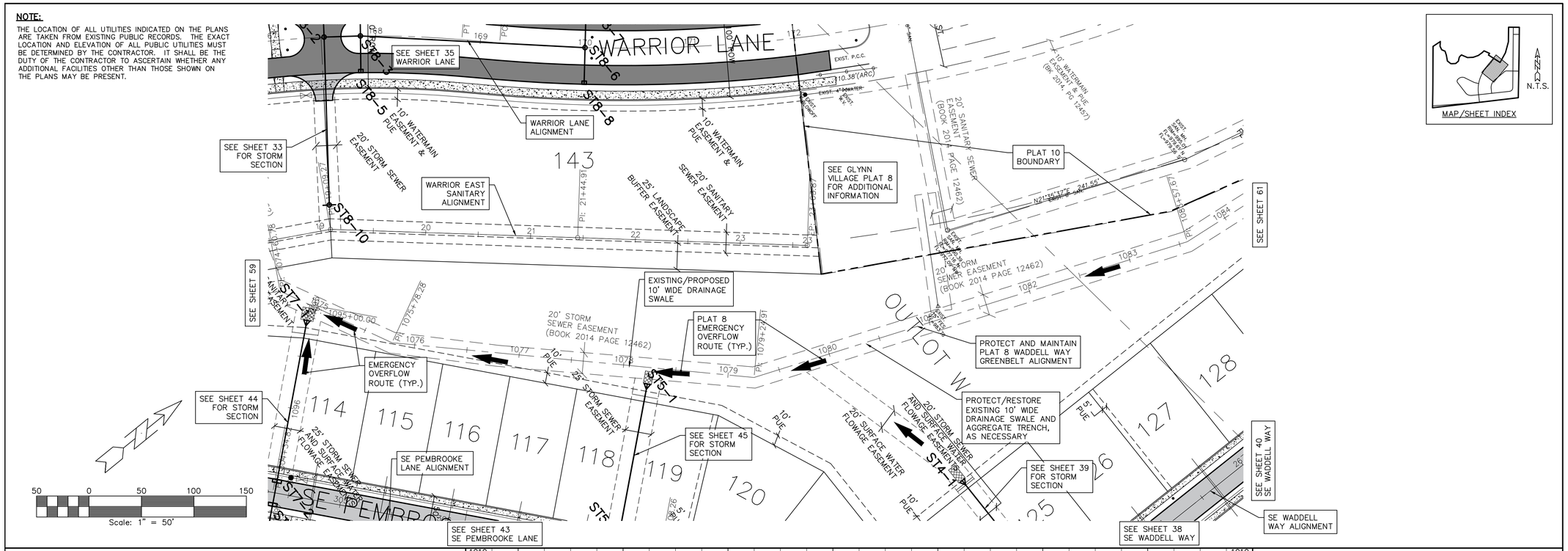
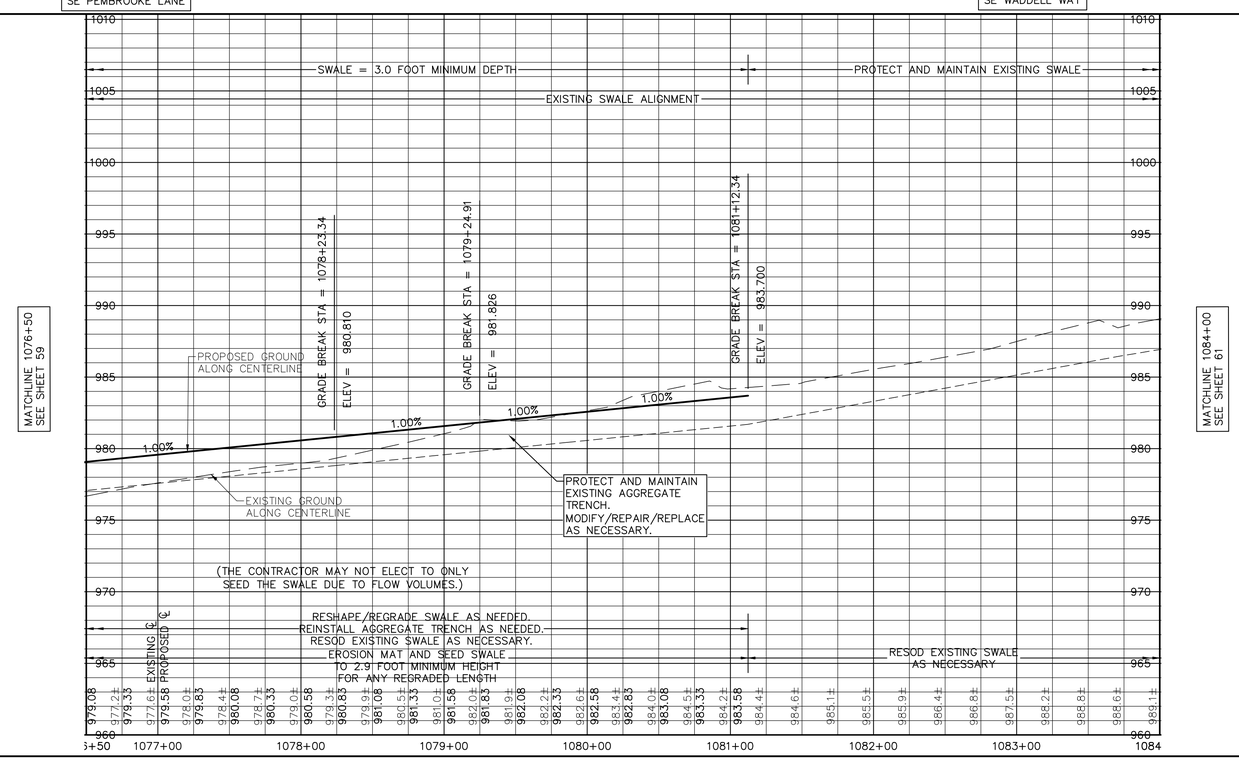
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



SCALES:
1" = 50' HOR
1" = 5' VER



NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

GLYNN VILLAGE PLAT 10 - PLAT 8 WADDELL WAY - GREENBELT I

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PP41.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 60 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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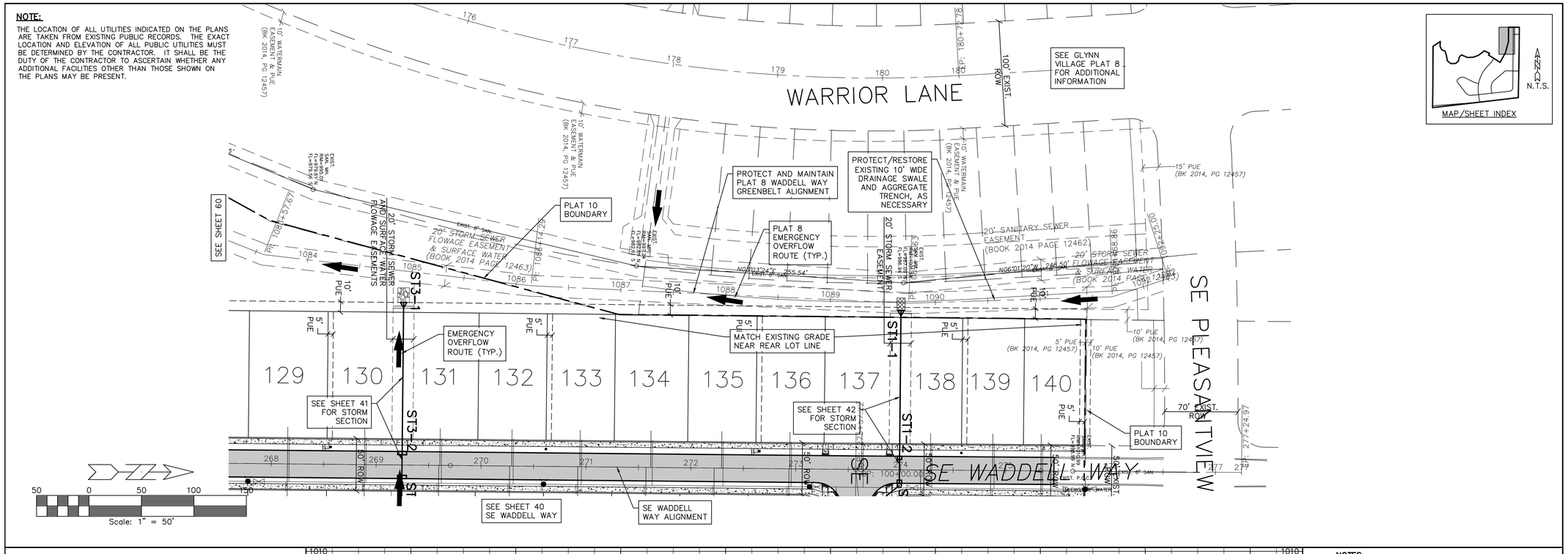
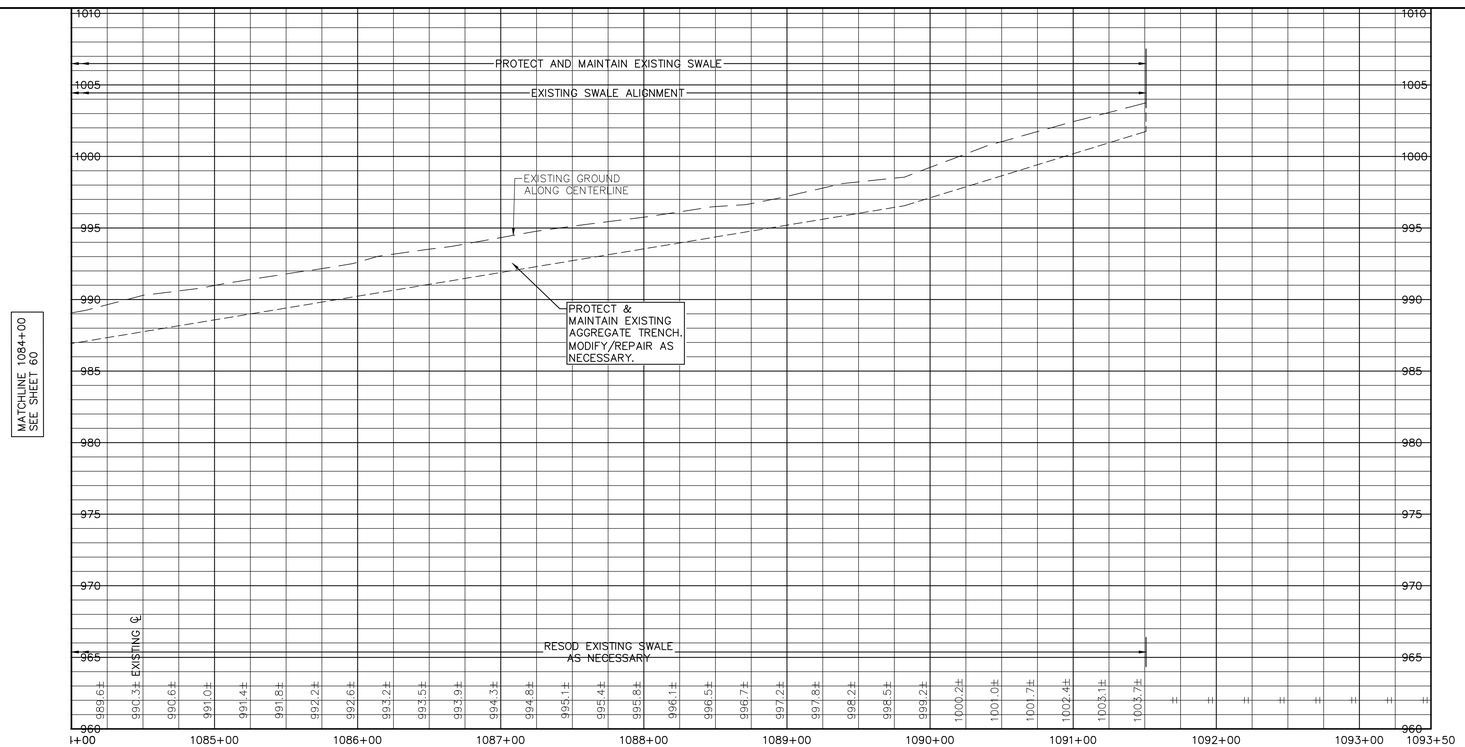
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



SCALES:
1" = 50' HOR
1" = 5' VER



NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

GLYNN VILLAGE PLAT 10 - PLAT 8 WADDELL WAY - GREENBELT 2

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PP42.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 61 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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NOTE:

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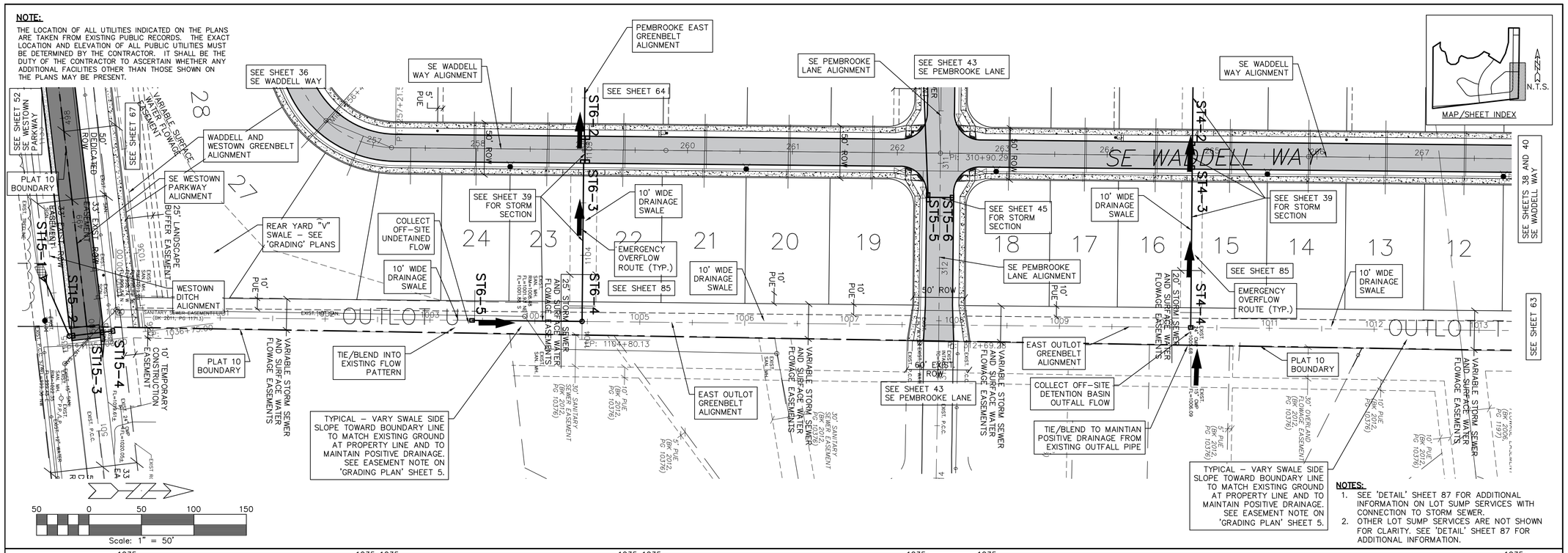
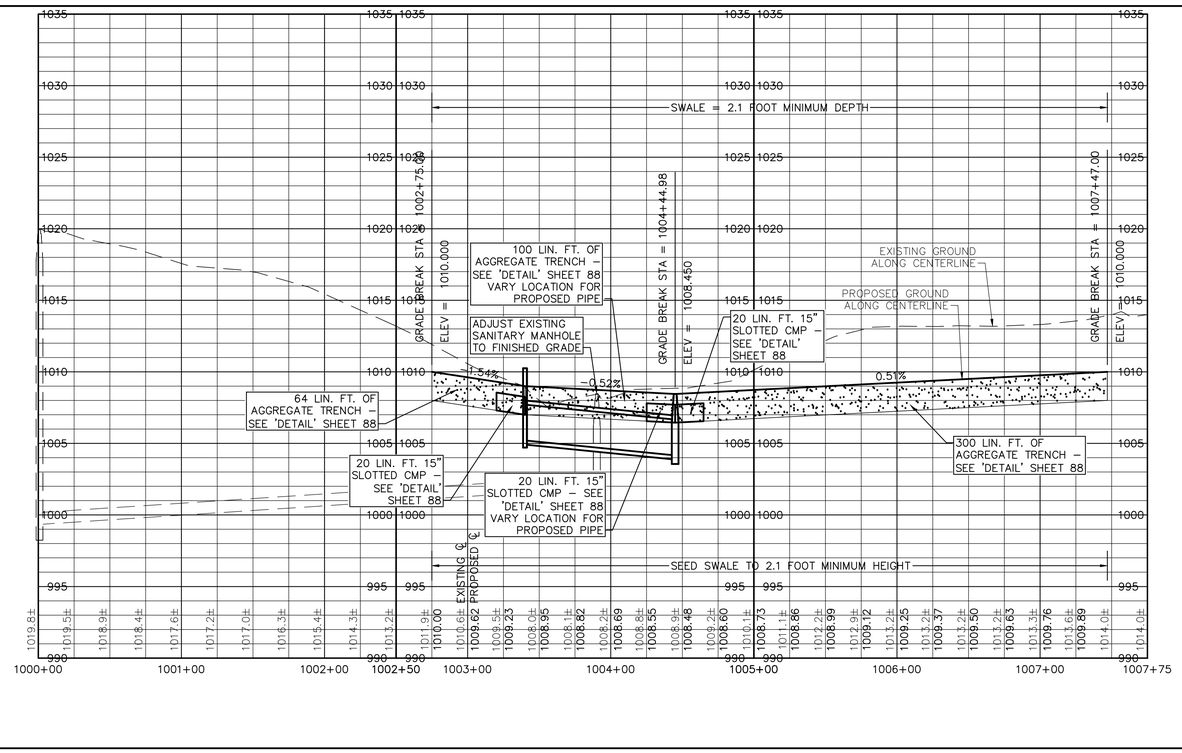
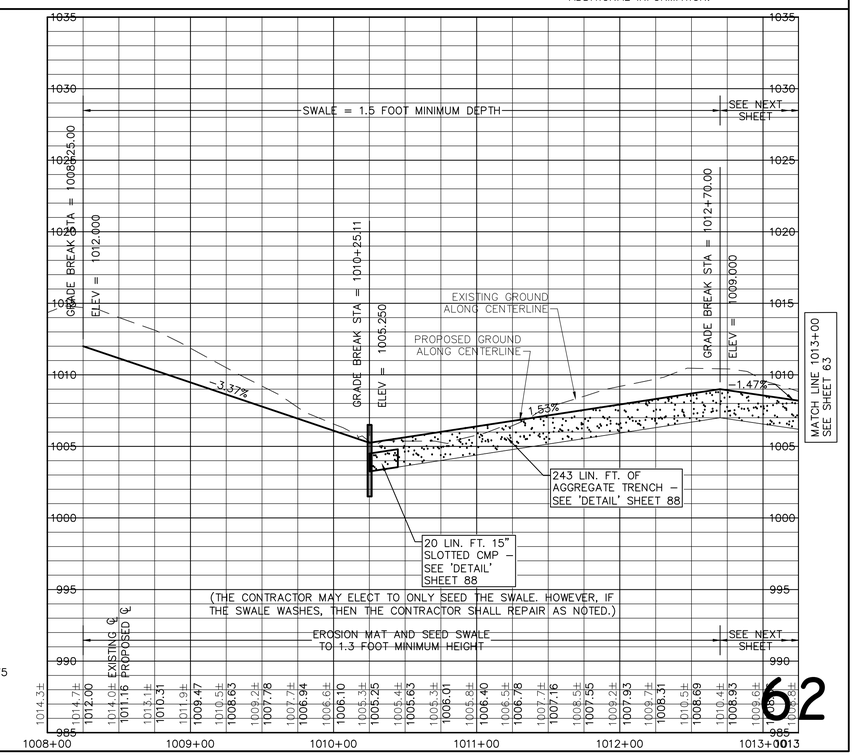


NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

SCALES:
1" = 50' HOR
1" = 5' VER





GLYNN VILLAGE PLAT 10 - EAST OUTLOT - GREENBELT I

SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-PP46.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 62 OF 100	FILE NO.: 15-013	

LOCATION:

NO.	REVISION	DATE	BY	FOR:

ERG
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Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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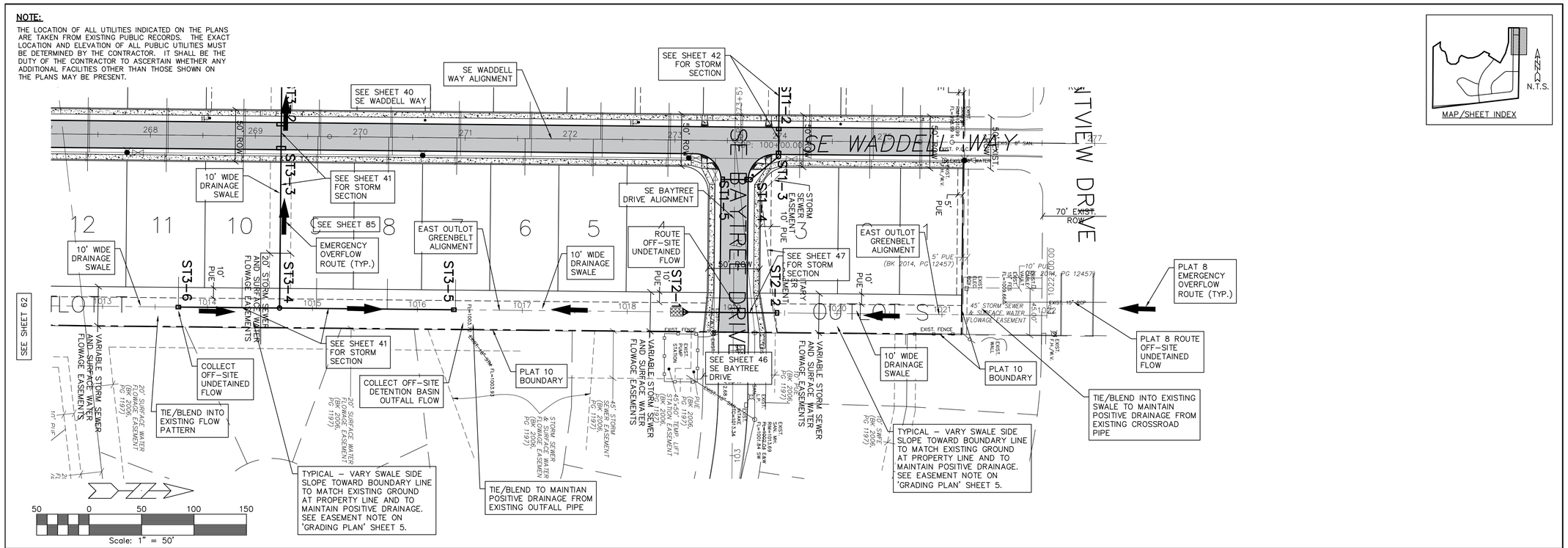
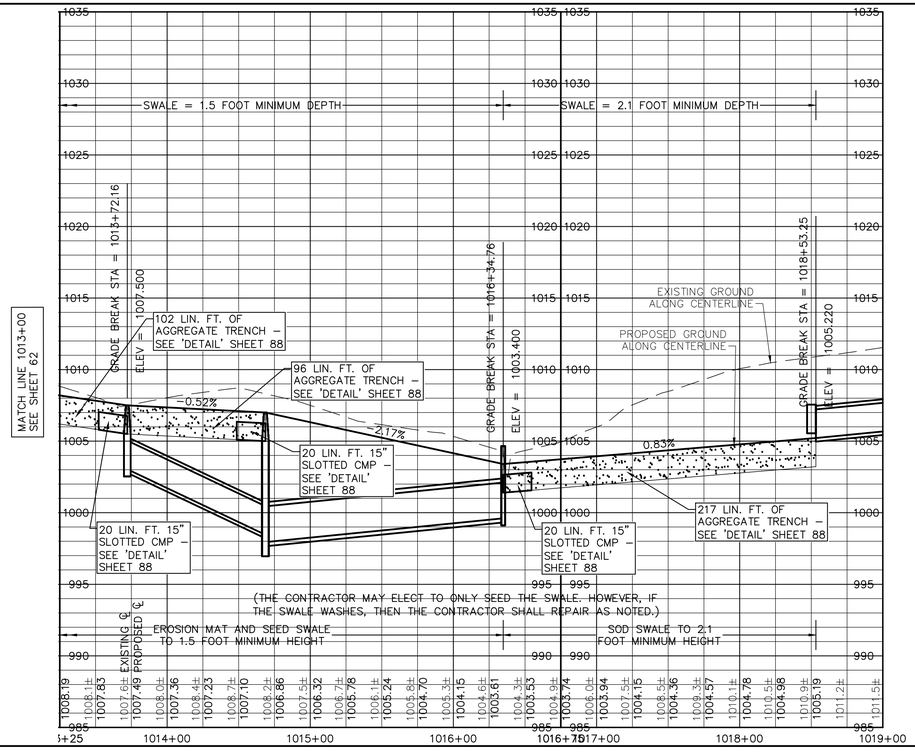
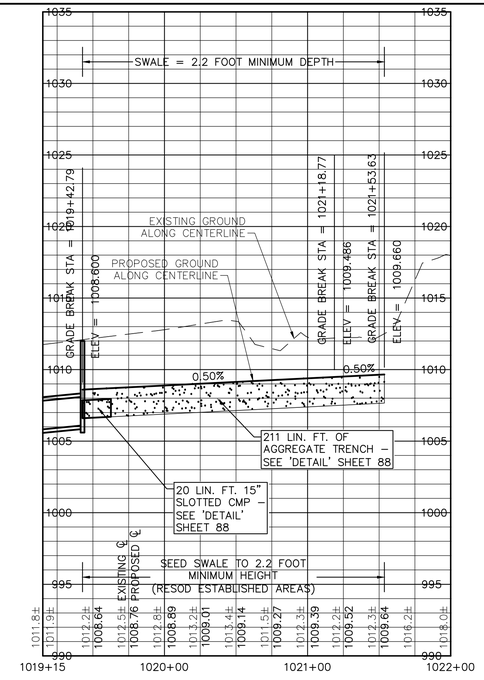
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



SCALES:
1" = 50' HOR
1" = 5' VER





NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

PLAT 10 - EAST OUTLOT - GREENBELT 2

LOCATION:		DRAWN BY:	PJV
SCALE:	1" = 50'	DESIGNED BY:	JRK
DWG:	15-013-PP47.dwg	CHECKED BY:	DJS
FIELD BOOK:		SHEET 63 OF 100	FILE NO.: 15-013

GLYNN VILLAGE PLAT

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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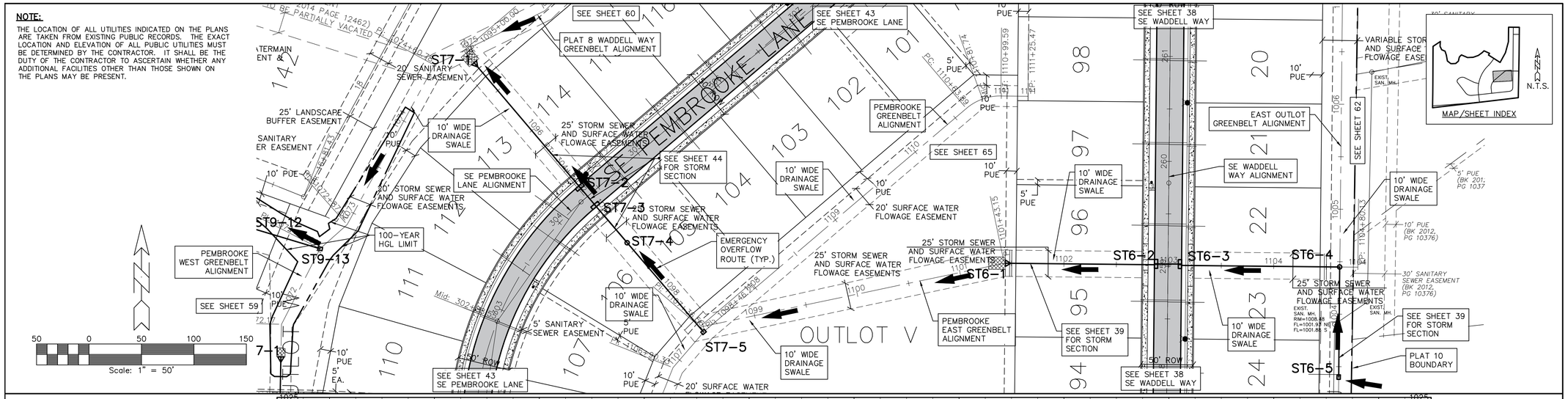
NOTE:

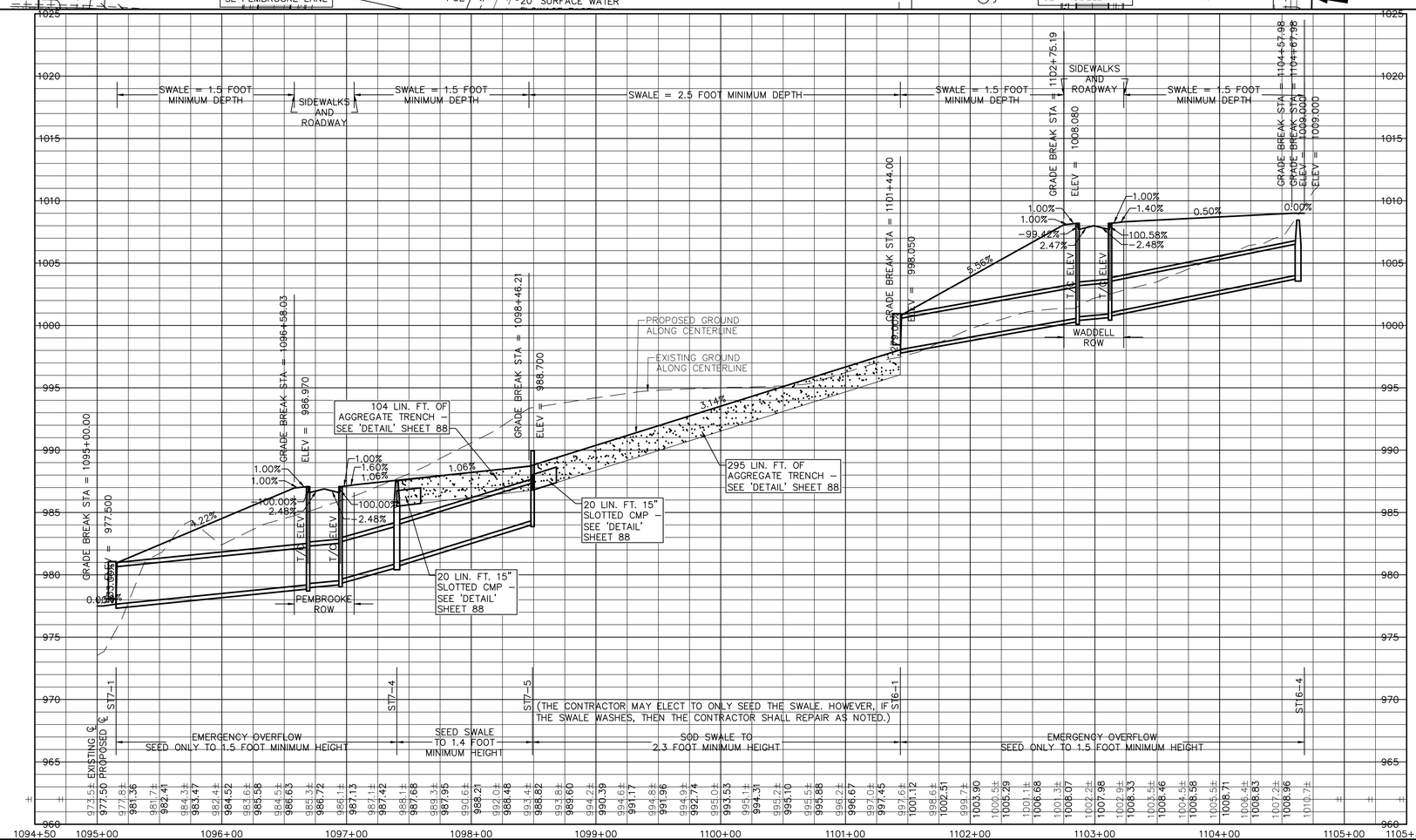
THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



SCALES:
1" = 50' HOR
1" = 5' VER

NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.



64

GLYNN VILLAGE PLAT 10 - PEMBROOKE EAST - GREENBELT

LOCATION:		DRAWN BY: PJV	
SCALE: 1" = 50'	DESIGNED BY: JRK	DATE: 02/24/2016	
DWG: 15-013-PP40.dwg	CHECKED BY: DJS	FILE NO.: 15-013	
FIELD BOOK:	SHEET 64 OF 100		

NO.	REVISION	DATE	BY	FOR:

FRG
Engineering, Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

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NOTE:

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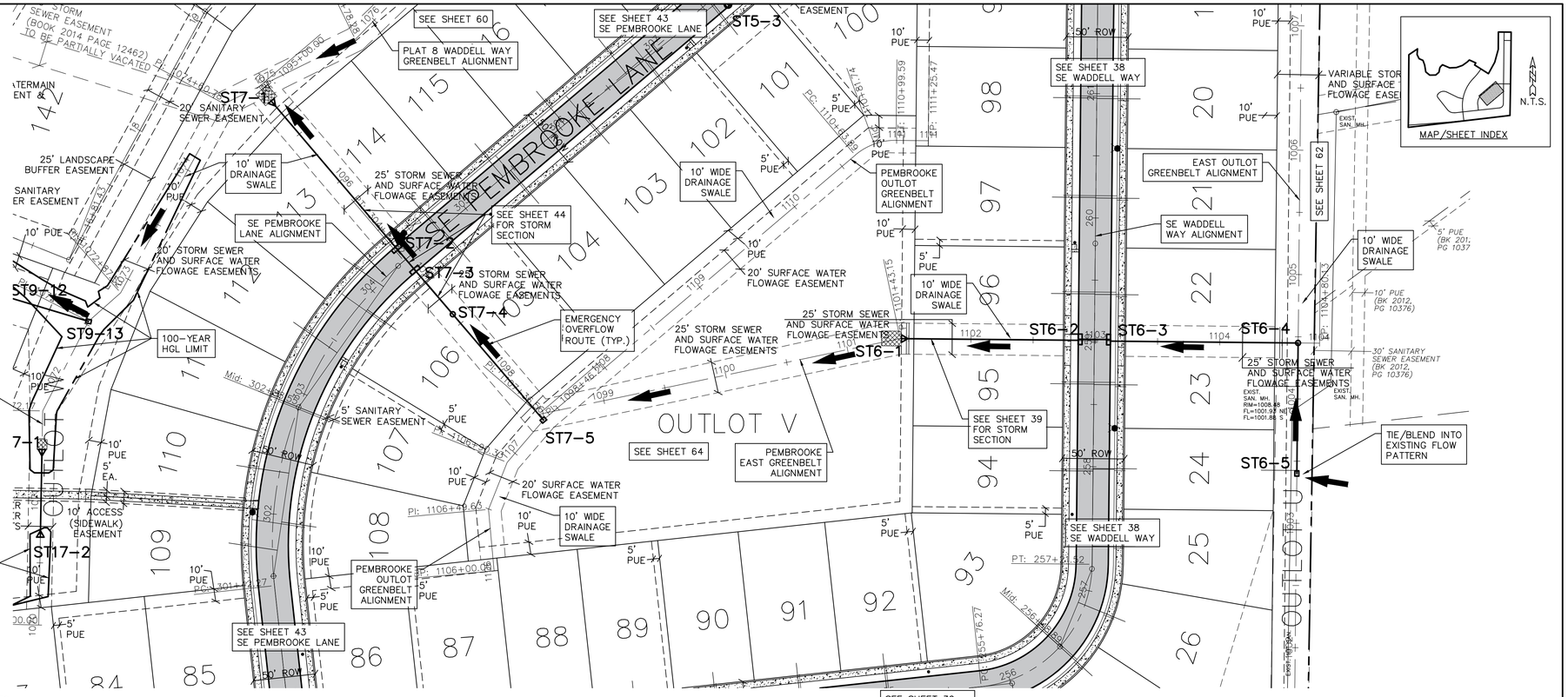
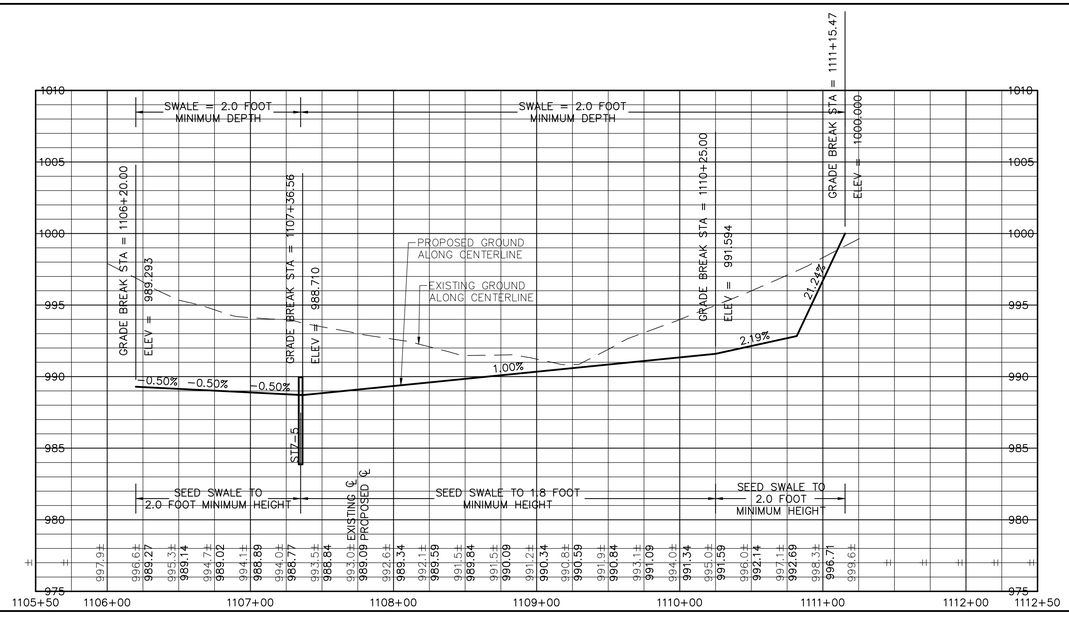


