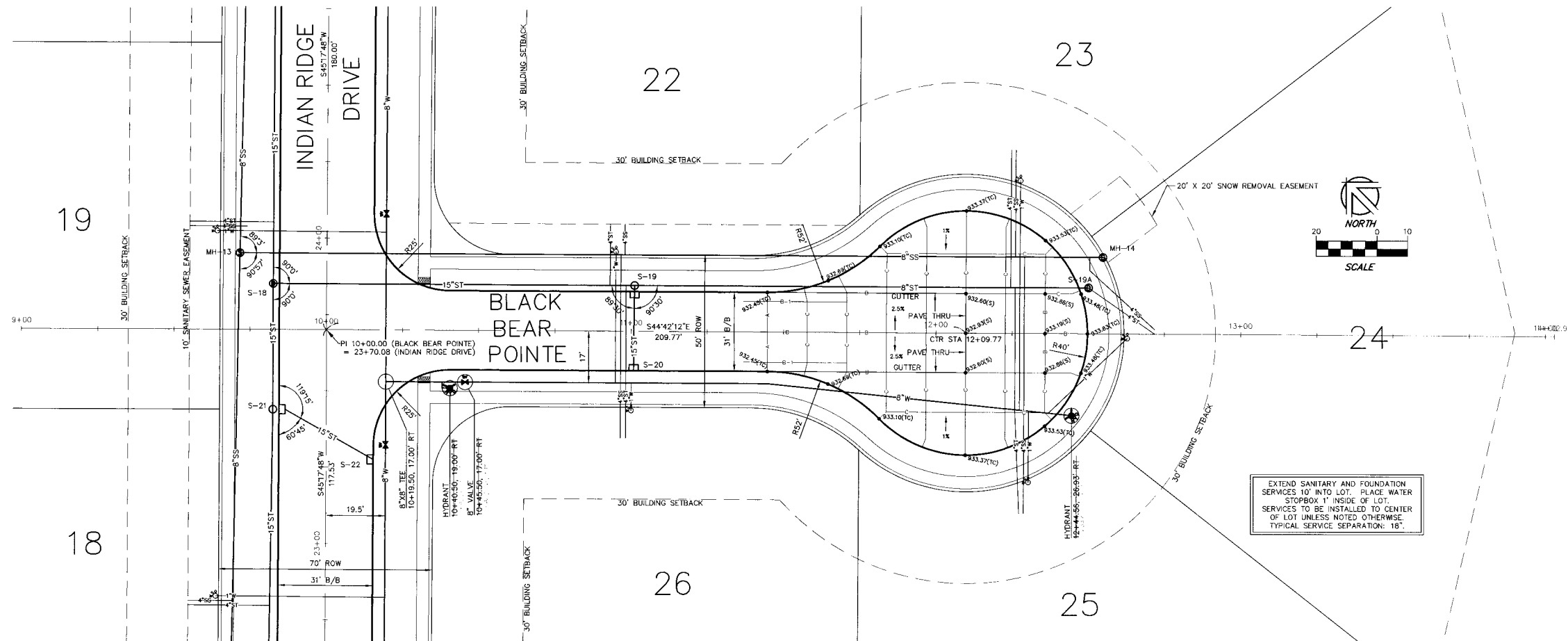
PAINTED WOODS 2 & 3
WAUREE, IOWA

EAGLE DRIVE, STATION 10+00 TO 16+00

REVISIONS

NO. 04155
DATE: 12/14/05
DRAWN BY: JKK
CHECKED BY: GMP
SCALE: AS NOTED
SHEET NO. 10/19

NOTES:
1. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS FOUND NO EVIDENCE OF ANY OBSTACLES OR CONDITIONS THAT WOULD PREVENT THE PROPOSED CONSTRUCTION. THE DESIGNER HAS NOT CONDUCTED ANY SURVEYING OR ENGINEERING WORK IN THIS PROJECT AREA.
2. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS FOUND NO EVIDENCE OF ANY OBSTACLES OR CONDITIONS THAT WOULD PREVENT THE PROPOSED CONSTRUCTION. THE DESIGNER HAS NOT CONDUCTED ANY SURVEYING OR ENGINEERING WORK IN THIS PROJECT AREA.
3. THE DESIGNER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROJECT AREA AND HAS FOUND NO EVIDENCE OF ANY OBSTACLES OR CONDITIONS THAT WOULD PREVENT THE PROPOSED CONSTRUCTION. THE DESIGNER HAS NOT CONDUCTED ANY SURVEYING OR ENGINEERING WORK IN THIS PROJECT AREA.



NILLES ASSOCIATES, INC.
306 S. ANKENY BLVD. ANKENY, IOWA 50021
(515) 965-0123 FAX (515) 965-3322
Civil Engineering and Land Surveying

PAINTED WOODS 2 & 3

BLACK BEAR POINTE, STATION 10+00 TO 12+50

NOTICE: HILLES ASSOCIATES, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND THE ENGINEERING INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSIDERATE, AMBIGUOUS, OR CONTRADICTORY, WHICH ARE