SCALES:
1" = 50' HOR
1" = 5' VER



NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

GLYNN VILLAGE PLAT 10 - PEMBROOKE OUTLOT - GREENBELT

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PP48.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 65 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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NOTE:

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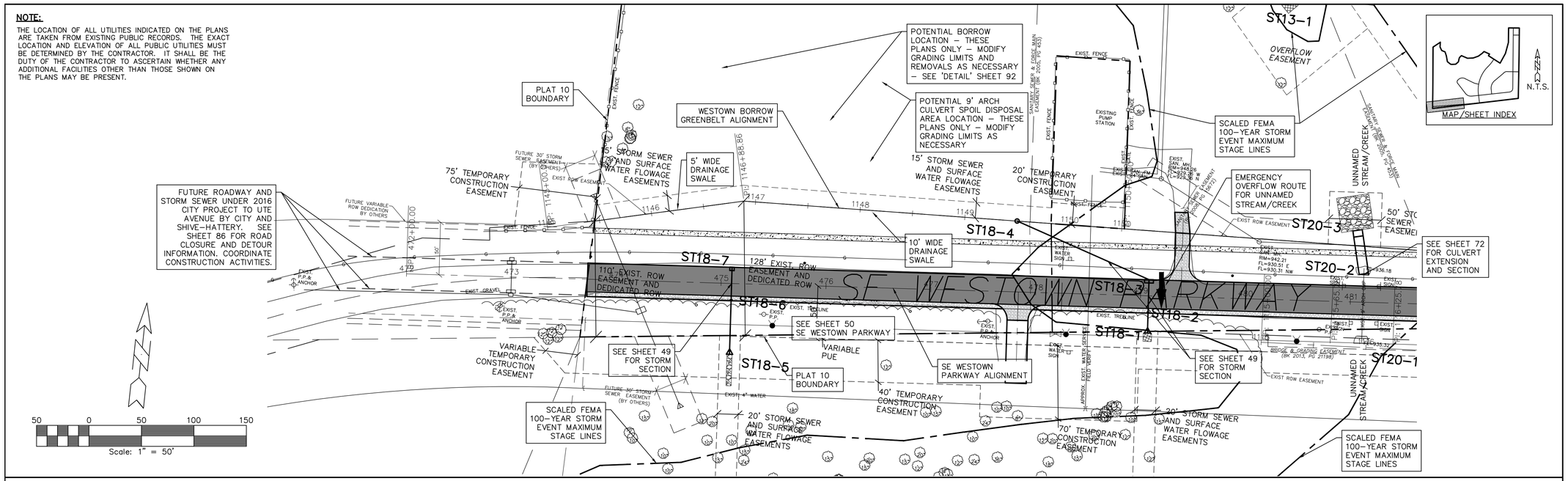
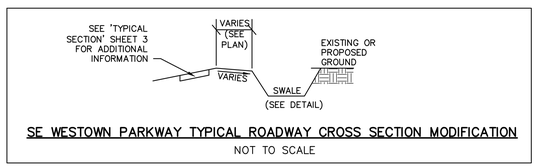


SCALES:
1" = 50' HOR
1" = 5' VER

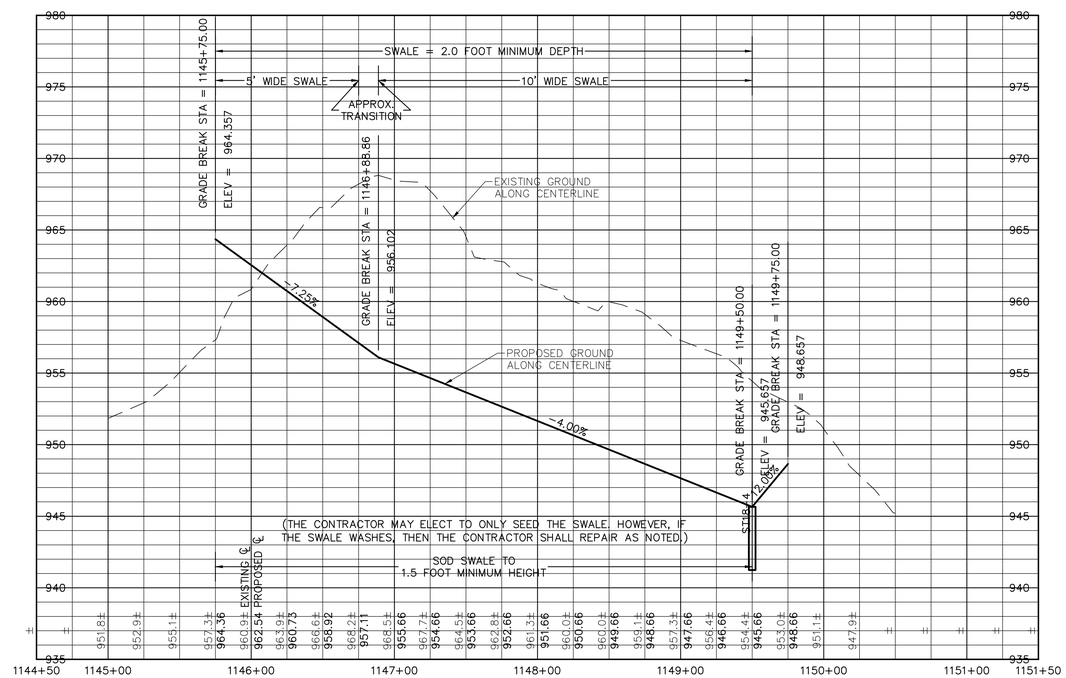
NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.



SE WESTOWN PARKWAY TYPICAL ROADWAY CROSS SECTION MODIFICATION

NOT TO SCALE



GLYNN VILLAGE PLAT 10 - WESTOWN BORROW - GREENBELT

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PP50A.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 66 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 286-4823

15-013

J:\2015 Proj\15-013\DESIGN\15-013-PP50A.dwg, 5/5/2016 10:17:57 AM, Jay

NOTE:

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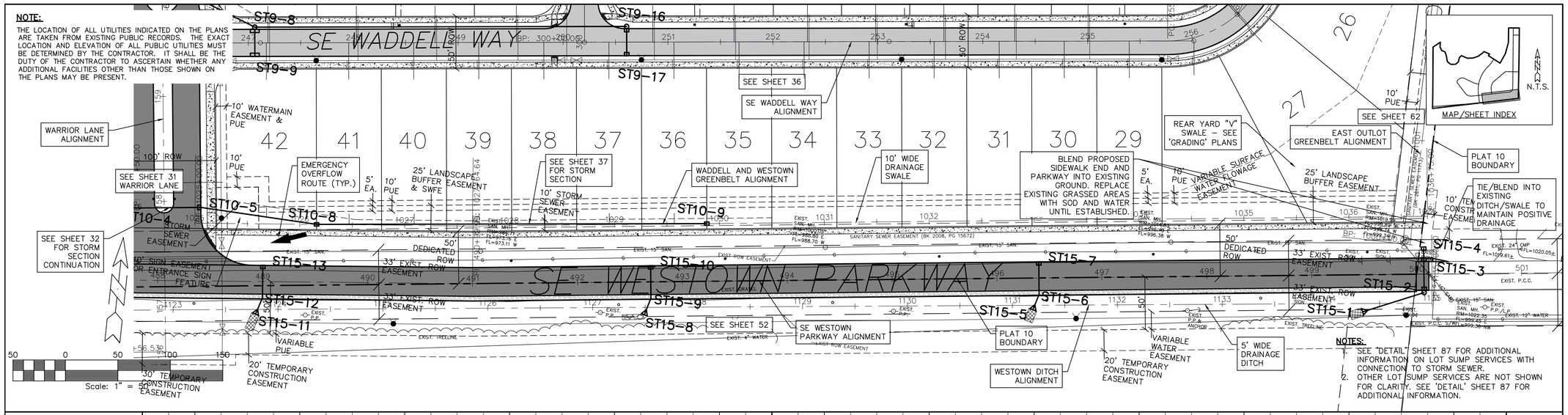
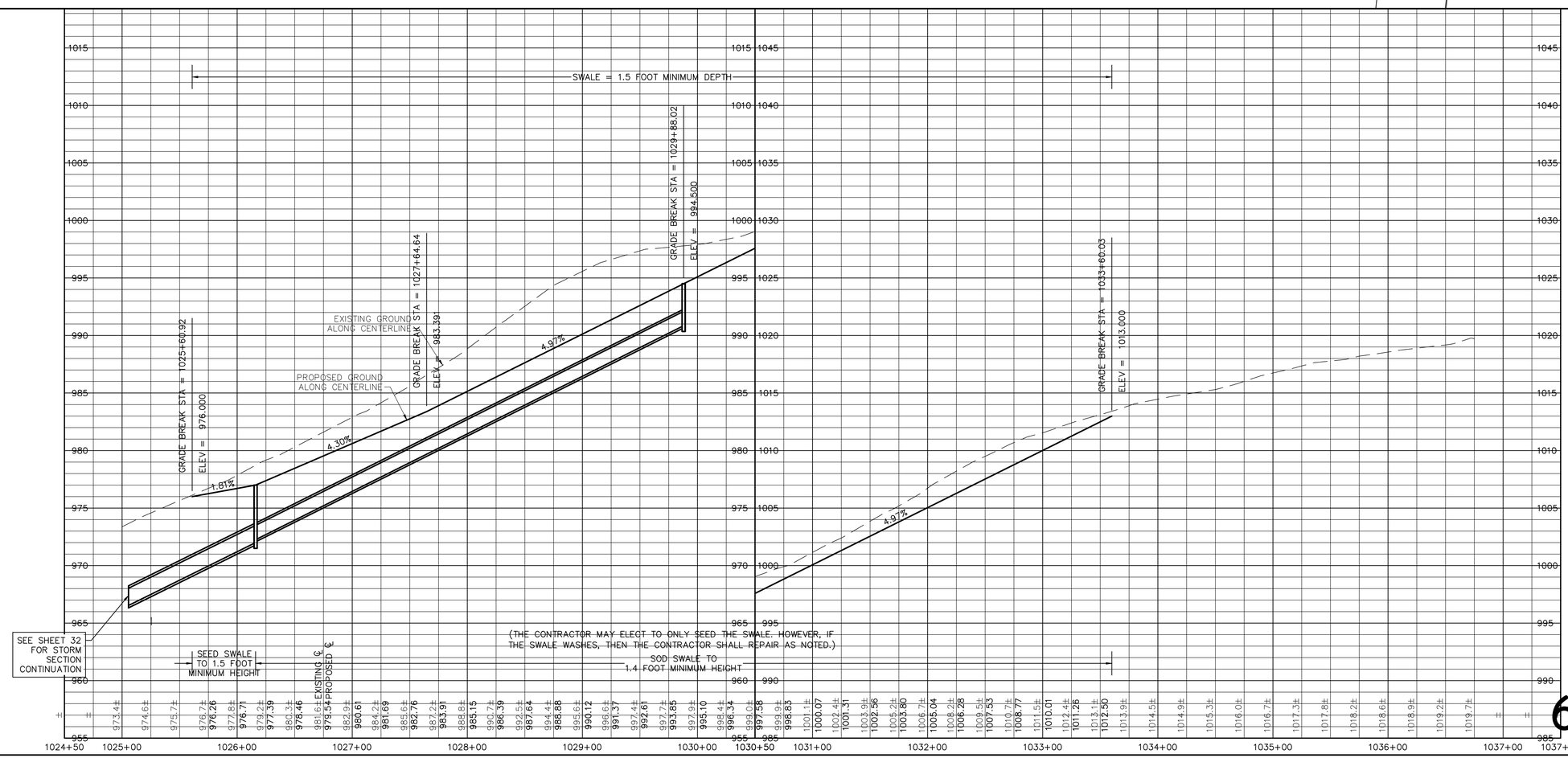


NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

SCALES:
1" = 50' HOR
1" = 5' VER



GLYNN VILLAGE PLAT 10 - WADDELL AND WESTOWN - GREENBELT

SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-PP49.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 67 OF 100	FILE NO.: 15-013	

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resources Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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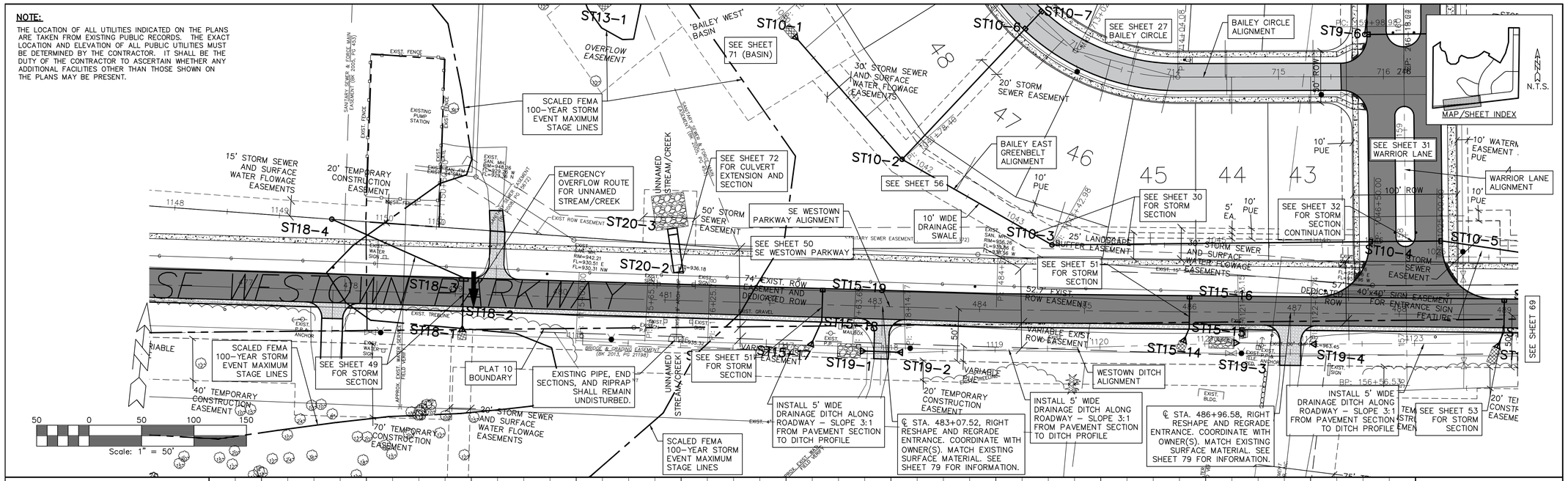
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



SCALES:
1" = 50' HOR
1" = 5' VER

NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
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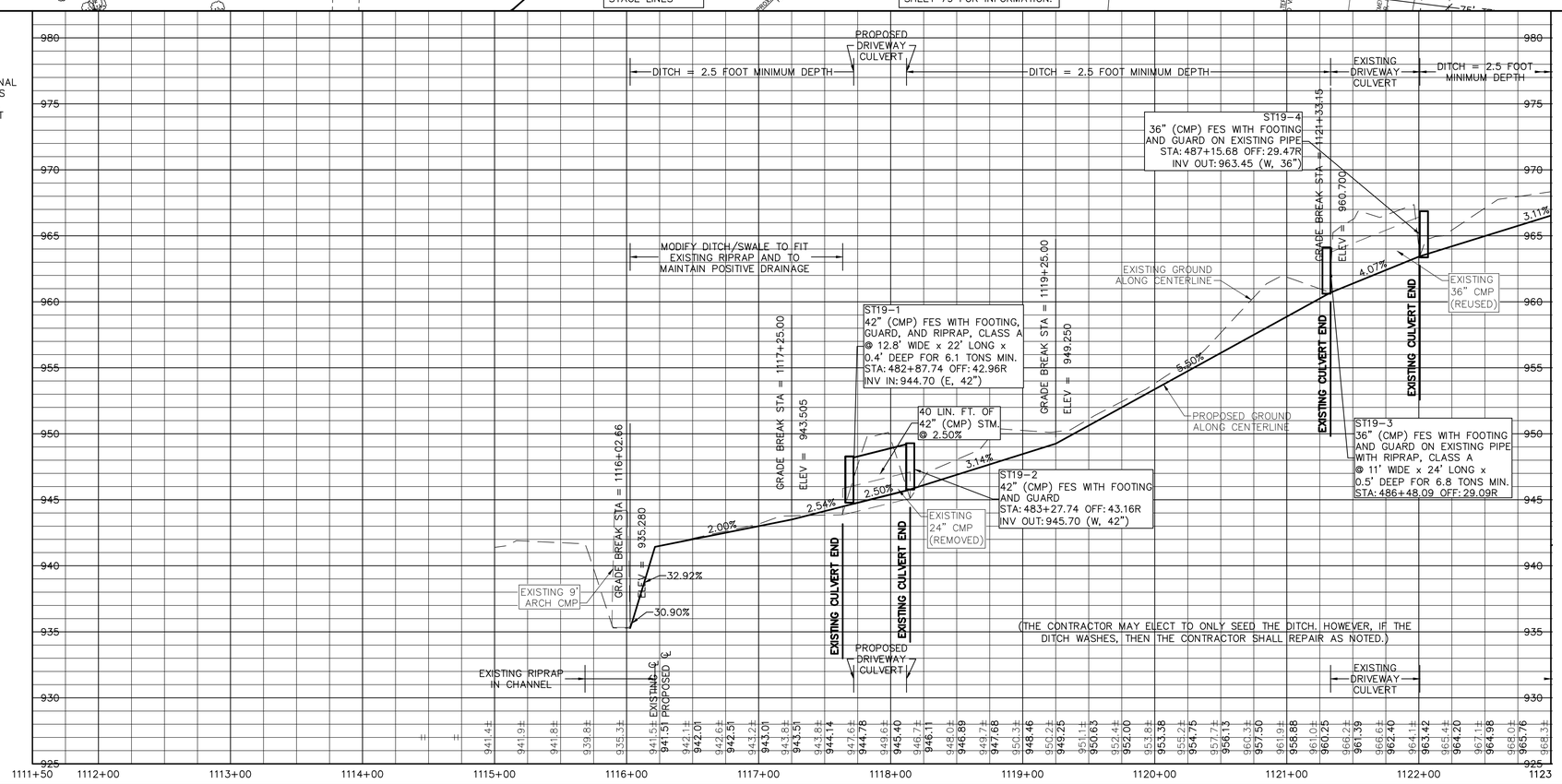

68

GLYNN VILLAGE PLAT 10 - WESTOWN DITCH - GREENBELT I

SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-PP50.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 68 OF 100	FILE NO.: 15-013	

LOCATION:

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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NOTE:

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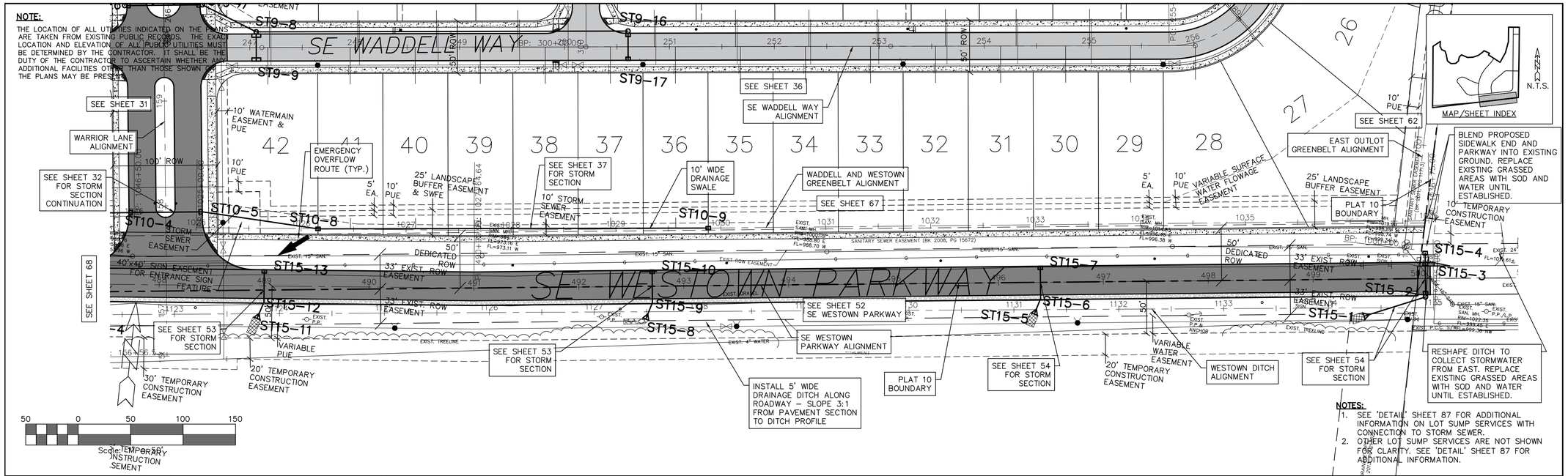
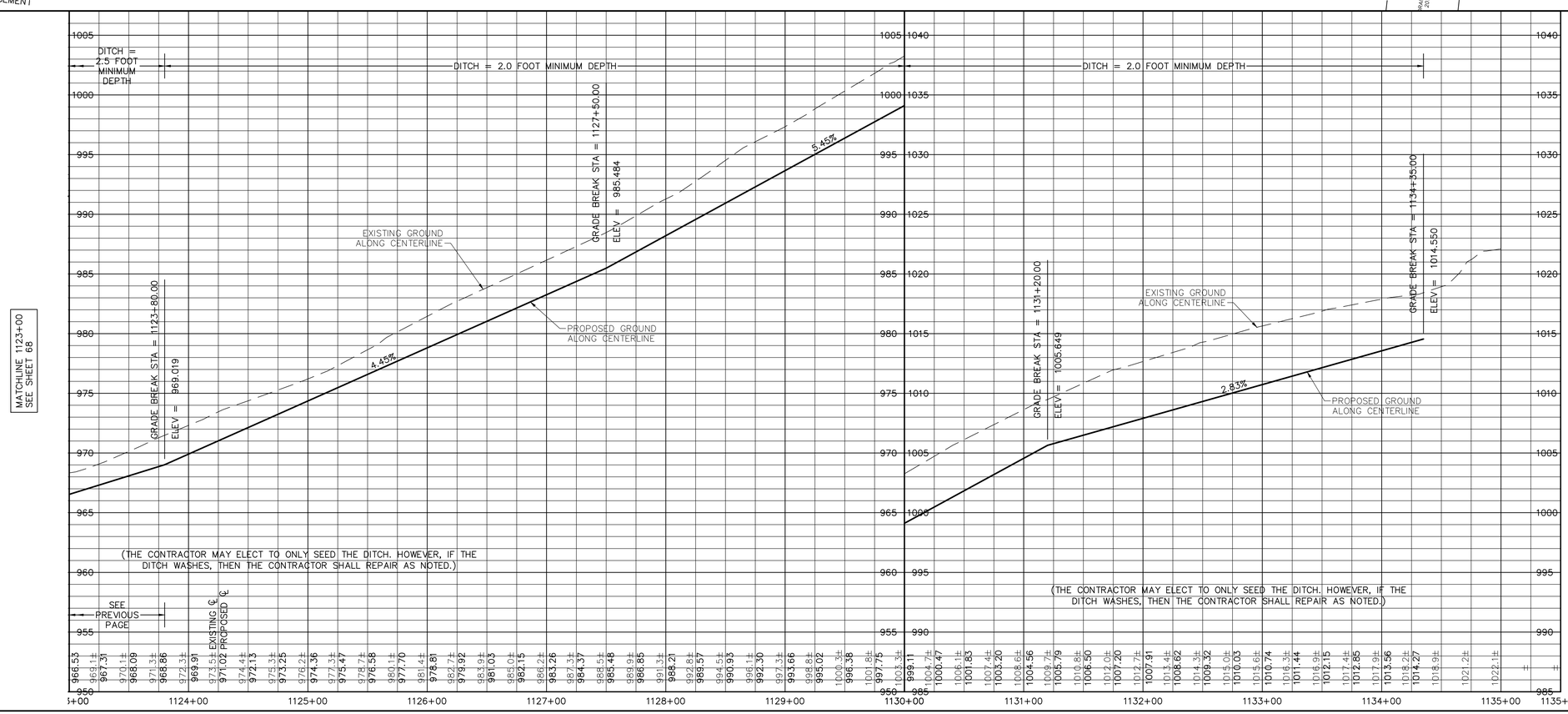


NOTES:

1. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION ON LOT SUMP SERVICES WITH CONNECTION TO STORM SEWER.
2. OTHER LOT SUMP SERVICES ARE NOT SHOWN FOR CLARITY. SEE 'DETAIL' SHEET 87 FOR ADDITIONAL INFORMATION.

SCALES:
1" = 50' HOR
1" = 5' VER



GLYNN VILLAGE PLAT 10 - WESTOWN DITCH - GREENBELT 2

SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-PP51.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 69 OF 100	FILE NO.: 15-013	

LOCATION:

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

J:\2015 Proj\15-013\DES\GN\15-013-PP51.dwg, 5/5/2016 10:19:37 AM, Jay

NOTE:

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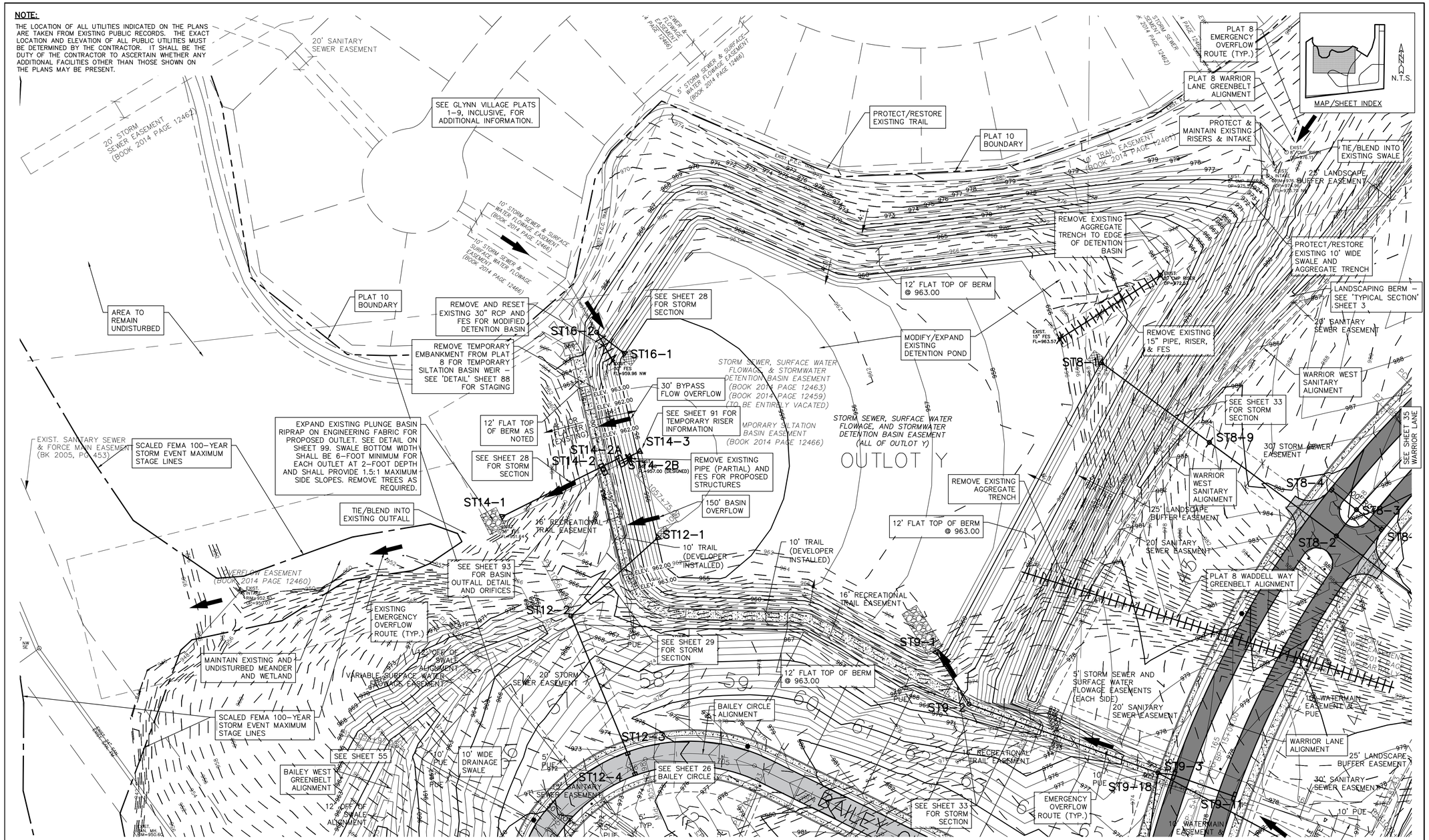

'EAST/8E' DETENTION BASIN

POND BOTTOM ELEVATION = 953.00
REQUIRED WQv VOLUME = 302,946.2 CU. FT. = 6.95 AC–FT
PROVIDED WQv VOLUME = 302,946.2 CU. FT. = 6.95 AC–FT
WQv DHWL = 957.14
REQUIRED 100–YEAR STORM VOLUME = 435,453.0 CU. FT. = 10.00 AC–FT
PROVIDED 100–YEAR STORM VOLUME = 837,131.6 CU. FT. = 19.22 AC–FT
100–YEAR STORM DHWL = 960.85
TOP OF BERM ELEVATION = 963.00
BULLETIN 71 10–YEAR DISCHARGE = 175.8 CFS
BULLETIN 71 100–YEAR DISCHARGE = 272.3 CFS

GLYNN VILLAGE PLAT 10 - 'EAST-8E' DETENTION BASIN - GRADING & STORM

LOCATION:		DRAWN BY: JRK	PJV
SCALE: 1" = 50'		DESIGNED BY: JRK	
DWG: 15-013-PP31.dwg		CHECKED BY: DJS	02/24/2016
FIELD BOOK:		SHEET 70 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

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NOTE:

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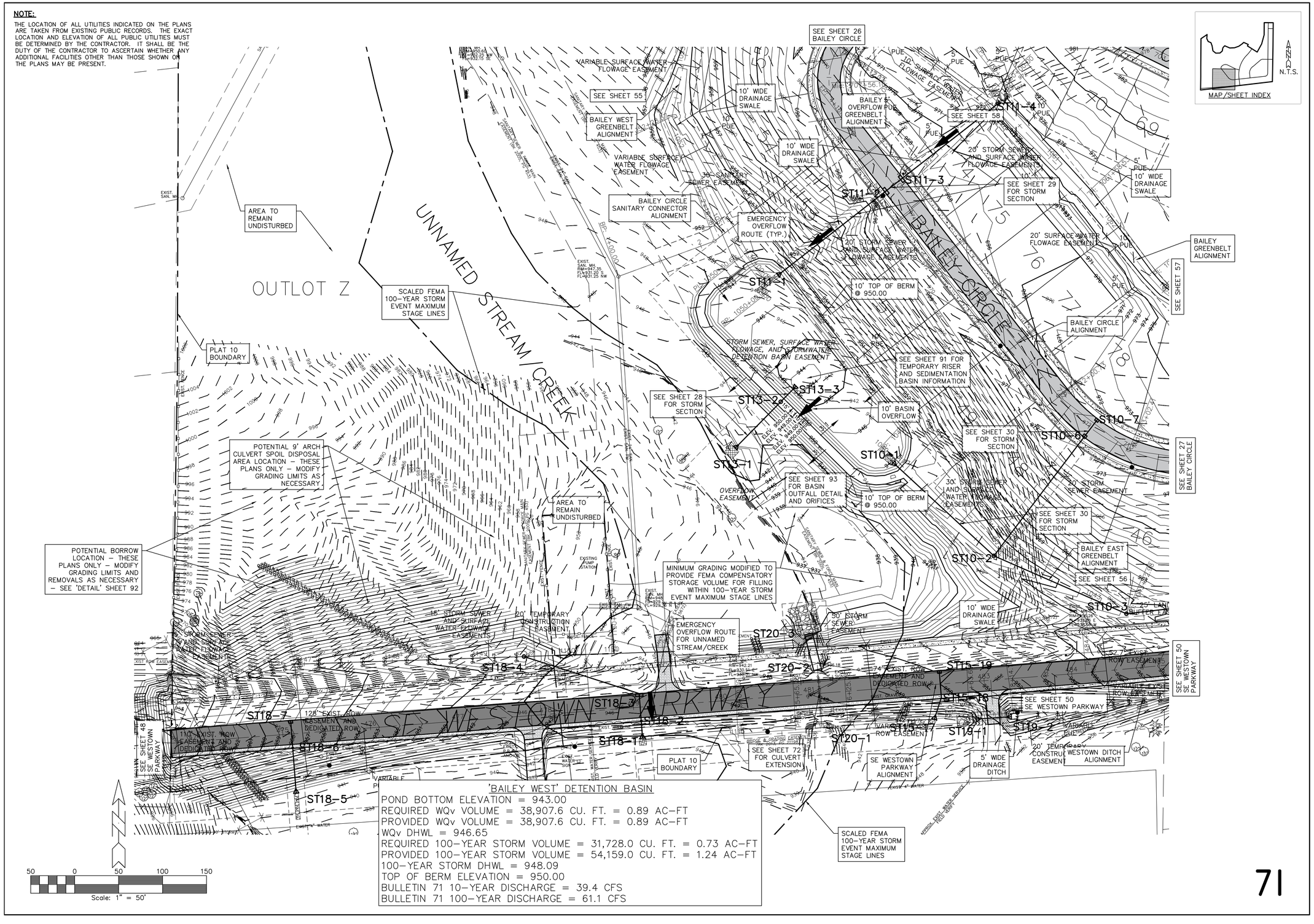


'BAILEY WEST' DETENTION BASIN

POND BOTTOM ELEVATION = 943.00
REQUIRED WQv VOLUME = 38,907.6 CU. FT. = 0.89 AC-FT
PROVIDED WQv VOLUME = 38,907.6 CU. FT. = 0.89 AC-FT
WQv DHWL = 946.65
REQUIRED 100-YEAR STORM VOLUME = 31,728.0 CU. FT. = 0.73 AC-FT
PROVIDED 100-YEAR STORM VOLUME = 54,159.0 CU. FT. = 1.24 AC-FT
100-YEAR STORM DHWL = 948.09
TOP OF BERM ELEVATION = 950.00
BULLETIN 71 10-YEAR DISCHARGE = 39.4 CFS
BULLETIN 71 100-YEAR DISCHARGE = 61.1 CFS

71

GLYNN VILLAGE PLAT 10 - 'BAILEY WEST' DETENTION BASIN - GRADING & STORM

LOCATION:		DRAWN BY:	PJV
SCALE:	1" = 50'	DESIGNED BY:	JRK
DWG:	15-013-PP43.dwg	CHECKED BY:	DJS
FIELD BOOK:		SHEET 71 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

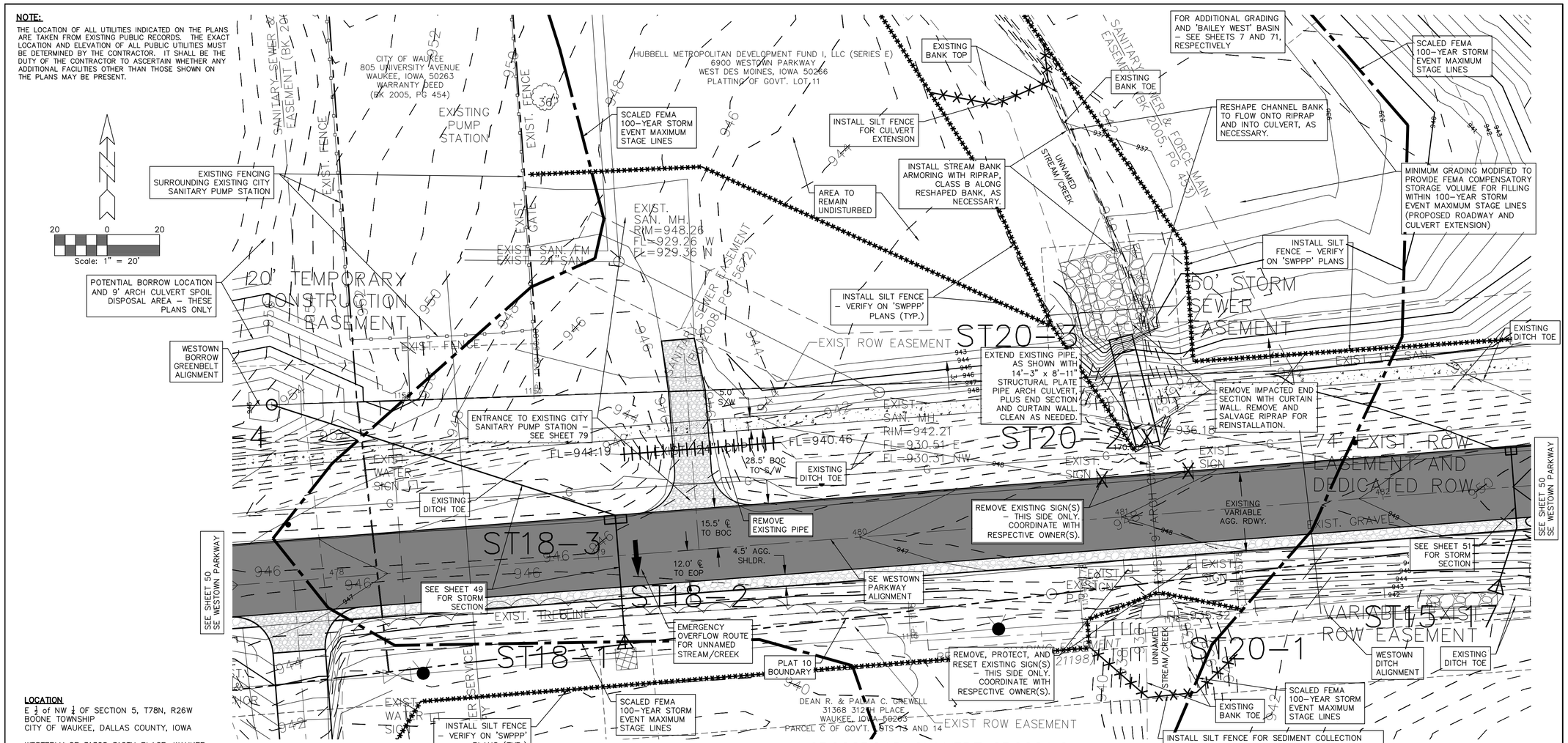
ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