DESIGN DRAWING

REVISIONS

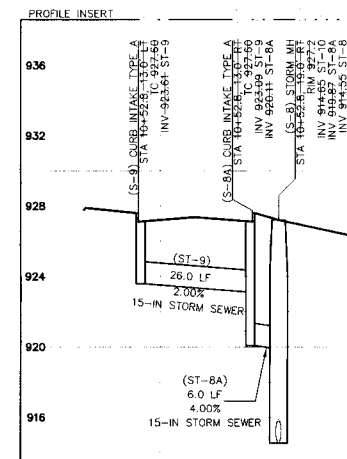
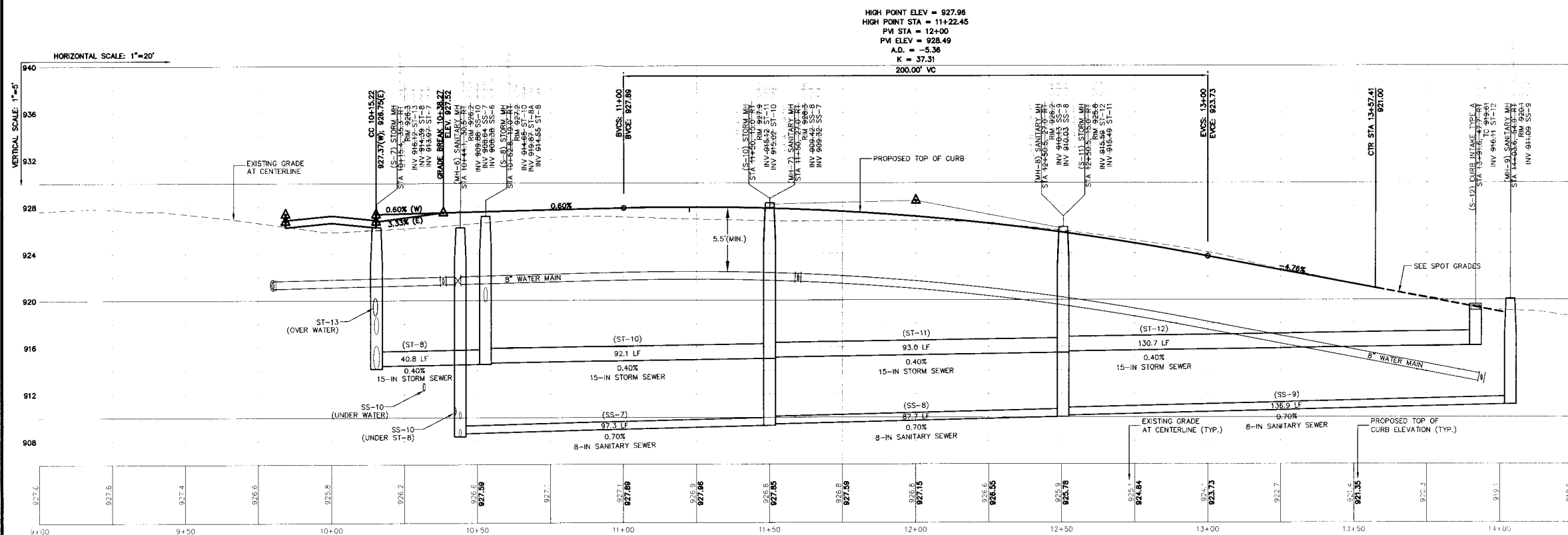
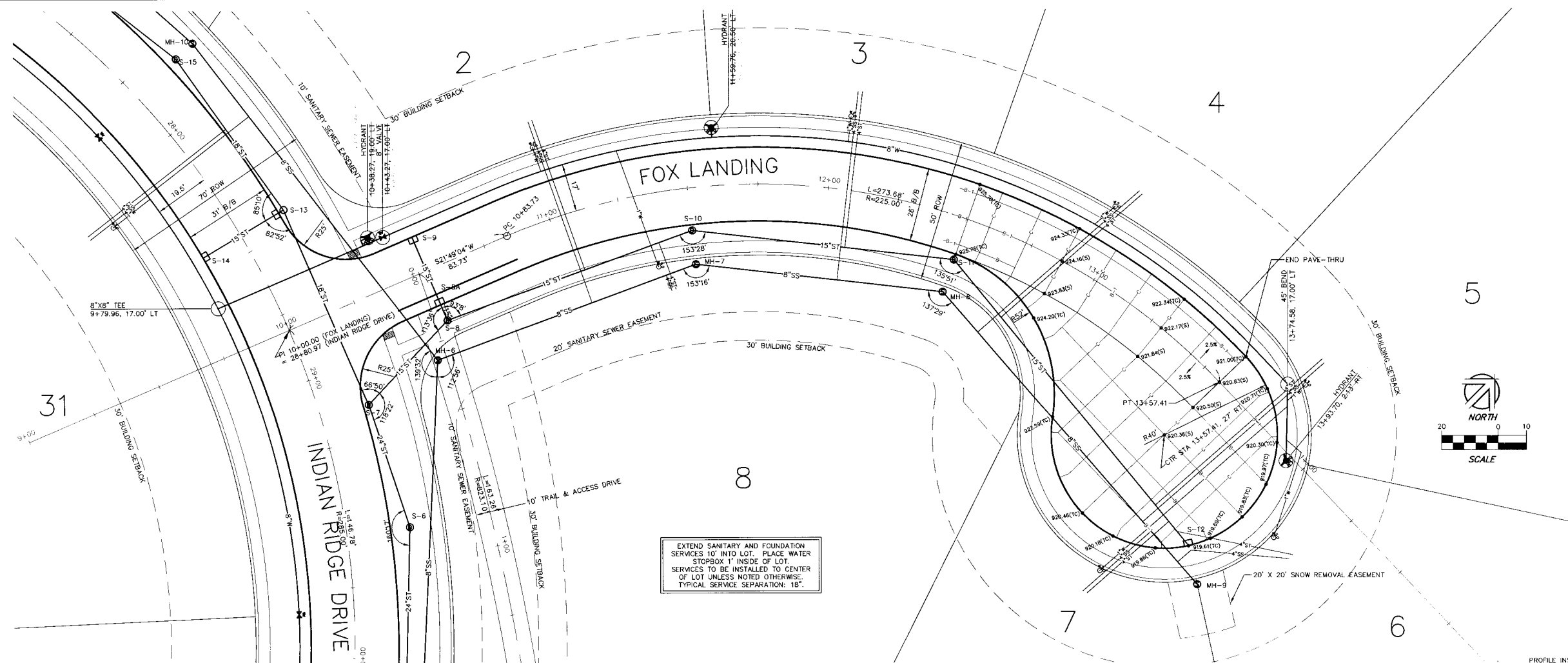