J:\2015 Proj\15-013\DESIGN\15-013-PP43.dwg, 5/5/2016 10:20:34 AM, Jay

NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



LOCATION

E ½ of NW ¼ OF SECTION 5, T78N, R26W
BOONE TOWNSHIP
CITY OF WAUKEE, DALLAS COUNTY, IOWA

WESTERLY OF 31368 312TH PLACE, WAUKEE

LOCATION MAP
NOT TO SCALE

HYDRAULIC DATA FROM USACOE CEMVR-OD-P-2013-1066
(AND IDNR FP-2013-215)

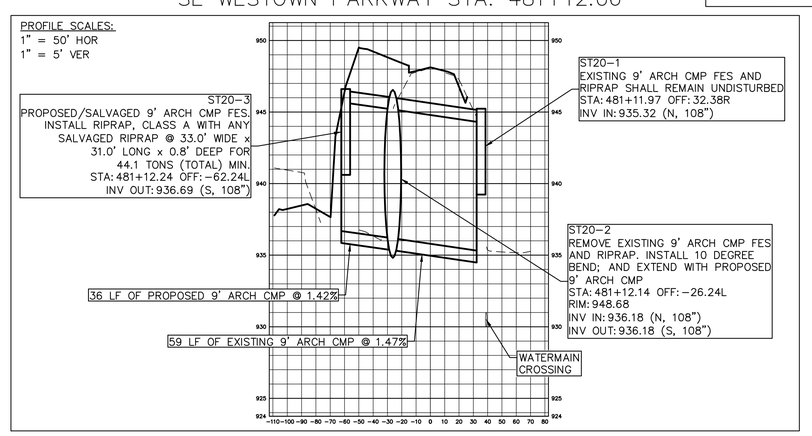
DRAINAGE AREA = 4.5 SQ. MILES
DESIGN DISCHARGE = 1,600 CFS
ROAD GRADE OVERFLOW @ Q50 =550 CFS
DISCHARGE THROUGH CULVERT @ Q50 = 1,050 CFS
DESIGN HIGH WATER ELEVATION = 947.6
CHANNEL SLOPE = 0.00846 FT./FT.
BARREL SLOPE (DESIGN) = 0.0153 FT./FT.
Q25 = 1,300 CFS W/ STAGE ELEVATION = 947.0
Q50 = 1,600 CFS W/ STAGE ELEVATION = 947.6 (DESIGN)
Q100 = 1,900 CFS W/ STAGE ELEVATION = 948.0
Q500 = 2,600 CFS W/ STAGE ELEVATION = 948.6
EXISTING HIGH WATER ELEVATION = UNKNOWN

SECTION 404 PERMIT AND CONDITIONS
CONSTRUCT THIS SHEET ACCORDING TO THE REQUIREMENTS OF THE US ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT 14, PERMIT NO. 2013-1066 (CONTINUANCE), PER USACOE CORRESPONDENCE DATED NOVEMBER 09, 2015. SEE NOTES ON THIS SHEET.

SECTION 401 PERMIT AND CONDITIONS
CONSTRUCT THIS SHEET ACCORDING TO THE REQUIREMENTS OF THE IDNR FLOODPLAIN CONSTRUCTION PERMIT, PERMIT NO. FP-2013-215, PER IDNR CORRESPONDENCE DATED FEBRUARY 23, 2016. SEE NOTES ON THIS SHEET.

PER IDNR,
Q100 = 650 CFS (USGS WRIR 87-4132)
BFE = 943.52 (BASE FLOOD ELEVATION)
MPL = 944.52 (MAXIMUM PERMISSIBLE LEVEL)

CROSSROAD CULVERT CROSSING
SE WESTOWN PARKWAY STA. 481+12.06



NOTES:

1. ANY REFERENCES TO 9' ARCH CMP (OR 108") SHALL MEAN 14'-3" x 8'-11" STRUCTURAL PLATE PIPE ARCH CULVERT.
2. SEE PLAN SHEET 50 FOR ROADWAY PROFILE INFORMATION.
3. GRADING AND COMPACTION REQUIREMENTS SHALL BE PER THE GENERAL NOTES ON SHEETS 2 AND 5.
4. SEE SHEET 73 FOR ADDITIONAL NOTES AND DETAILS RELATING TO THIS CULVERT EXTENSION.
5. THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) AND/OR THE UNITED STATES ARMY CORPS OF ENGINEERS (USACOE, USCOE, OR COE) RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.
6. A COPY OF IDNR AND/OR USACOE PERMITS ARE AVAILABLE FROM THE CITY OF WAUKEE PUBLIC WORKS DEPARTMENT.
7. INSTALL 'SEDIMENT BASIN' ON THE SOUTHERLY SIDE OF THE CULVERT TO COLLECT ANY DISTURBED MATERIAL RELATING FROM THE CULVERT EXTENSION ON THE NORTHERLY SIDE.

GLYNN VILLAGE PLAT 10 - EXISTING 9' ARCH CMP CULVERT EXTENSION

SCALE: AS NOTED	DESIGNED BY: JRK	DRAWN BY: PJV	LOCATION:
DWG: 15-013-CULVERT.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 72 OF 100	FILE NO.: 15-013	

NO.	REVISION	DATE	BY	FOR:

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2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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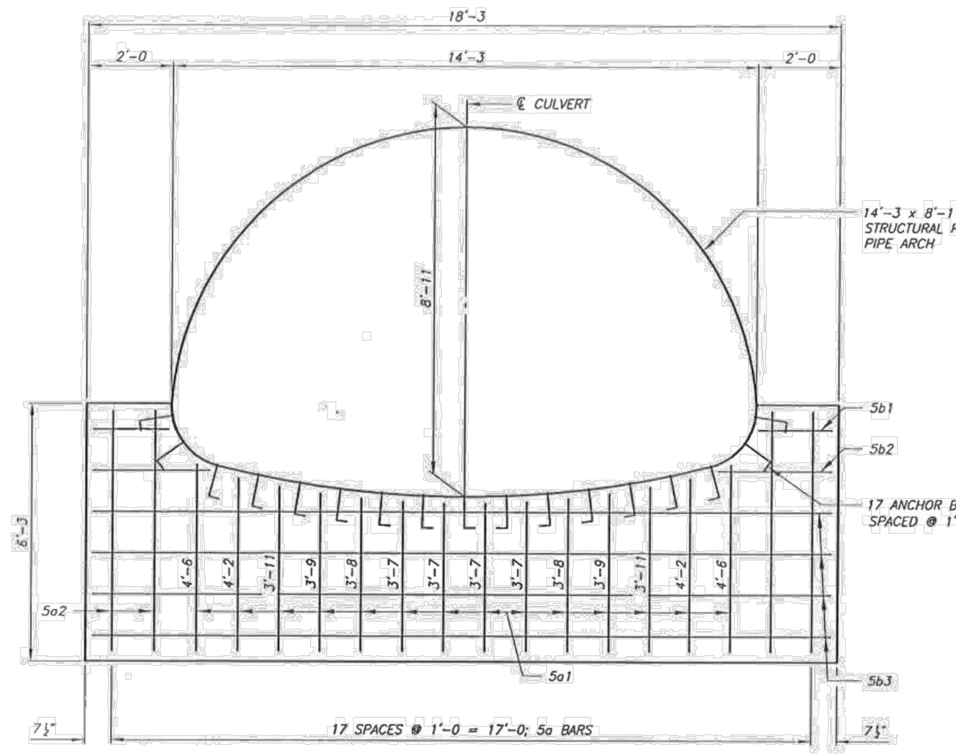
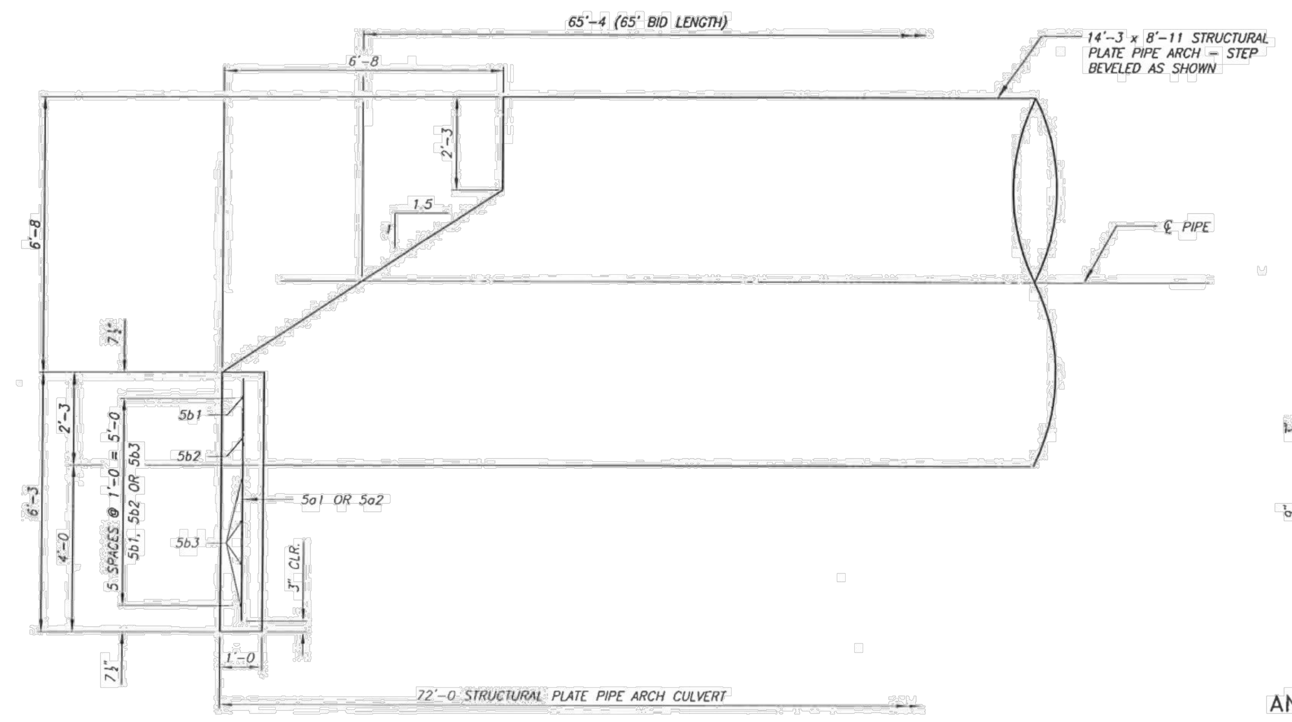
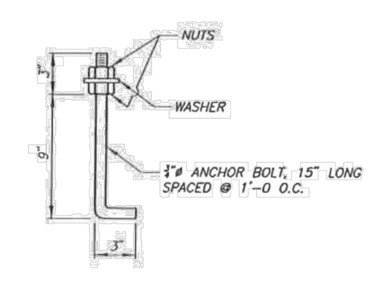


END ELEVATION—CURTAIN WALL



ELEVATION—CURTAIN WALL



ANCHOR BOLT DETAIL

(34 REQUIRED)

REINFORCING BAR LIST – ONE(1) CURTAIN WALL					
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
5a1	CURTAIN, VERTICAL	—	14	VARIES	57
5a2	CURTAIN, VERTICAL	—	4	5'–10	24
5b1	CURTAIN, HORIZONTAL	—	2	1'–9	4
5b2	CURTAIN, HORIZONTAL	—	2	2'–9	6
5b3	CURTAIN, HORIZONTAL	—	4	17'–11	75
				TOTAL (LBS.)	166

CONCRETE PLACEMENT QUANT. – CURTAIN WALLS		
LOCATION	UNIT	QUANTITY
CURTAIN WALL 2 @ 3.2 C.Y.	CU.YDS.	6.4
TOTAL	CU.YDS.	6.4

ESTIMATED QUANTITIES – CURTAIN WALLS		
ITEM	UNIT	QUANTITY
CONCRETE, STRUCTURAL	CU.YDS.	6.4
STEEL, REINFORCING	LBS.	332
EXCAVATION, CLASS 20	CU.YDS.	65

CURTAIN WALL NOTES

THE INTENT OF THIS DESIGN IS TO BUILD A 18'–3 x 6'–3 REINFORCED CONCRETE CURTAIN WALL STRUCTURE AT EACH END OF A 14'–3 x 8'–11 STRUCTURAL PLATE PIPE ARCH CULVERT. THE 14'–3 x 8'–11 STRUCTURAL PLATE PIPE ARCH CULVERT WILL BE PLACED AS DETAILED AND NOTED ELSEWHERE IN THESE PLANS.

THE STRUCTURAL PLATE PIPE IS TO BE ANCHORED WITH ¾"ø x 1'–3 GALVANIZED ANCHOR BOLTS AS DETAILED, BEGINNING AT CENTER LINE FLOW LINE AND SPACED ON 12" CENTERS IN BOTH DIRECTIONS. 34 BOLTS ARE REQUIRED. COST OF ANCHOR BOLTS AND DRILLING 13/16"ø HOLES IN C.M.P. IS TO BE INCLUDED IN THE UNIT PRICE BID FOR "STRUCTURAL CONCRETE, CLASS C".

THE SIDES OF THE CURTAIN WALL ARE TO BE FORMED TO INSURE CORRECT LINE AND GRADE. ALL EXPOSED CORNERS OF 90 DEGREE OF SHARPER ARE TO BE FILLETED WITH A ¾" DRESSED AND BEVELED STRIP.

ALL REINFORCING IS TO BE SECURELY WIRED IN PLACE BEFORE THE CONCRETE IS POURED. ALL REINFORCING STEEL SHALL BE GRADE 60.

CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN. CLEARANCE TO THE BOTTOM ENDS OF VERTICAL BARS SHALL BE 3".

IF DE–WATERING PRESENTS A PROBLEM FOR PLACING THE CURTAIN WALL AS DETAILED, ALTERNATE METHODS SUCH AS STEEL SHEET PILE AND PRECAST CONCRETE WALLS MAY BE APPROVED BUT AT NO ADDITIONAL COST. THE CULVERT CONTRACTOR IS TO SUBMIT TO THE ENGINEER FOR APPROVAL, COMPLETE DRAWINGS OF THE PROPOSED CURTAIN WALL ALTERNATIVE BEFORE BEGINNING CONSTRUCTION.

14'–3 x 8'–11 x 72'–0
STRUCTURAL PLATE PIPE ARCH CULVERT

CURTAIN WALL DETAILS

STATION 14+65.00 0° SKEW
CITY OF WAUKEE, IOWA

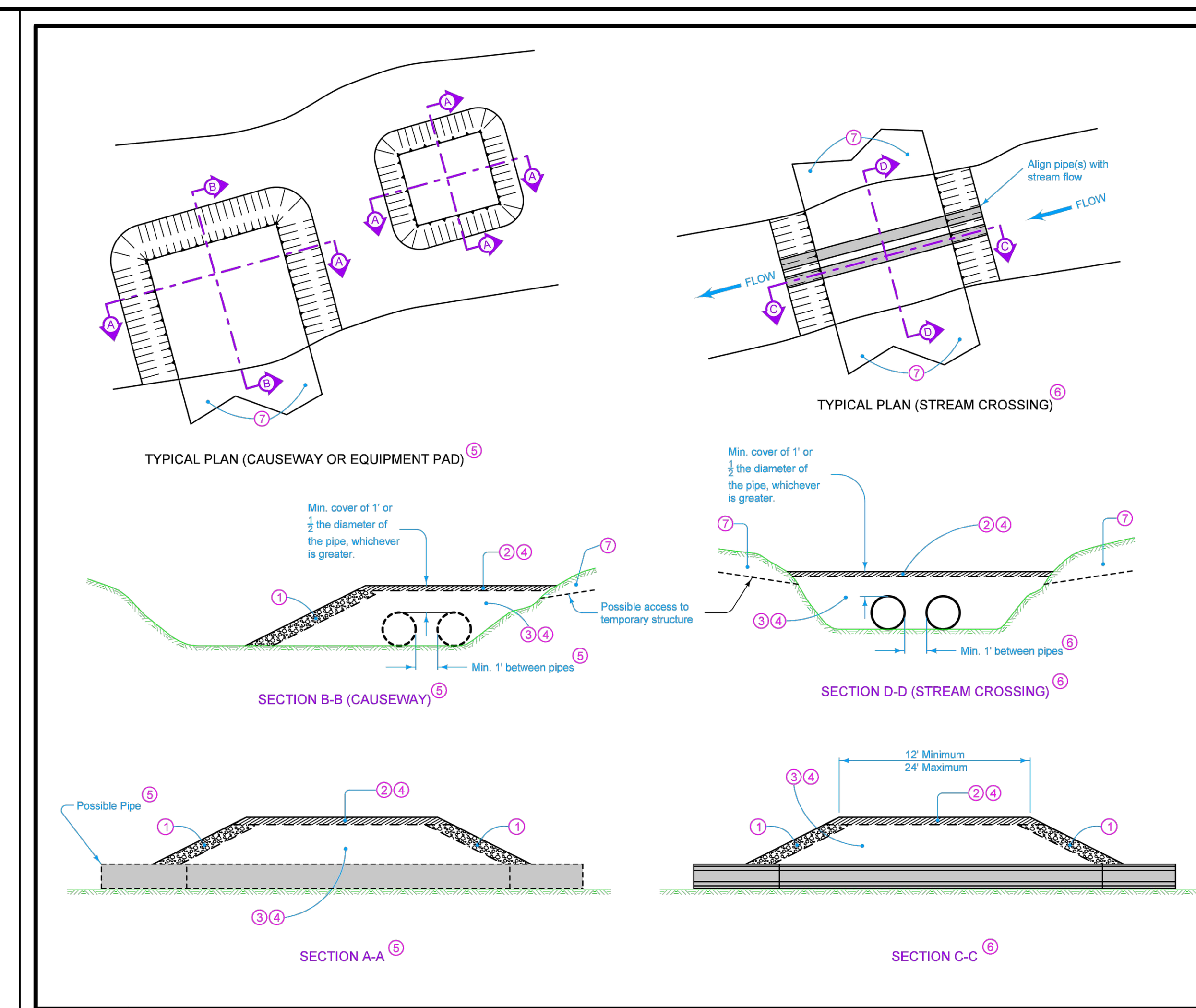
CALHOUN–BURNS & ASSOCIATES, INC. CONSULTING ENGINEERS
WEST DES MOINES, IOWA 50266 (515)224–4344

JOB NO. 2013194

DESIGNED BY : JAJ
DRAWN BY : JNM
CHECKED BY : TAC

DALLAS COUNTY

SHEET 6 OF 7



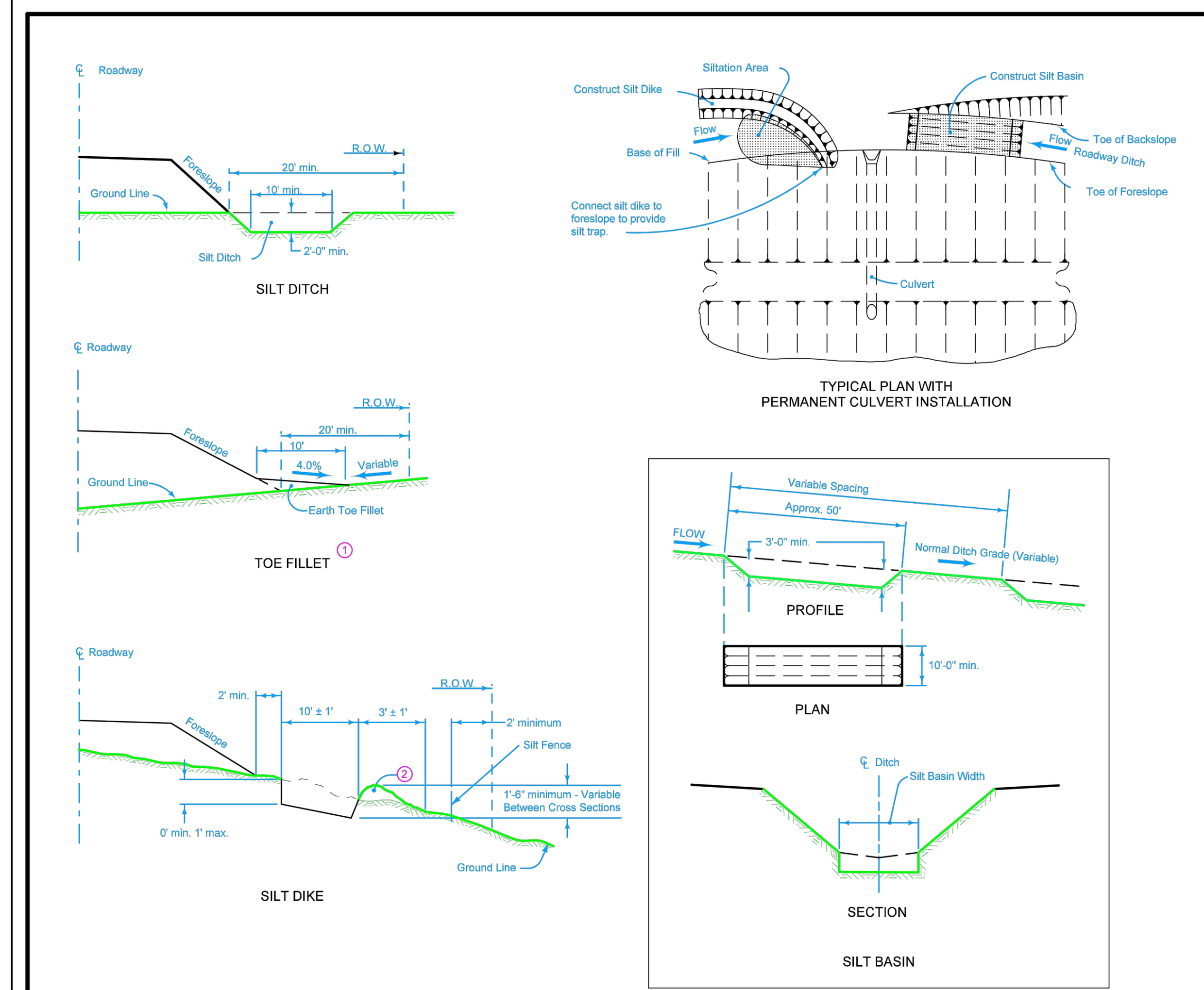
1. Minimum 1 foot of Class D revetment, Class E revetment, or broken concrete meeting the requirements of Section 4130 of the Standard Specifications.
2. Possible choke layer for construction traffic. Use any combination of erosion stone, granular backfill, special backfill (except with reclaimed HMA), granular surfacing material, or granular soils of AASHTO classification A-1 or A-2 with less than 5% fines passing the #200 sieve.
3. Use clean material with less than 5% fines passing the #200 sieve. Acceptable materials include revetment and granular materials.
4. When dredging is allowed by a permit, use dredged material containing 10% or less passing the #200 sieve. Prior to beginning construction according to EW-401 , install erosion control measures according to EC-202. Leave these measures in place and maintain until temporary EW-401 materials have been completely removed. Installation, maintenance, and removal of these erosion control measures is incidental and will not be paid for separately.
5. Pipe required if structure spans more than half the distance between banks. Contractor determines size and number of pipe(s) unless specified otherwise in the contract documents.
6. Pipe required. Contractor determines size and number of pipe(s) unless specified otherwise in the contract documents.
7. When material needs to be cut from the bank to provide for access to construct and use a temporary stream structure, move this material to an upland location.

IOWA DOT STANDARD ROAD PLAN EW-401 — REVISION 2, 10-20-15 — SHEET 1 of 1

REVISIONS: Corrected typo in note 4. Updated the DOT logo.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

TEMPORARY STREAM CROSSING, CAUSEWAY, OR EQUIPMENT PAD



Obtain the Engineer's approval for installation locations.

1. Construct an earth fillet at the toe of the roadway foreslope for areas where a roadway ditch, silt ditch, or silt dike is not provided. This Toe Fillet is incidental to "Roadway and Borrow Excavation".
2. Windrow of excavated and compacted silt material or deposited and compacted earth.

Possible Contract Items:
- Silt Ditch
- Silt Dike
- Silt Basin

Possible Tabulations:
- 100-13
- 100-14
- 100-15

IOWA DOT STANDARD ROAD PLAN EW-403 — REVISION 1, 10-20-15 — SHEET 1 of 1

REVISIONS: Replaced the DOT logo in the title block with the new version.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

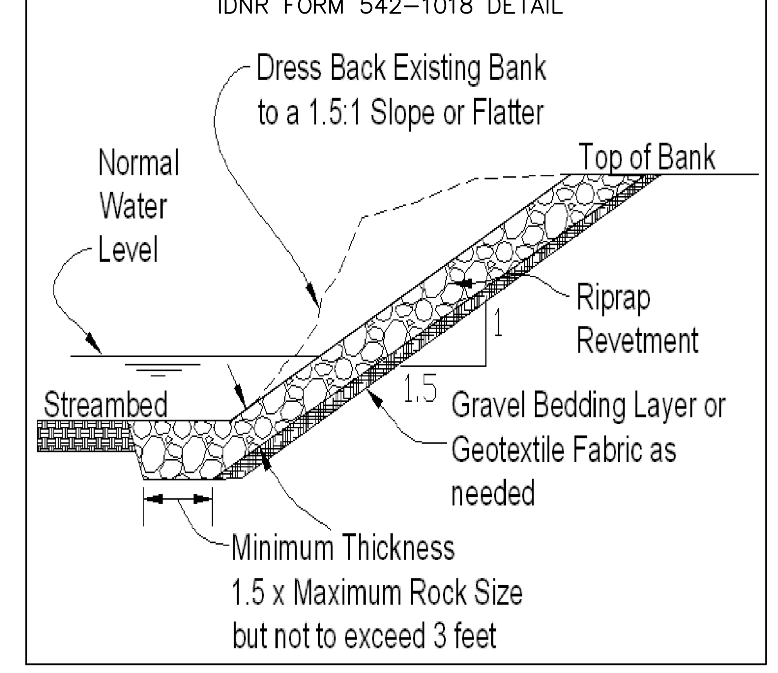
TEMPORARY EROSION CONTROL MEASURES

NOTES:

1. THE PERMITEE(S) AND ANY SUCCESSOR IN REAL ESTATE ON WHICH THE PERMITTED ACTIVITY IS LOCATED SHALL BE RESPONSIBLE FOR PROPER MAINTENANCE.
   1.1. UPON COMPLETION OF THE CULVERT EXTENSION AND RELATED ACTIVITIES, THE RESULTING STRUCTURE, ASSOCIATED APPROACH ROAD GRADES, ASSOCIATED EROSION CONTROL DEVICES, ETC. SHALL BE DEEMED THE PROPERTY AND THE RESPONSIBILITY OF THE CITY OF WAUKEE.
   1.2. THE NOTED PERMITS ARE ISSUED BASED ON THE APPROVED PLANS AND APPLICATIONS; AUTHORIZE ONLY THE USE, ARRANGEMENT, AND CONSTRUCTION SET FORTH IN SUCH APPROVED PLANS AND APPLICATIONS AND NO OTHER USE ARRANGEMENT, OR CONSTRUCTION; AND ADDITIONAL DOCUMENTATION AND/OR CERTIFICATIONS MAY BE REQUIRED AS NOTED IN THE PERMITS.
2. IDNR FORM 37, NOTIFICATION OF COMPLETION OF CONSTRUCTION, MUST BE COMPLETED AND RETURNED WITHIN 30 CALENDAR DAYS OF THE COMPLETION OF CONSTRUCTION.
3. USACOE "COMPLETED WORK CERTIFICATION" FORM MUST BE COMPLETED AND RETURNED WITHIN 30 CALENDAR DAYS OF THE COMPLETION OF CONSTRUCTION IN ACCORDANCE WITH GENERAL CONDITION NO. 30 OF THE NATIONWIDE PERMITS.
4. THE APPROACH ROAD GRADE ELEVATIONS FOR THE APPROVED PROJECT SHALL NOT BE ELEVATED OR OTHERWISE ALTERED WITHOUT PRIOR AUTHORIZATION FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) AND/OR THE UNITED STATES ARMY CORPS OF ENGINEERS (USACOE, USCOE, OR COE).
5. ACCEPTABLE RIPRAP MATERIAL INCLUDES: FIELD STONE, QUARRY ROCK, AND BROKEN CONCRETE. IF ANY BROKEN CONCRETE IS USED, ALL EXPOSED REINFORCING STEEL MUST BE CUT OFF FLUSH WITH THE SURFACE OF THE CONCRETE PRIOR TO PLACING THE RIPRAP. ALSO, ANY CONCRETE PIECES LARGER THAN THREE (3') FEET ACROSS SHALL EITHER BE BROKEN INTO SMALLER PIECES PRIOR TO PLACEMENT, OR NOT USED AS RIPRAP MATERIAL. THE USE OF ASPHALT OR OTHER SOLID WASTE IS PROHIBITED.
   5.1. ALL BANK AND SHORELINE PROTECTION SHALL CONSIST OF SUITABLE CLEAN MATERIALS, FREE FROM DEBRIS, TRASH, AND OTHER DELETERIOUS MATERIALS.
   5.2. ALL BANK AND SHORELINE PROTECTION SHALL ALSO BE NON–FROZEN MATERIALS.
6. ALL EXCESS SPOIL MATERIAL RESULTING FROM THE PROJECT SHALL BE REMOVED FROM THE FLOODPLAIN; SPREAD THINLY (LESS THAN SIX (6") INCHES THICK) ON THE SURROUNDING GROUND; OR REMOVED FROM THE PROJECT AREA.
   6.1. IN ADDITION, SPOIL MATERIAL SHOULD NOT BE PLACED IN AND AREA THAT IS, OR COULD BE, CLASSIFIED AS A REGULATED WETLAND.
   6.2. SEE PLAN FOR RECOMMENDED LOCATION.
7. ALL RELATED CONSTRUCTION ACTIVITIES WILL BE CONDUCTED DURING PERIODS OF LOW FLOW.
8. THE CONTRACTOR(S) SHALL SUBMIT A PLAN FOR TEMPORARY STREAM DIVERSION (OR OTHER APPROVED METHOD OF REDUCING FLOW AND/OR DEWATERING) PRIOR TO STARTING CONSTRUCTION. THE PLAN IS TO BE REVIEWED AND APPROVED BY THE CITY AND THE ENGINEER.
9. ANY TEMPORARY CROSSINGS SHALL INCLUDE ENOUGH CULVERTS TO ACCOMMODATE LOW FLOWS AND MUST BE REMOVED AFTER COMPLETION OF WORK ON THIS PROJECT.
   9.1. TEMPORARY STREAM CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IDOT STANDARD ROAD PLAN EW–401, ATTACHED.
   9.2. SEE ATTACHED IDOT STANDARD ROAD PLAN EW–403 FOR ADDITIONAL REQUIREMENTS.
10. THE CONTRACTOR(S) SHALL REMOVE ALL FILL MATERIAL USED FOR ANY TEMPORARY CROSSING, CAUSEWAY, WORK PAD, ETC. IN THEIR ENTIRETY TO AN UPLAND, NON–WETLAND SITE; RETURN THE AFFECTED AREA(S) OUTSIDE CONSTRUCTION LIMITS TO PRE–CONSTRUCTION ELEVATIONS; TO SEED ALL DISTURBED AREAS WITH NATIVE GRASSES; AND TO IMPLEMENT APPROPRIATE MEASURES TO ENSURE THAT SEDIMENTS ARE NOT INTRODUCED INTO WATER OF THE UNITED STATES DURING CONSTRUCTION OF THIS PROJECT.
11. EQUIPMENT FOR HANDLING AND CONVEYING MATERIALS DURING CONSTRUCTION SHALL BE OPERATED TO PREVENT DUMPING OR SPILLING THE MATERIAL INTO WATERBODIES, STREAMS, AND/OR WETLANDS – EXCEPT AS NOTED HEREIN.
12. CARE SHALL BE TAKEN TO PREVENT ANY PETROLEUM PRODUCTS, CHEMICALS, OR OTHER DELETERIOUS MATERIALS FROM ENTERING WATERBODIES, STREAMS, AND/OR WETLANDS.
13. CONSTRUCTION EQUIPMENT, ACTIVITIES, AND MATERIALS SHALL BE KEPT OUT OF THE WATERBODIES, STREAMS, AND/OR WETLANDS TO THE MAXIMUM EXTENT POSSIBLE.
14. WHEN DEWATERING PRESENTS A PROBLEM FOR PLACING THE ANY ITEMS AS DETAILED, ALTERNATE METHODS MAY BE APPROVED AFTER SUBMITTAL.
15. THE CONTRACTOR(S) SHALL BE RESPONSIBLE TO ENSURE COMPENSATORY STORAGE VOLUME IS PROVIDED TO THE MINIMUM LIMITS AND GRADES SHOWN. ADDITIONAL VOLUME IS BETTER WHILE STILL PROVIDING POSITIVE DRAINAGE.
16. THE CONTRACTOR(S) SHALL REMOVE ANY DEBRIS WITHIN ANY PERMITTED CULVERT, INCLUDING BUT NOT LIMITED TO EXISTING TREES/BRANCHES, EXISTING RIPRAP, EXISTING EARTH, OTHER EXISTING DEBRIS, AND ANY ITEMS RESULTING FROM RELATED CONSTRUCTION ACTIVITIES – EXCLUDE ANY ALGAE/MOSS, EXCEPT AS NECESSARY FOR ANY CONNECTIONS.
17. PER IDNR, THE SITE AREA HAS THE POTENTIAL OF INHABITATION FROM THE INDIANA BAT (MYOTIS SODALIS) AND THE NORTHERN LONG–EARED BAT (MYOTIS SEPTENTRIONALIS) – NO THOROUGH FIELD STUDIES WERE PERFORMED.
   17.1. IF EVIDENCE SHOULD BE FOUND OR SUSPECTED, CONTACT THE IDNR (ENDANGERED SPECIES COORDINATOR) AT 515/281–5918; AND THE US FISH AND WILDLIFE SERVICE (ROCK ISLAND FIELD OFFICE) AT 309/757–5800.
   17.2. NO TREE CUTTING SHALL BE ALLOWED BETWEEN APRIL 1 AND SEPTEMBER 30.