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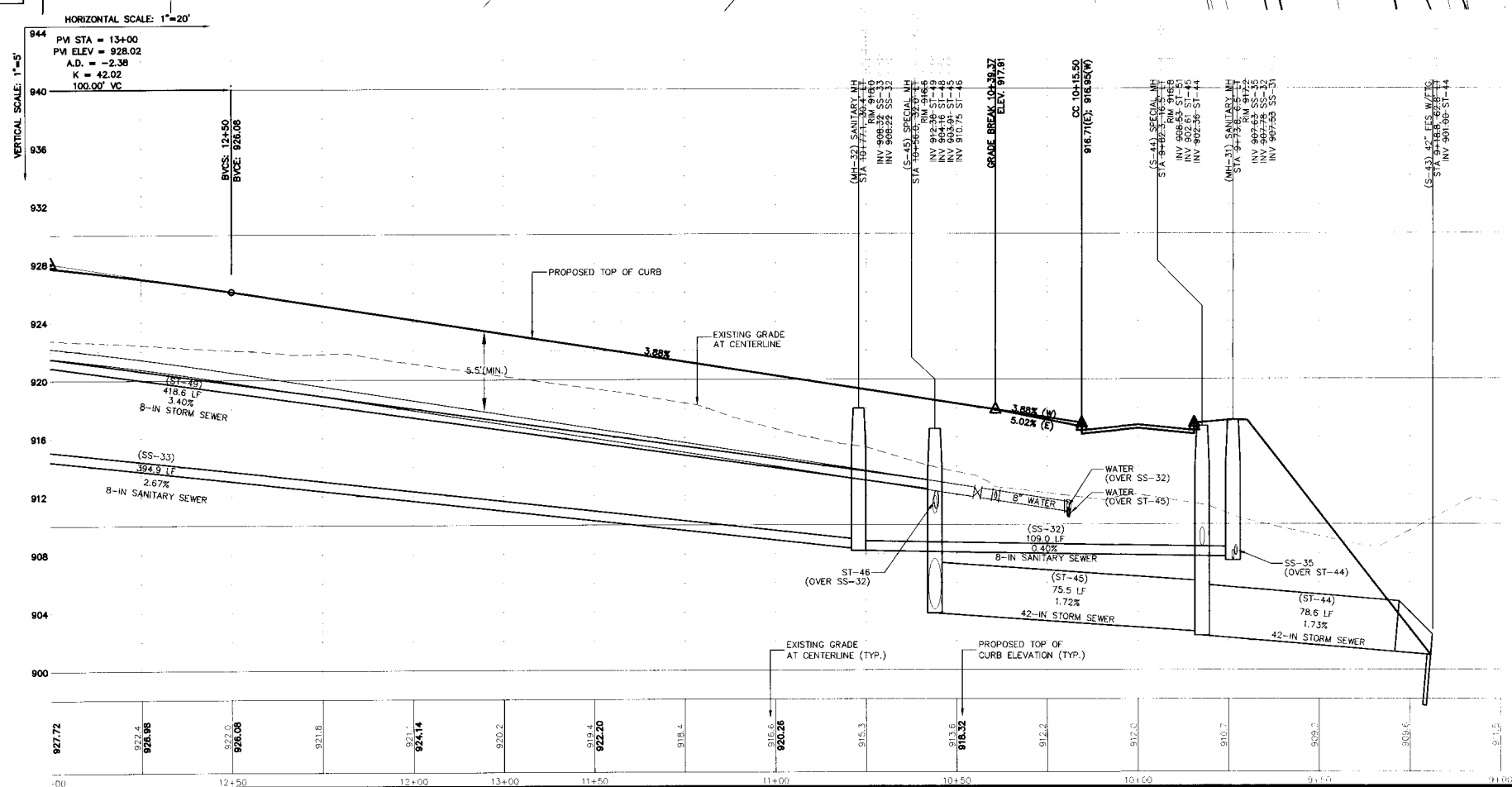
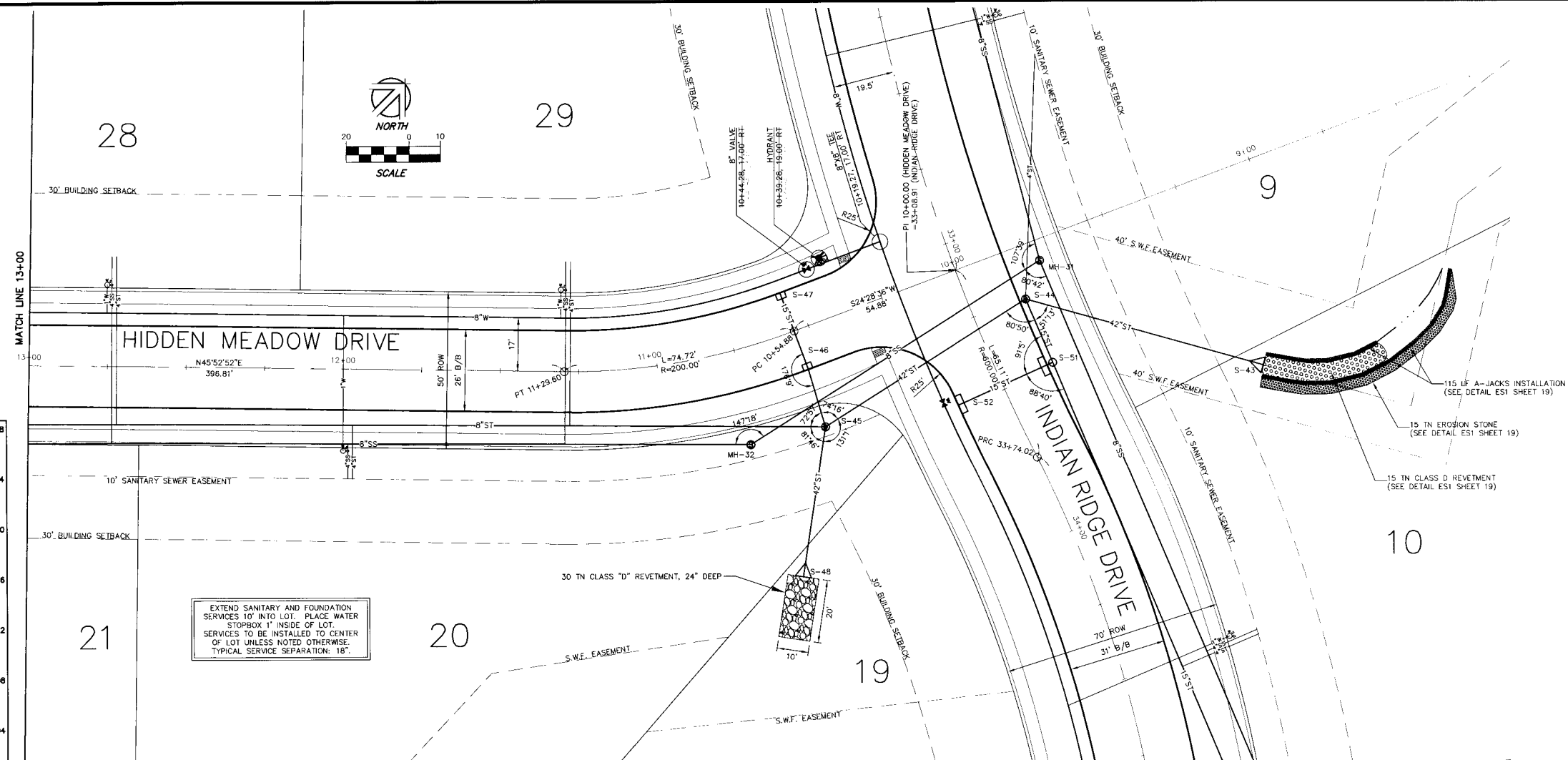
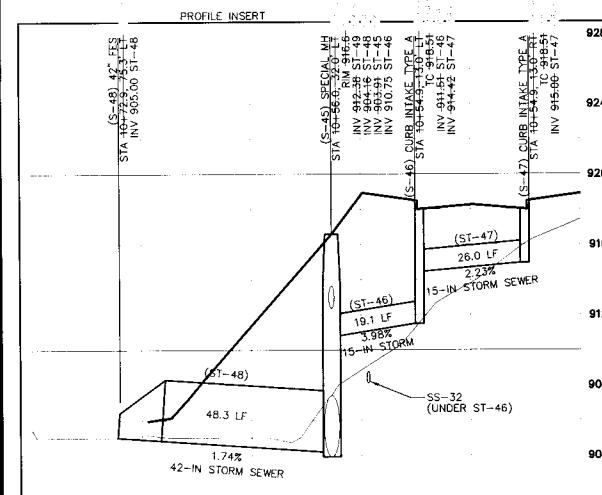
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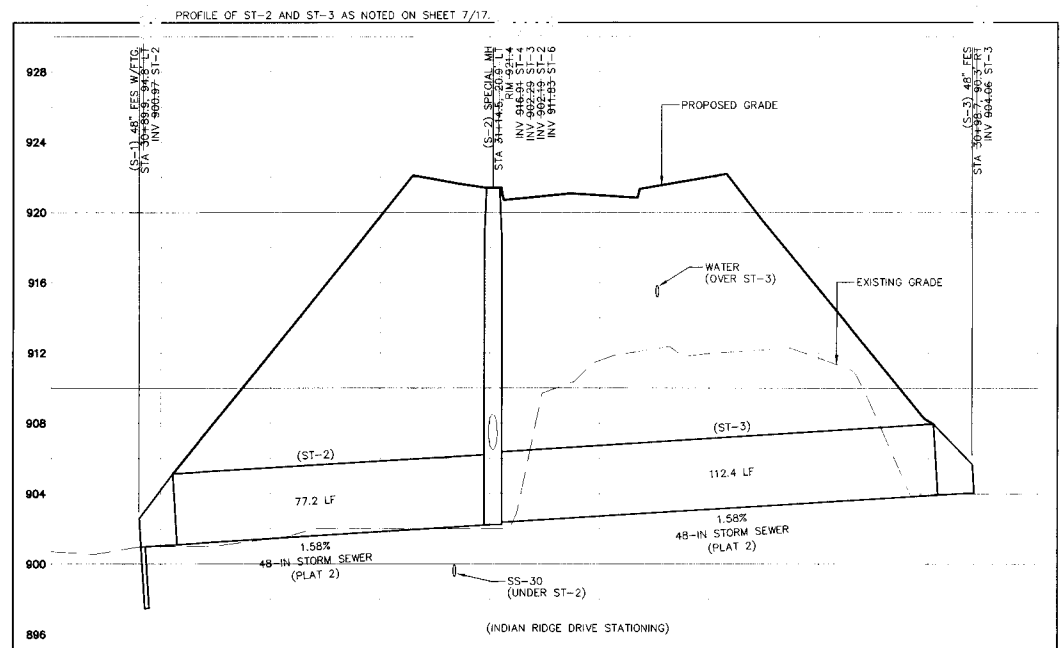
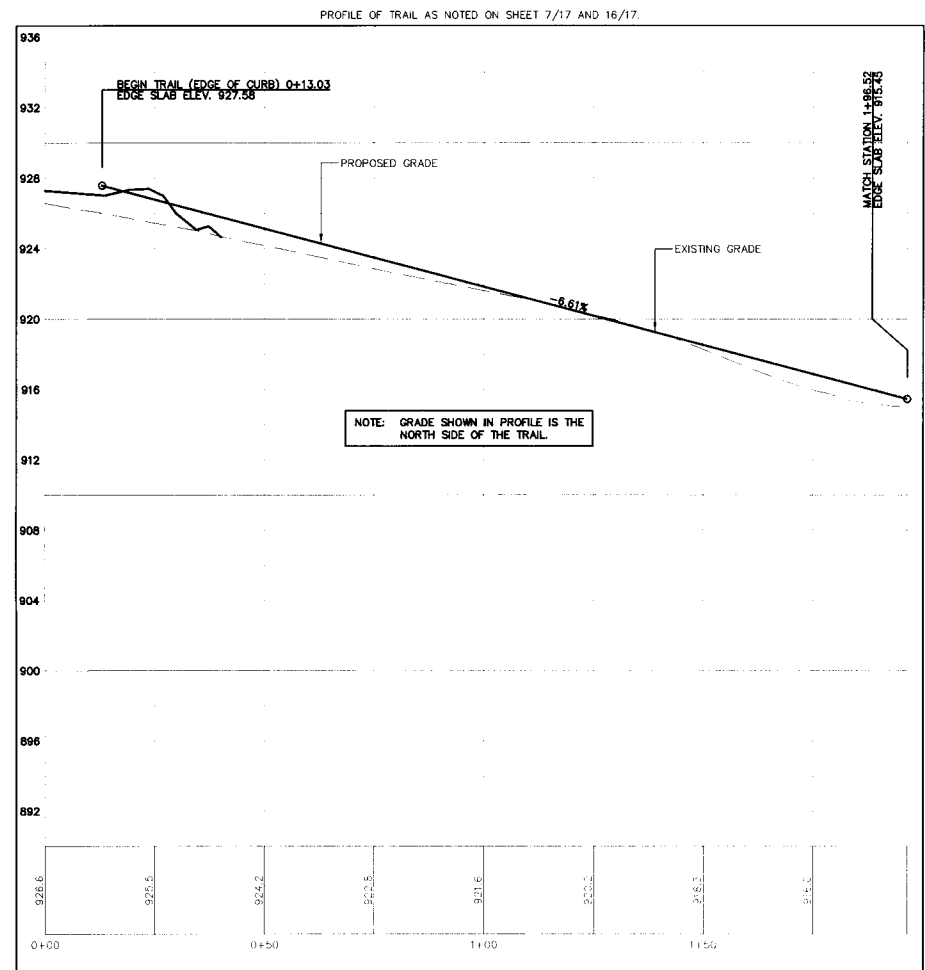
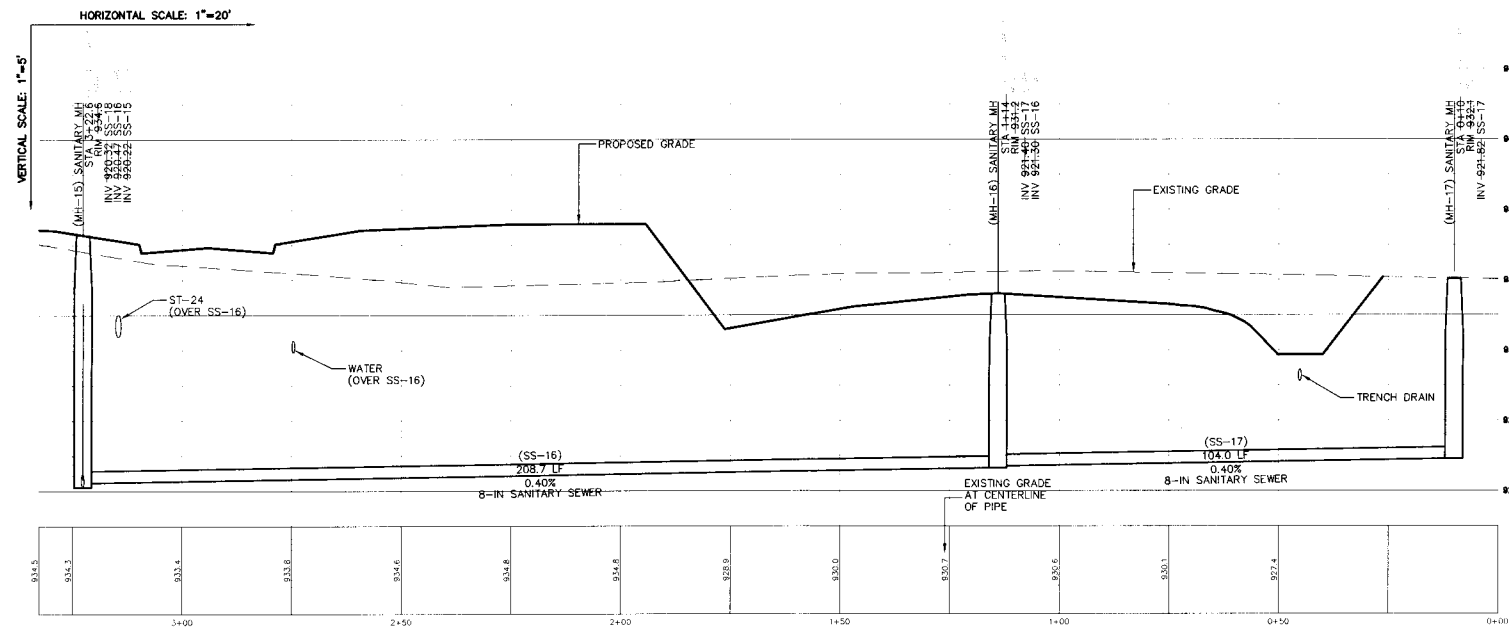