Typical Stream Bank Armoring Cross Section

NOT TO SCALE
IDNR FORM 542–1018 DETAIL



73

GLYNN VILLAGE PLAT 10 - EXISTING CULVERT EXTENSION NOTES & DETAILS

SCALE: AS NOTED
DWG: 15–013–CULVERT.dwg
FIELD BOOK:
DESIGNED BY: JRK
CHECKED BY: DJS
SHEET 73 OF 100
DRAWN BY: PJV
DATE: 02/24/2016
FILE NO.: 15–013
LOCATION:
FOR:

NO.	REVISION	DATE	BY

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288–4823

15–013

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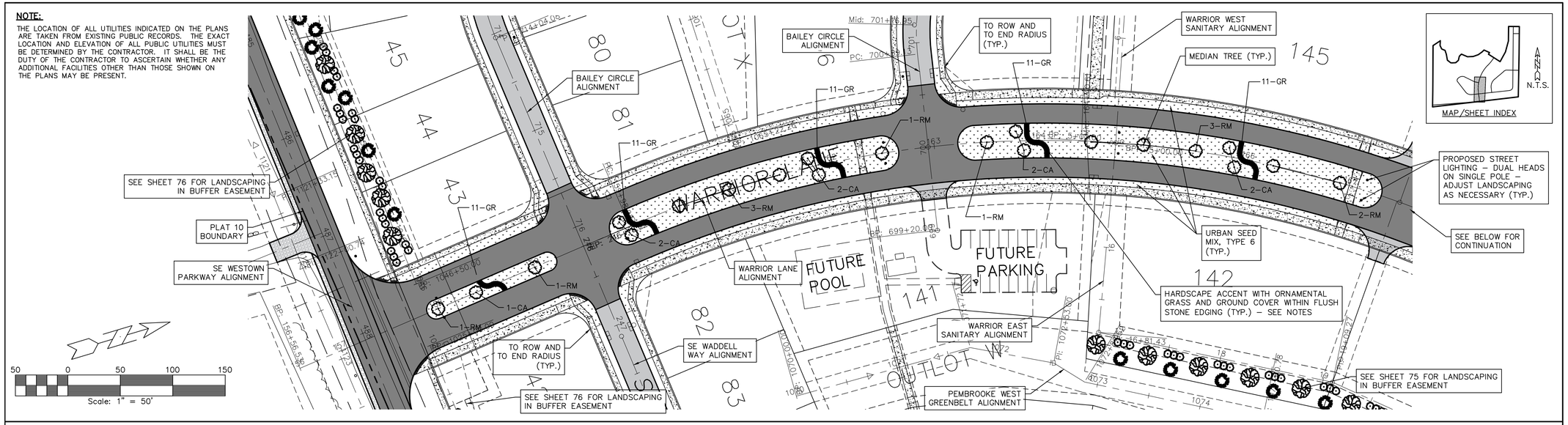

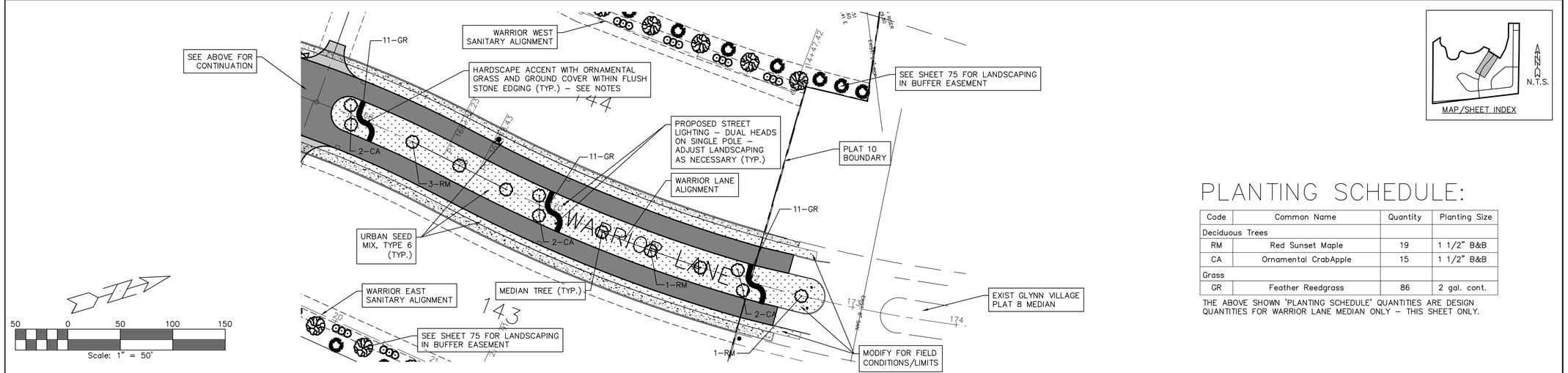

PLANTING SCHEDULE:

Code	Common Name	Quantity	Planting Size
Deciduous Trees			
RM	Red Sunset Maple	19	1 1/2" B&B
CA	Ornamental CrabApple	15	1 1/2" B&B
Grass			
GR	Feather Reedgrass	86	2 gal. cont.

THE ABOVE SHOWN 'PLANTING SCHEDULE' QUANTITIES ARE DESIGN QUANTITIES FOR WARRIOR LANE MEDIAN ONLY – THIS SHEET ONLY.

LANDSCAPING/GROUND COVER NOTES:

1. SEE ADDITIONAL PLANTING AND SWPPP NOTES ON SWPPP SHEETS "A", "B", AND "C".
2. DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL, OR THE STORAGE AND/OR DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL, OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF VEGETATION WITHIN THE FINAL MEDIAN AREA.
3. ALL WIRE, TWINE, AND BURLAP SHALL BE REMOVED FROM THE ROOTBALL OF ALL STREET TREES PRIOR TO PLANTING.
4. NO STAKING OF TREES IS ALLOWED.
5. ALL DISTURBED MEDIAN AREAS AND ROW AREAS NOT COVERED BY TREES AND/OR OTHER PERMANENT COVERINGS SHALL BE RESTORED WITH A MINIMUM OF SIX (6") INCHES OF TOPSOIL BEFORE PERMANENT (FINAL) SEEDING/SODDING OPERATIONS COMMENCE; AND THEN SEEDED WITH MULCH OR SODDED.
6. ALL DISTURBED AREAS PREVIOUSLY COVERED WITH ESTABLISHED GRASS SHALL BE SODDED AND WATERED UNTIL ESTABLISHED.
7. ALL NON–PAVED AREAS DISTURBED BY CONSTRUCTION, OR REQUIRED TO BE STABILIZED, SHALL BE RESTORED BY SEED AND MULCH.
8. ALL SEEDING SHALL BE DONE IN ACCORDANCE WITH SUDAS SPECIFICATION 9010 WITH ANY REFERENCED FIGURES AND SPECIFICATIONS.
9. ALL SODDING SHALL BE DONE IN ACCORDANCE WITH SUDAS SPECIFICATION 9020 WITH ANY REFERENCED FIGURES AND SPECIFICATIONS.
10. ALL PLANTINGS MATERIALS AND PLANTING SHALL BE DONE IN ACCORDANCE WITH SUDAS SPECIFICATION 9030 WITH ANY REFERENCED FIGURES AND SPECIFICATIONS.
11. TEMPORARY STABILIZATION SHALL BE WITH THE SUDAS EROSION CONTROL MIX.
12. FINAL STABILIZATION SHALL BE A SUDAS URBAN GRASS MIX ON A MINIMUM OF SIX (6") INCHES OF TOPSOIL.
13. PERMANENT STABILIZATION SHALL BE LIMITED TO THE SMF's AND WARRIOR LANE MEDIAN.
14. ALL MEDIAN TREES SHALL BE AN OVERHEAD DECIDUOUS VARIETY WITH A MINIMUM 1.5 INCH B&B, SINGLE STRAIGHT LEADER, AND MATCHED.
15. MEDIAN TREES SHALL BE SPACED AT APPROXIMATELY 50 FOOT SPACING, BUT MAINTAIN A MINIMUM OF TEN (10) FOOT BUFFER FROM ALL SANITARY OR STORM SEWERS, WATERMAINS, LIGHT POLES, AND SIDEWALKS/TRAILS.
16. HARDSCAPING ACCENTS, EDGING, GROUND COVER, AND PLANTINGS SHALL BE OF A SIMILAR MATERIALS AND CONSTRUCTED AS PROVIDED ON THE GLYNN VILLAGE PLAT 8 PORTIONS OF WARRIOR LANE (LOCATED IMMEDIATELY TO THE NORTH OF THE PROPOSED IMPROVEMENTS).
17. PLANTING BEDS SHALL BE SPACED AT APPROXIMATELY 200 FEET; SHALL BE FOUR (4) FEET WIDE; AND LANDSCAPING GRASSES SHALL BE PLANTED AT APPROXIMATELY FOUR (4) FEET RANDOM OFFSET SPACINGS.
18. CONTINUOUS STONE EDGING AROUND THE MEDIAN PLANTING BEDS SHALL BE SIX (6) TO EIGHT (8) INCHES WIDE; SHALL BE INSTALLED BETWEEN THE BACK OF CURBS OF THE MEDIANS; SHALL BE LAID FLUSH WITH THE FINISHED GRADE; PLACED ON BOTH SIDES OF PLANTING BED; AND SHALL UTILIZE AN APPROXIMATELY NINE (9) FOOT RADII FOR LAYOUT.
19. ALL SEEDING MIXTURES AND/OR SODDING SHALL ALSO INCLUDE, BUT NOT LIMITED TO: LOOSENING AND SMOOTHING TOPSOIL TO FINISHED GRADE, MULCH, FERTILIZER, WATERING, RE–SEEDING, CLEANUP AS NECESSARY UNTIL ACCEPTANCE OF FINAL STABILIZATION.
20. TREE PLANTING SUBSTITUTIONS – THE DEVELOPER MAY SUBSTITUTE TREE SPECIES TO ADD VARIETY AND PROVIDE MORE DISEASE AND PEST RESISTANCE.
    - 20.1. ALL TREE PLANTING SUBSTITUTIONS SHALL BE APPROVED BY THE CITY OF WAUKEE PRIOR TO PLANTING/ORDERING.
    - 20.2. THE DEVELOPER MAY SUBSTITUTE OVERSTORY TREES WITH THE FOLLOWING:
      - 20.2.1. SKYLINE AND IMPERIAL LOCUST
      - 20.2.2. HOMESTEAD
      - 20.2.3. PATRIOT
      - 20.2.4. PROSPECTOR ELM
    - 20.3. THE DEVELOPER MAY SUBSTITUTE UNDERSTORY TREES WITH THE FOLLOWING:
      - 20.3.1. THORNLESS COCKSPUR
      - 20.3.2. WINTERKING HAWTHORN
      - 20.3.3. CHANTICLEER
      - 20.3.4. CLEVELAND SELECT
      - 20.3.5. ARISTOCRAT PEAR
21. SHOWN QUANTITIES AND SPACINGS ARE FOR DESIGN BASIS. INSTALLER(S) SHALL ENSURE PROPER SPACING FOR MATURE SIZES.

GLYNN VILLAGE PLAT 10 - WARRIOR LANE - MEDIAN GROUND COVER PLAN

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PLANTINGS.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 74 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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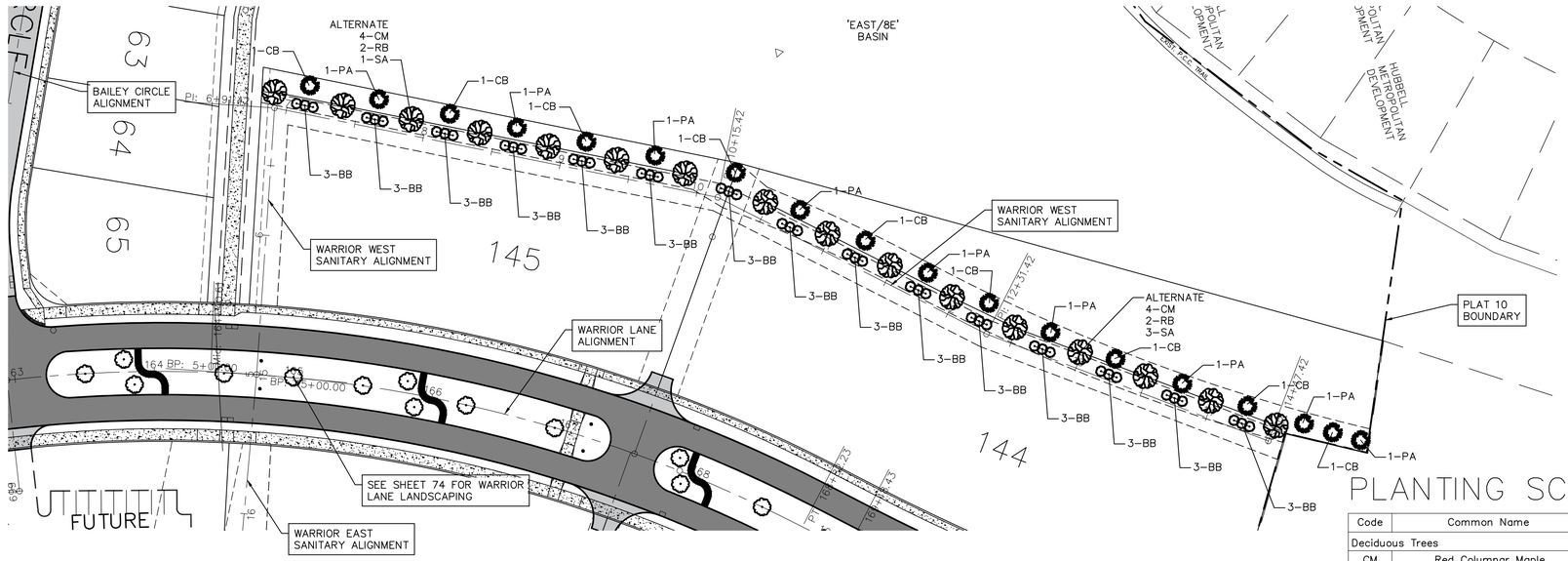
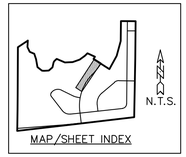
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.





50 0 50 100 150

Scale: 1" = 50'

LANDSCAPING NOTES:

1. SEE SHEET 74 FOR ADDITIONAL NOTES AND INFORMATION.
2. SHOWN PLANTINGS SHALL BE INSTALLED WITH THE RESPECTIVE DEVELOPMENT(S) OF LOTS 145 AND 144. THE BERM SHALL BE INSTALLED UNDER THE CURRENT DEVELOPMENT.
3. UPDATED LANDSCAPING PLANS SHALL BE PROVIDED AT THE TIME OF RESPECTIVE DEVELOPMENT(S).

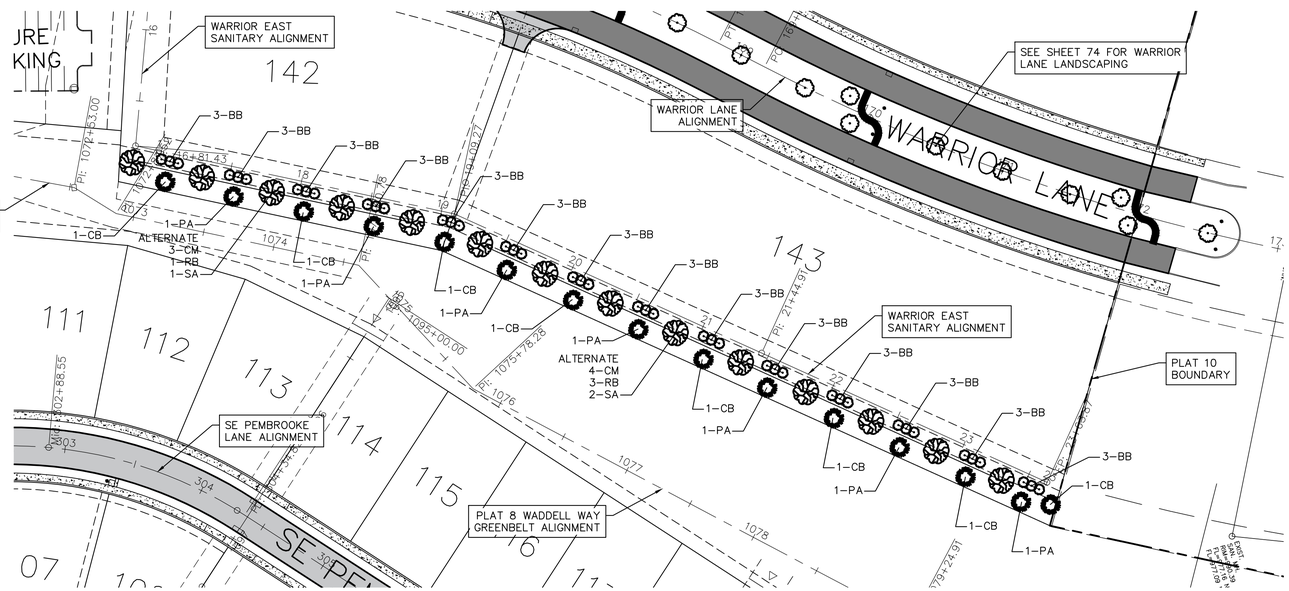
PLANTING SCHEDULE:

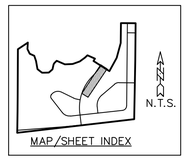
Code	Common Name	Quantity	Planting Size
Deciduous Trees			
CM	Red Columnar Maple	15	1 1/2" B&B
SA	Swamp Oak	8	1 1/2" B&B
RB	River Birch	7	1 1/2" B&B
Evergreen Trees			
CB	Colorado Blue Spruce	17	6' Height
PA	Norway Spruce	16	6' Height
Shrubs/Bushes			
BB	Dwarf Burning Bush	87	3 Gal.

THE ABOVE SHOWN 'PLANTING SCHEDULE' QUANTITIES ARE DESIGN QUANTITIES FOR FUTURE PLANTINGS ON BOTH LANDSCAPING BERMS ONLY – THIS SHEET ONLY.

NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



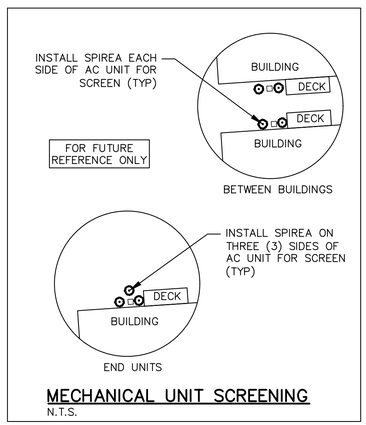


50 0 50 100 150

Scale: 1" = 50'

LANDSCAPING NOTES:

1. SEE SHEET 74 FOR ADDITIONAL NOTES AND INFORMATION.
2. SHOWN PLANTINGS SHALL BE INSTALLED WITH THE RESPECTIVE DEVELOPMENT(S) OF LOTS 142 AND 143. THE BERM SHALL BE INSTALLED UNDER THE CURRENT DEVELOPMENT.
3. UPDATED LANDSCAPING PLANS SHALL BE PROVIDED AT THE TIME OF RESPECTIVE DEVELOPMENT(S).



MECHANICAL UNIT SCREENING

N.T.S.

GLYNN VILLAGE PLAT 10-WARRIOR OUTLOTS - LANDSCAPING BUFFER PLAN

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PLANTINGS.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 75 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

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(515) 288-4823

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NOTE:

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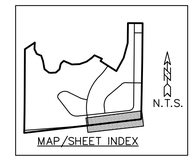
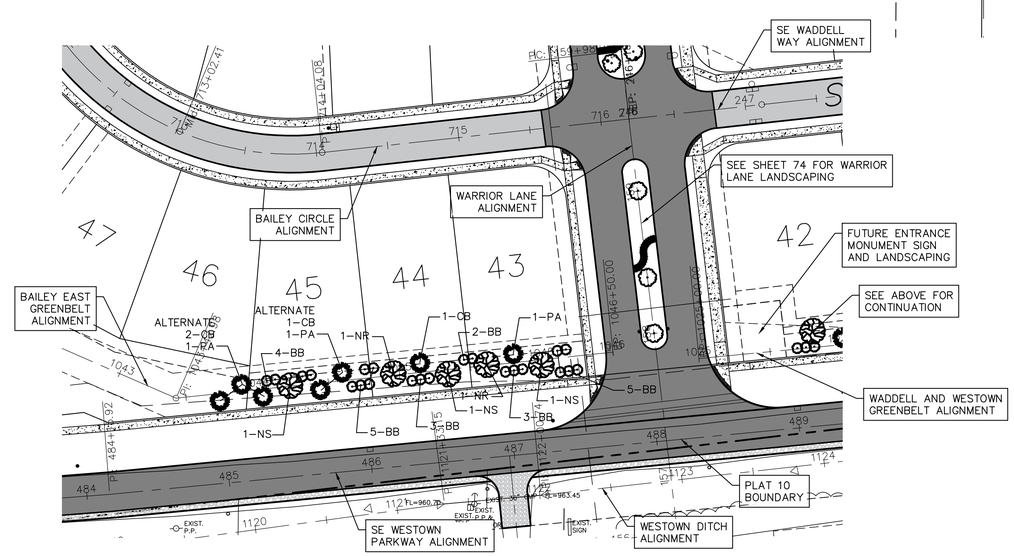


50 0 50 100 150

Scale: 1" = 50'



LANDSCAPING NOTES:

1. SEE SHEET 74 FOR ADDITIONAL NOTES AND INFORMATION.
2. THE FUTURE ENTRANCE MONUMENT SIGN AND LANDSCAPING SHALL BE SUBMITTED SEPARATELY AND AT A LATER DATE.