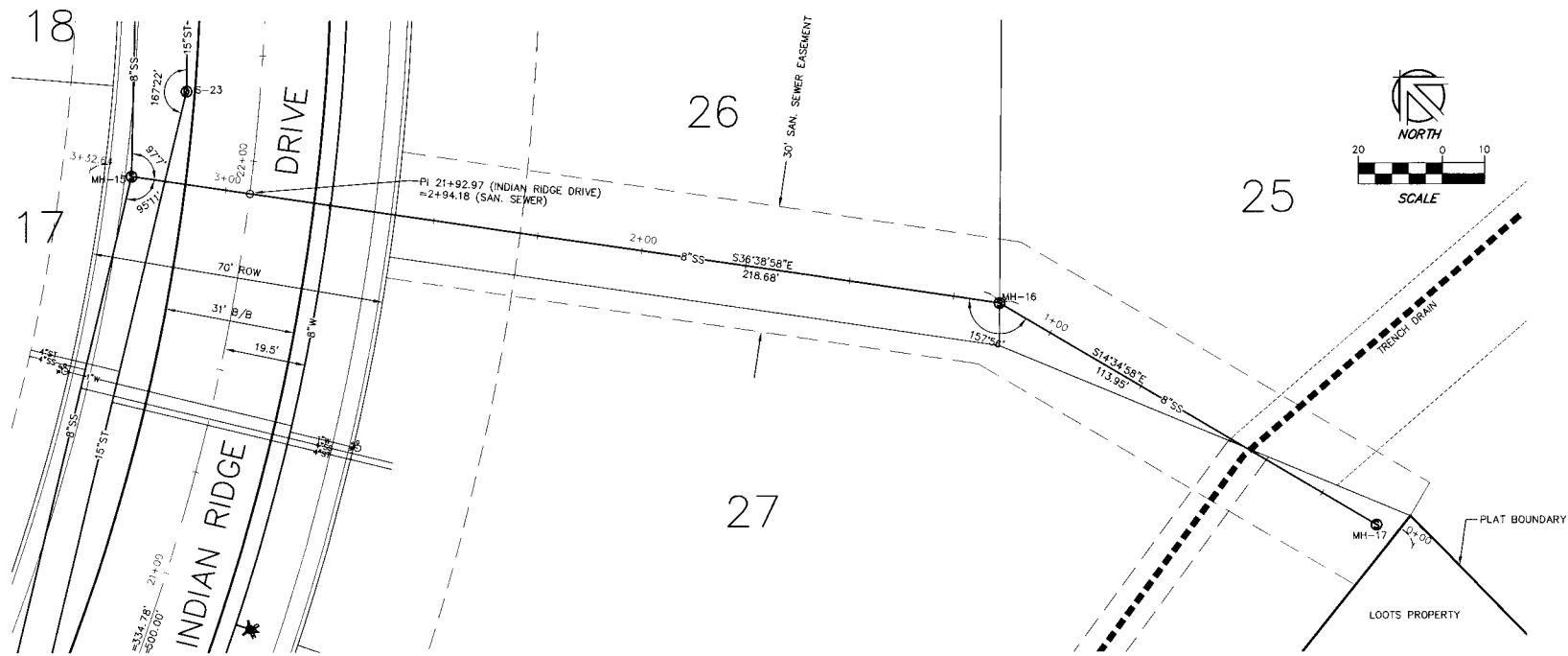
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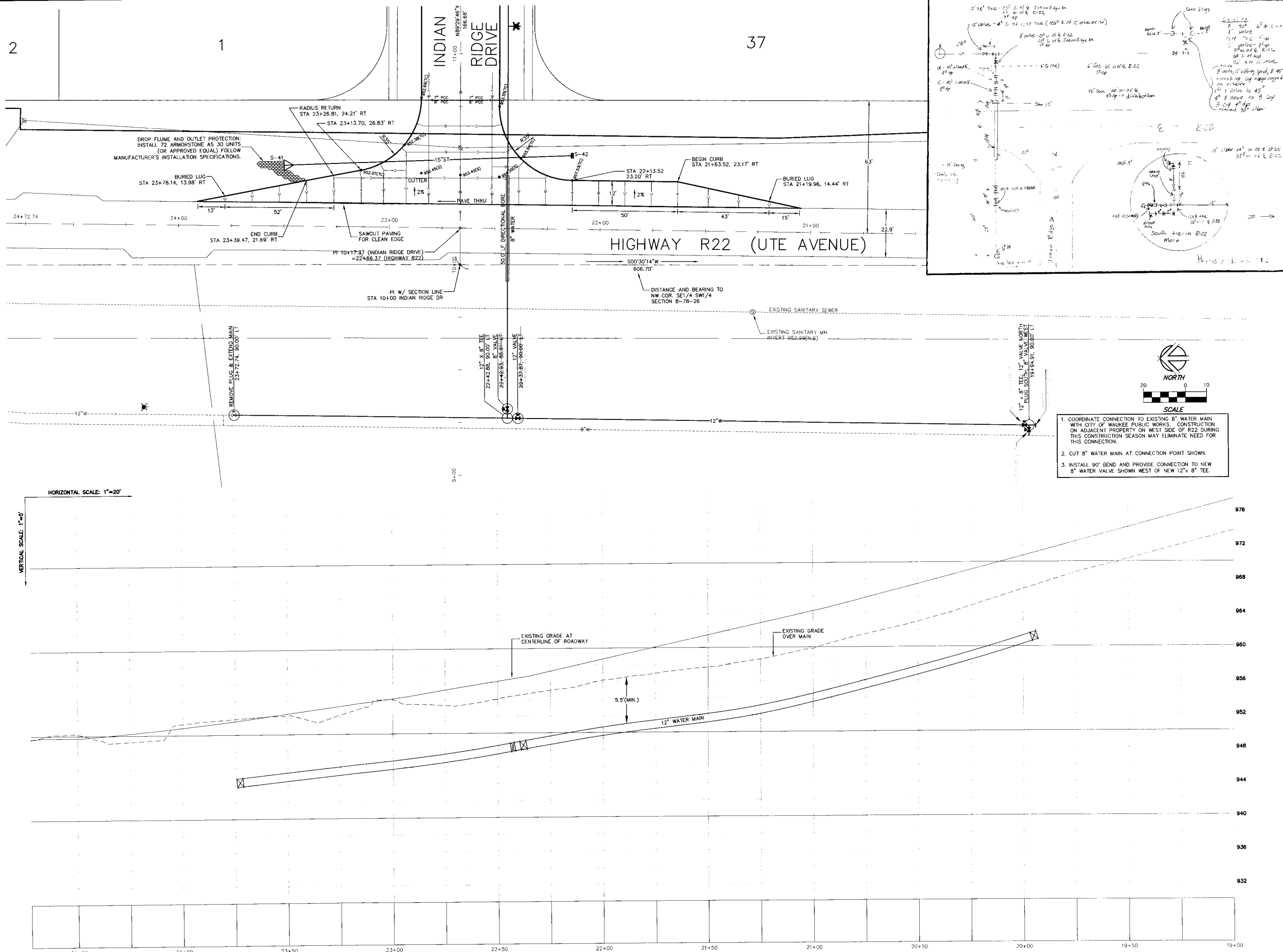
DWG No..

SHEET No. 11/18





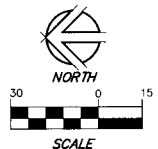
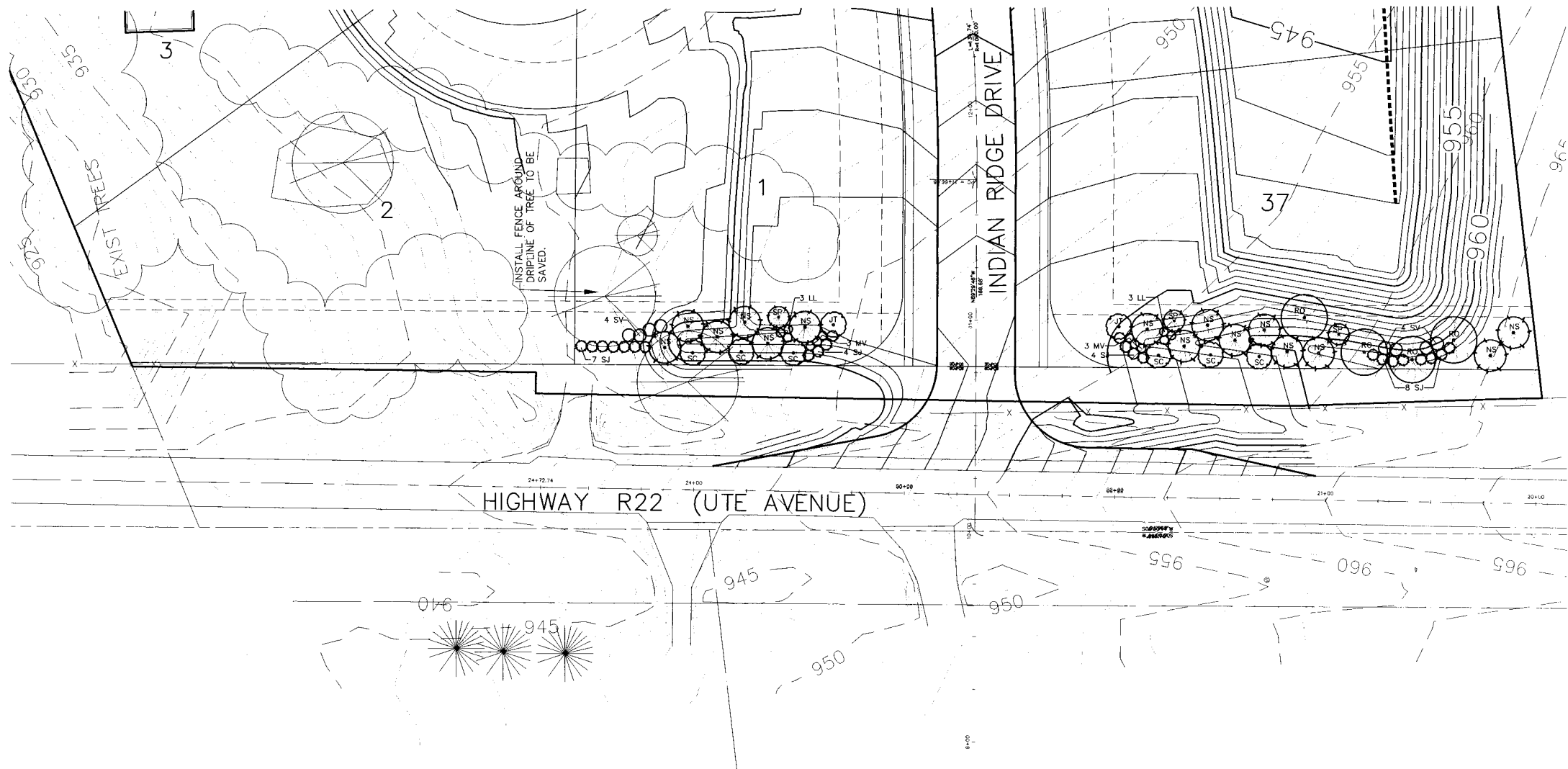




- COORDINATE CONNECTION TO EXISTING 6" WATER MAIN WITH CITY OF WAUKEE PUBLIC WORKS. CONSTRUCTION ON ADJACENT PROPERTY ON WEST SIDE OF R22 DURING THIS CONSTRUCTION SEASON MAY ELIMINATE NEED FOR THIS CONNECTION.
- CUT 8" WATER MAIN AT CONNECTION POINT SHOWN.
- INSTALL 90° BEND AND PROVIDE CONNECTION TO NEW 8" WATER VALVE SHOWN WEST OF NEW 12"x 8" TEE.

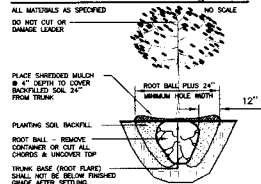
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DESIGN DRAWING
THESE DRAWINGS HAVE BEEN PREPARED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR OBTAINING ALL NECESSARY INFORMATION FROM THE CITY OF WAUKEE PUBLIC WORKS. THE USER OF THESE PLANS, SPECIFICATIONS, OR CONTRACT DOCUMENTS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE CITY OF WAUKEE PUBLIC WORKS.

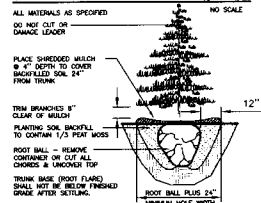


LANDSCAPE DETAILS

Deciduous Tree Planting Detail



Coniferous Tree Planting Detail



GENERAL LANDSCAPING NOTES:

1. ALL PLANT MATERIAL AND PLANTING SHALL BE IN ACCORDANCE WITH DIVISION 9 - SECTION 9030 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS MANUAL (SUDAS) OMITTING PARTS 2.08 AND 3.07 (TREE WRAPPING) AND SUBJECT TO THE FOLLOWING NOTES.
2. NO SUBSTITUTIONS IN SPECIES LISTED WILL BE ACCEPTED WITHOUT APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT. IF ANY UNAUTHORIZED SUBSTITUTIONS ARE MADE BY THE OWNER OR CONTRACTOR THE PROJECT LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE GROWTH OR PERFORMANCE OF THE PLANT MATERIAL.
3. PLANTINGS SHALL MEET THE MINIMUM SIZES LISTED UNLESS LARGER CALIPER OR HEIGHTS ARE APPROVED BY THE OWNER AND PROJECT LANDSCAPE ARCHITECT.
4. ALL NURSERY STOCK MUST MEET THE MINIMUM STANDARDS ESTABLISHED IN THE MOST RECENT EDITION OF THE 'AMERICAN STANDARDS FOR NURSERY STOCK' PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
5. LANDSCAPE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER AND/OR GENERAL CONTRACTOR TO ENSURE PLANT MATERIAL RECEIVES ADEQUATE WATERING FOR A MINIMUM OF 30 DAYS AFTER PLANTING AND CONTINUING UNTIL SELF-SUFFICIENT.
6. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE TIME OF INSTALLATION. SEE PLANTING DETAILS FOR ADDITIONAL PLANTING INSTRUCTION.
7. DECIDUOUS TREES IN EXCESS OF 2" CALIPER AND CONIFEROUS TREES IN EXCESS OF 6 FEET IN HEIGHT SHALL BE STAKED OR GUYED. STAKING PROCEDURE SHALL ENSURE TRUNKS ARE PROTECTED FROM DAMAGE. STRAPS OR WIRES SHALL NOT BE OVERLY TIGHTENED TO ALLOW FOR SOME LATERAL TRUNK MOVEMENT.
8. ALL DISTURBED AREAS NOT DESIGNATED FOR PLANTING BEDS OR SPECIALTY PLANTING AREAS SHALL BE SEEDED OR SODDED AS DIRECTED BY THE PLAN.
9. SODDING SHALL BE IN ACCORDANCE WITH DIVISION 9 - SECTION 9020 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS MANUAL (SUDAS).
10. SEEDING SHALL BE IN ACCORDANCE WITH DIVISION 9 - SECTION 9010 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS MANUAL (SUDAS) ADDING THAT A 1-2" LAYER OF BIOLOGICALLY FORMULATED COMPOST IS AN ACCEPTABLE ALTERNATIVE TO MULCH AS DESCRIBED IN PART 2.05.
11. ALL PLANTING BEDS DESIGNATED FOR MULCH INCLUDING AREAS AROUND TREES & SHRUBS) SHALL BE 3" DEPTH SHREDDED HARDWOOD - 4" DIAMETER (TREES) AND 2" DIAMETER (SHRUBS). A PRE-EMERGENT HERBICIDE SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE IMMEDIATELY AFTER MULCHING.

TREE & SHRUB PLANTING SCHEDULE

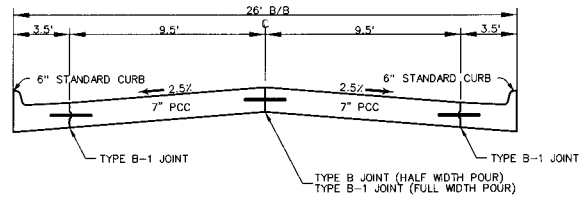
Key	Common / Scientific name	Minimum Size	No.	Root/Comment
RO	Red Oak <i>Quercus rubra</i>	2" cal.	4	B & B or SPADE
SC	Snowdrift Crabapple <i>Malus cv. 'Snowdrift'</i>	1 1/2" cal.	6	B & B or CONT.
JT	Japanese Tree Lilac <i>Syringa reticulata</i>	1 1/2" cal.	2	B & B or CONT.
LL	Common Lilac (Purple) <i>Syringa vulgaris</i>	3" ht.	6	CONT.
NS	Norway Spruce <i>Picea abies</i>	6" ht.	14	B & B or SPADE
SP	Swiss Stone Pine <i>Pinus cembra</i>	4" ht.	3	CONTAINER
SV	Autumn Brilliance Serviceberry <i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	4" ht.	8	CONTAINER
MV	Mohican Viburnum <i>Viburnum lentana 'Mohican'</i>	24" Ht.	6	CONTAINER
SJ	Sea Green Juniper <i>Juniperus chinensis 'Sea Green'</i>	18" Ht.	23	CONTAINER

CERTIFICATION

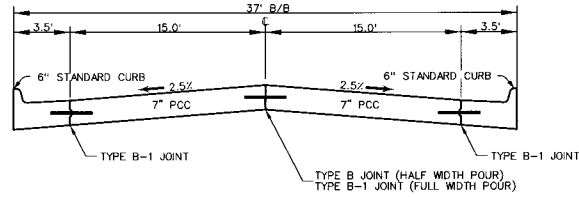
I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: ROGER J. SILVER, REG. No. 327 DATE: 12/14/05

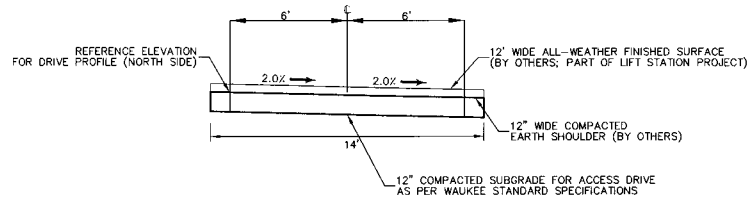




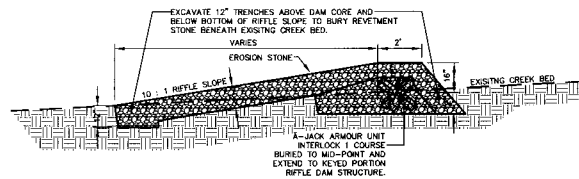
PA1 26' WIDE STREET SECTION
NO SCALE



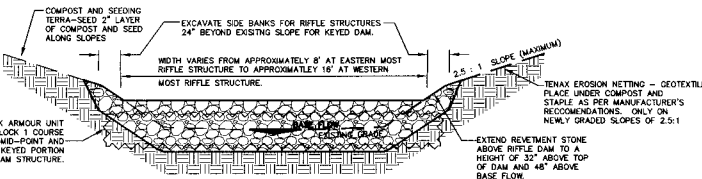
PA2 37' WIDE STREET SECTION
NO SCALE



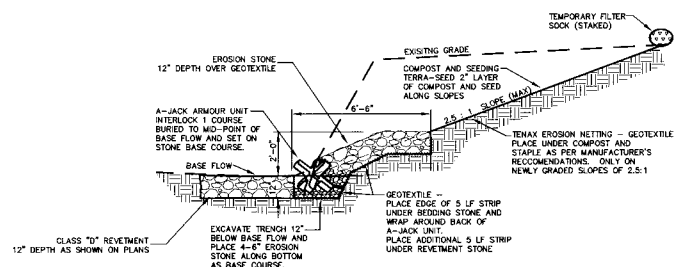
GR1 ACCESS DRIVE GRADING SECTION
NO SCALE



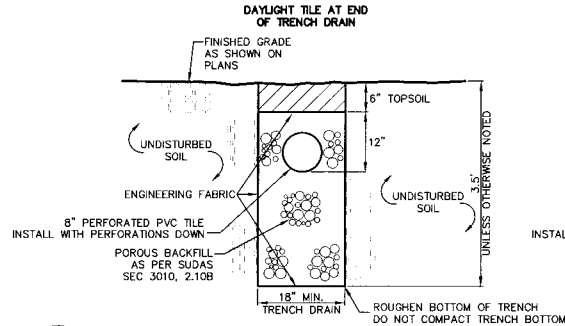
RD 1 RIFFLE DAM - SECTION
SCALE: 1" = 4'-0"



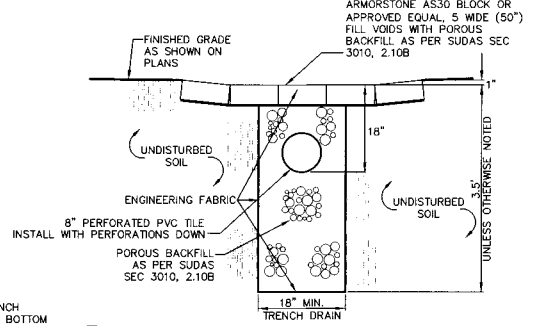
RD 2 RIFFLE DAM - FRONT ELEVATION VIEW
SCALE: 1" = 4'-0"



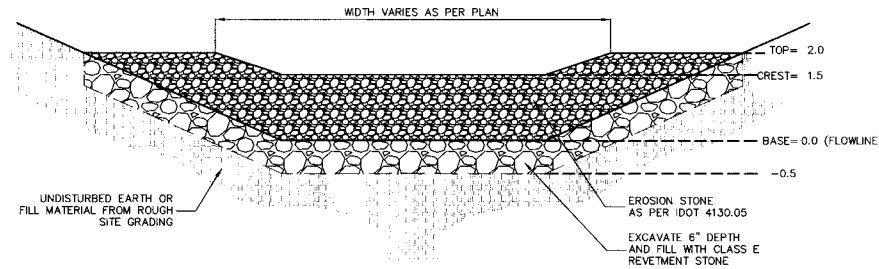
ES EMBANKMENT STABILIZATION (TYPE 1) - SECTION
SCALE: 1" = 4'-0"



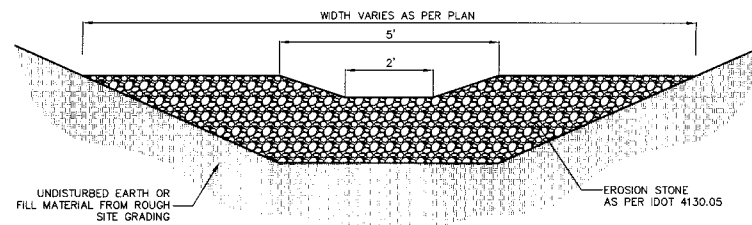
TD1 TRENCH DRAIN
NO SCALE



TD2 BLOCK OUTLET PROTECTION
NO SCALE



SW1 STONE WEEPER DETAIL
SCALE: 1" = 2"



CD1 CHECK DAM
SCALE: 1" = 2"