PLANTING SCHEDULE:

Code	Common Name	Quantity	Planting Size
Deciduous Trees			
NS	Norwegian Sunset Maple	17	1 1/2" B&B
NR	Northern Red Oak	18	1 1/2" B&B
Evergreen Trees			
CB	Colorado Blue Spruce	15	6' Height
PA	Norway Spruce	15	6' Height
Shrubs/Bushes			
BB	Dwarf Burning Bush	80	3 Gal.

THE ABOVE SHOWN 'PLANTING SCHEDULE' QUANTITIES ARE DESIGN QUANTITIES FOR THE LANDSCAPE BUFFER (WITHOUT A BERM) ALONG SE WESTOWN PARKWAY ONLY – THIS SHEET ONLY.

GLYNN VILLAGE PLAT 10 - WESTOWN LANDSCAPE BUFFER PLAN

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-PLANTINGS.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 76 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

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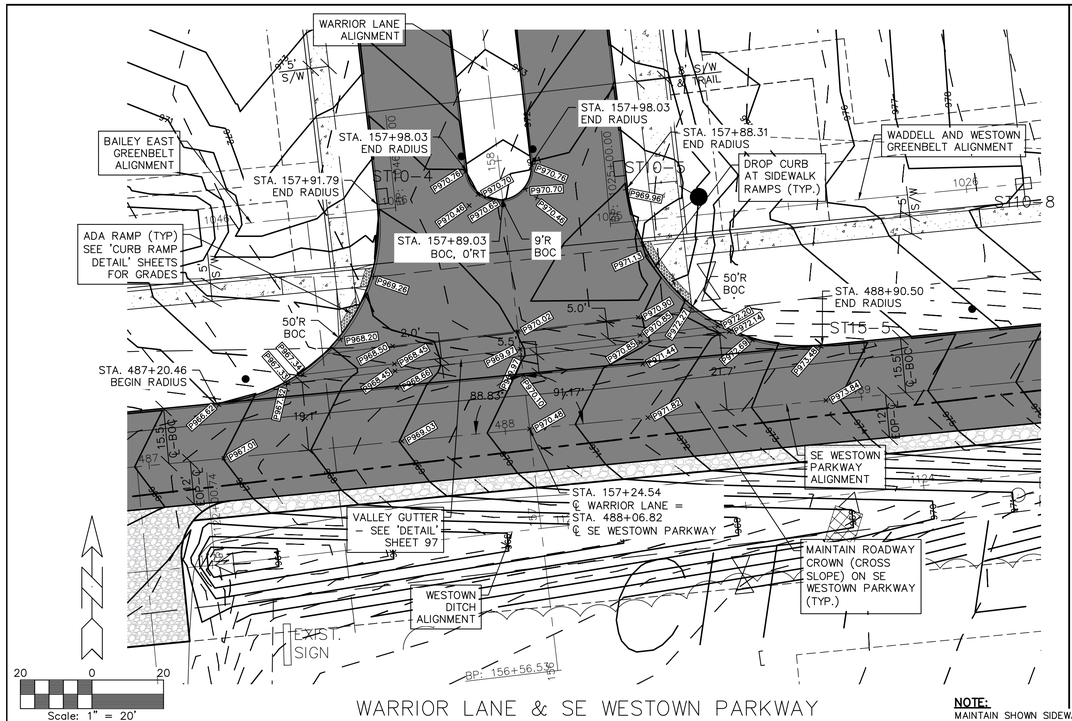
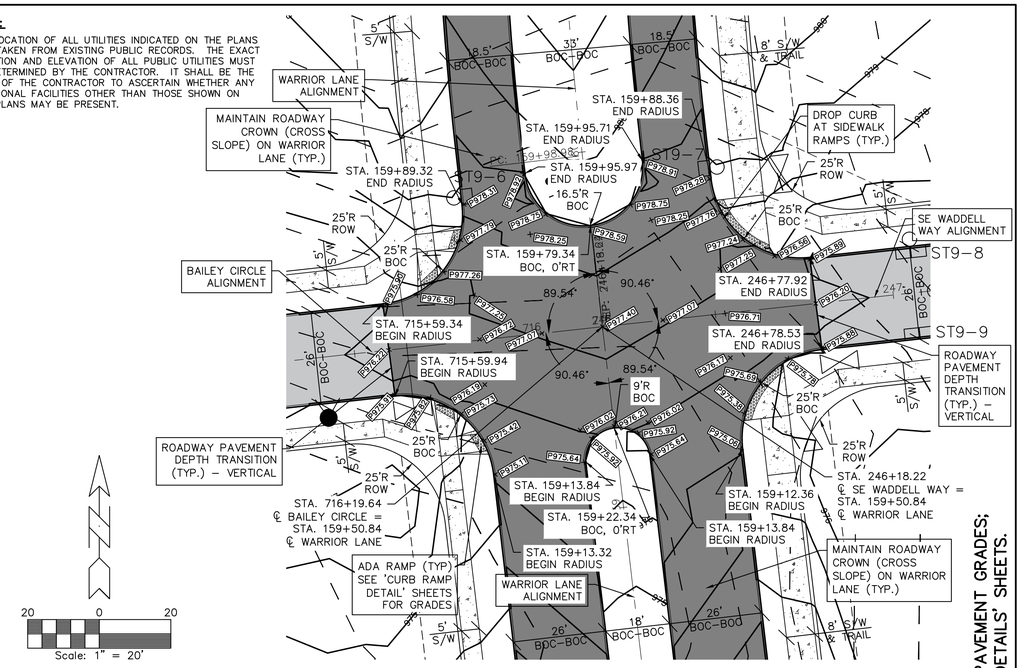


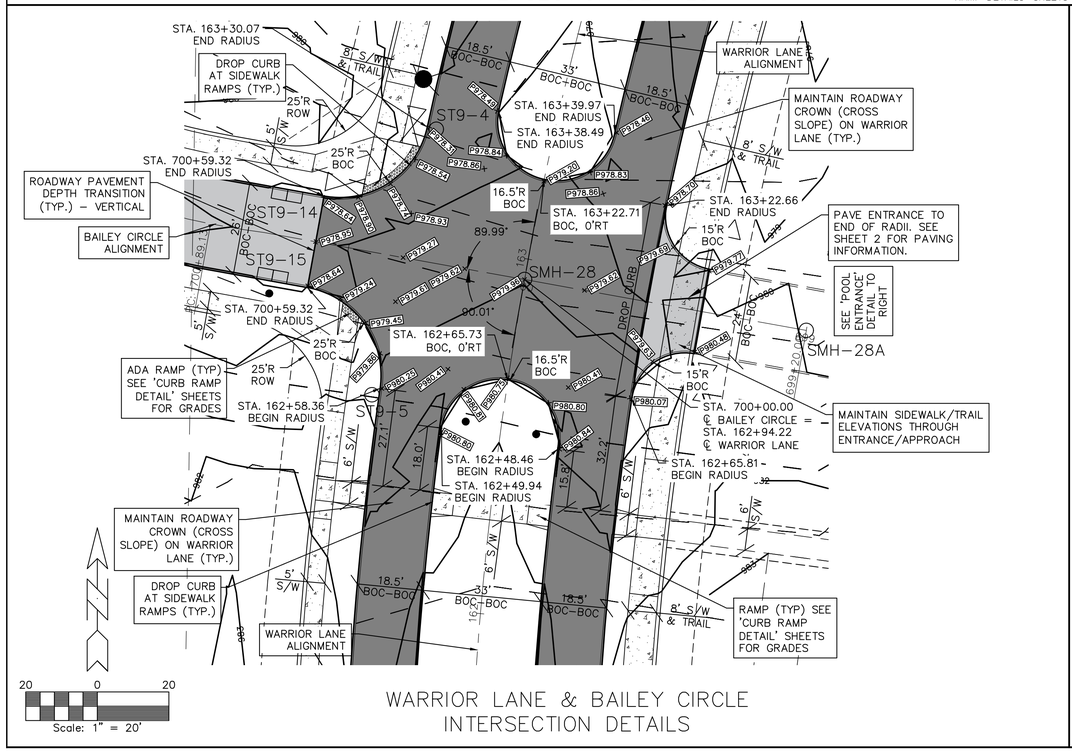
WARRIOR LANE & SE WESTOWN PARKWAY INTERSECTION DETAILS

NOTE:
THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

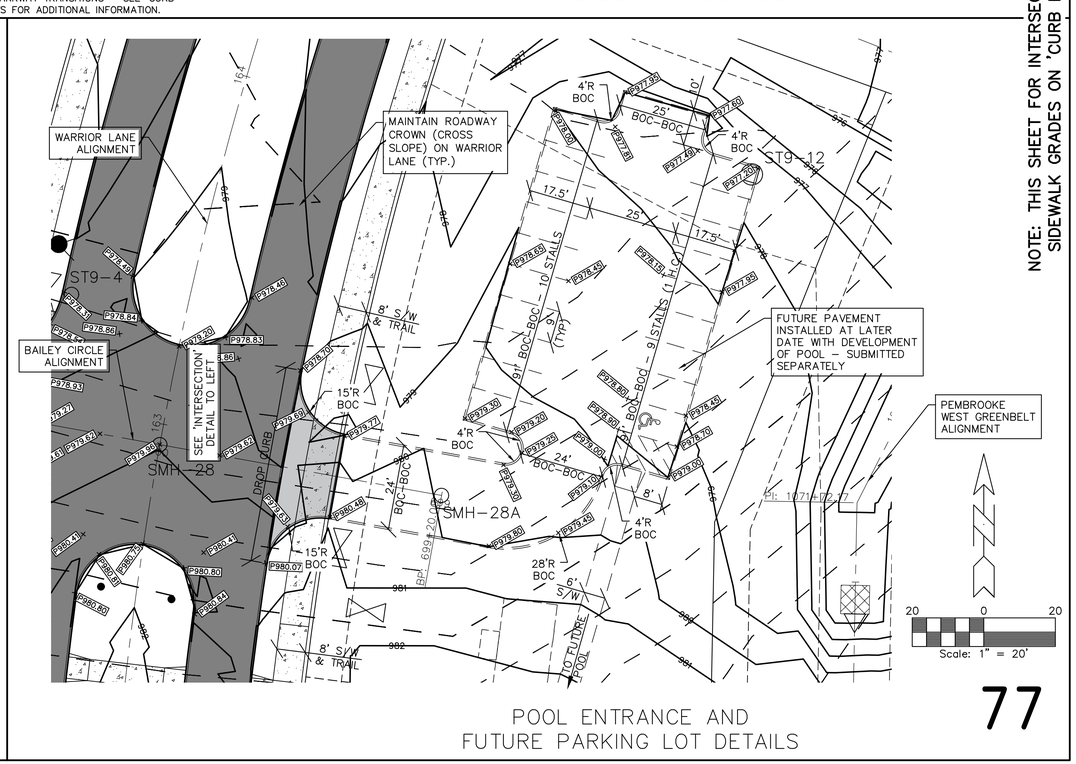


WARRIOR LANE & BAILEY CIRCLE/SE WADDELL WAY INTERSECTION DETAILS

NOTE:
MAINTAIN SHOWN SIDEWALK AND/OR TRAIL WIDTHS THROUGH THE SIDEWALK AND PARKWAY TRANSITIONS – SEE 'CURB RAMP DETAILS' SHEETS FOR ADDITIONAL INFORMATION.



WARRIOR LANE & BAILEY CIRCLE INTERSECTION DETAILS



POOL ENTRANCE AND FUTURE PARKING LOT DETAILS

NOTE: THIS SHEET FOR INTERSECTION PAVEMENT GRADES; SIDEWALK GRADES ON 'CURB RAMP DETAILS' SHEETS.

77

GLYNN VILLAGE PLAT 10 - INTERSECTION DETAILS I

LOCATION:	SCALE: 1" = 20'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-INT-1.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 77 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

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DES MOINES, IOWA 50312
(515) 286-4823

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NOTE:

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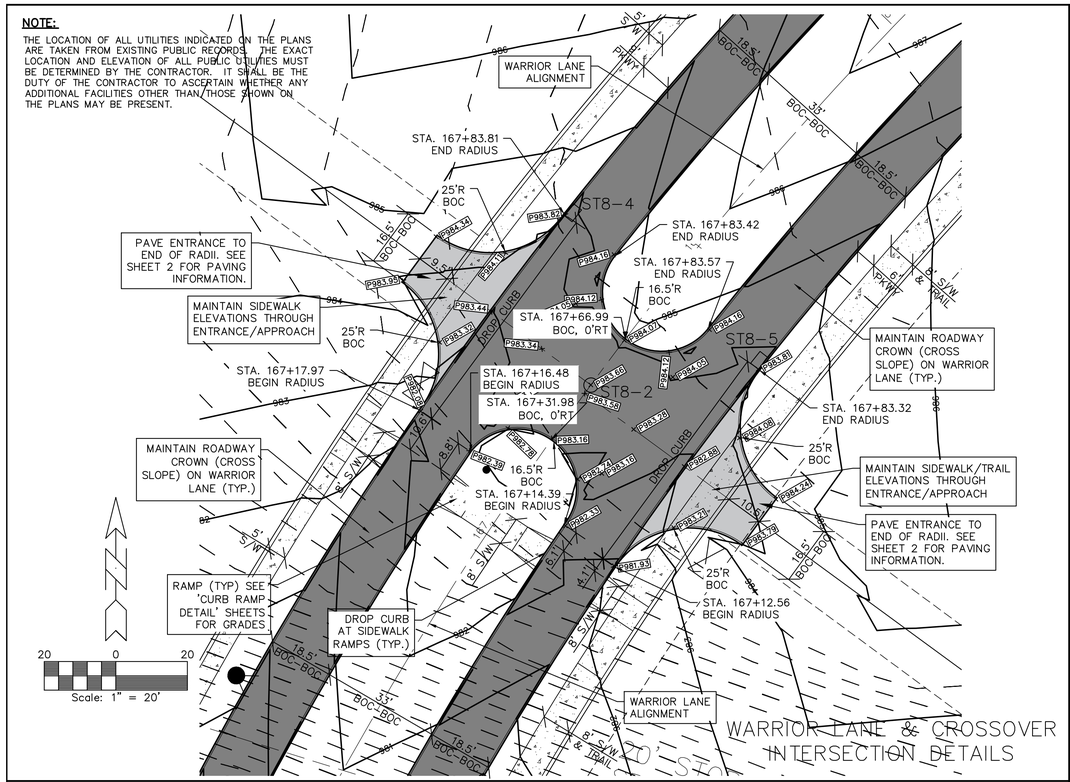
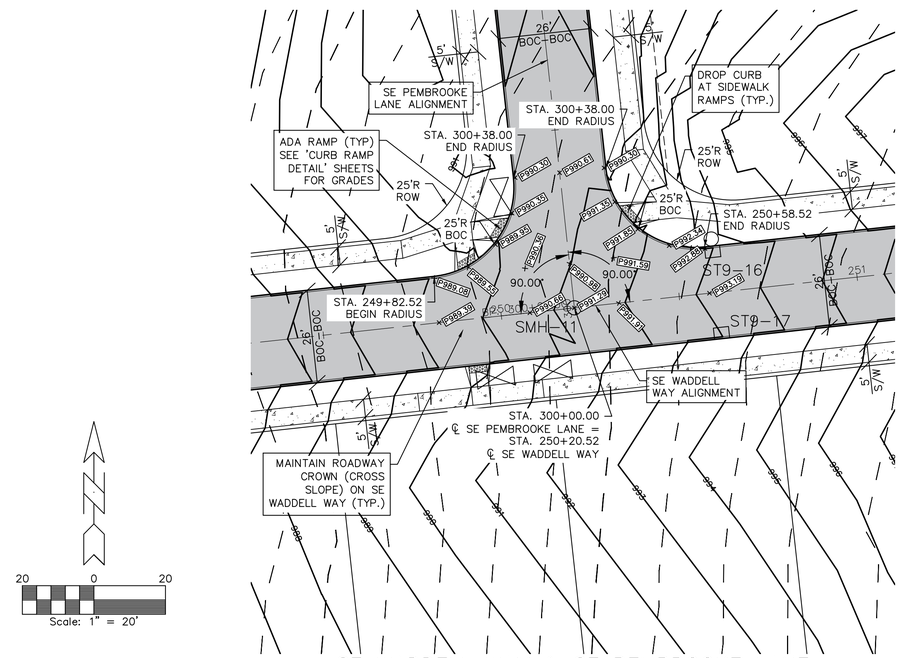


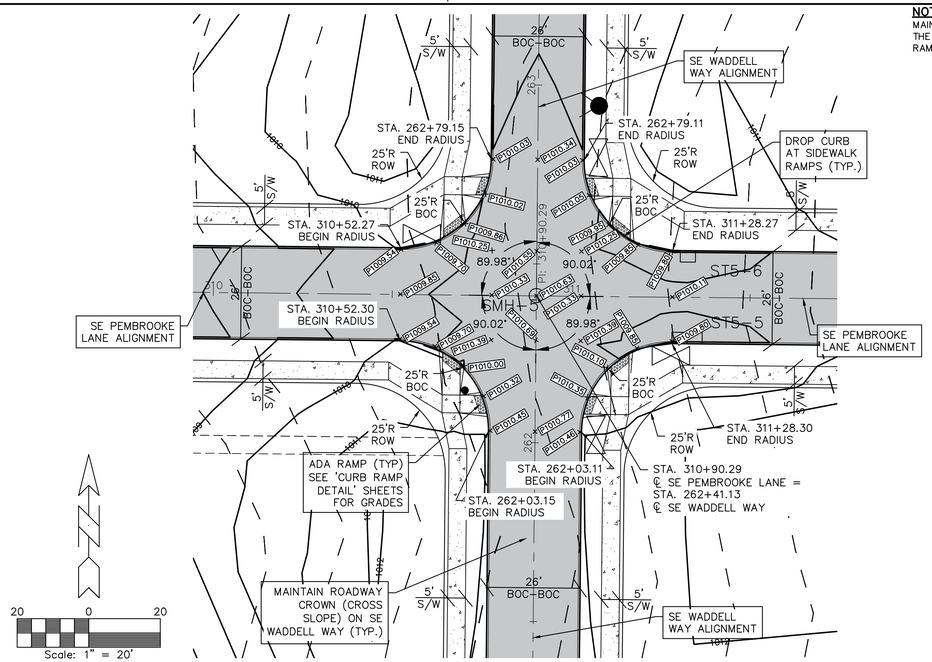
WARRIOR LANE & CROSSOVER INTERSECTION DETAILS



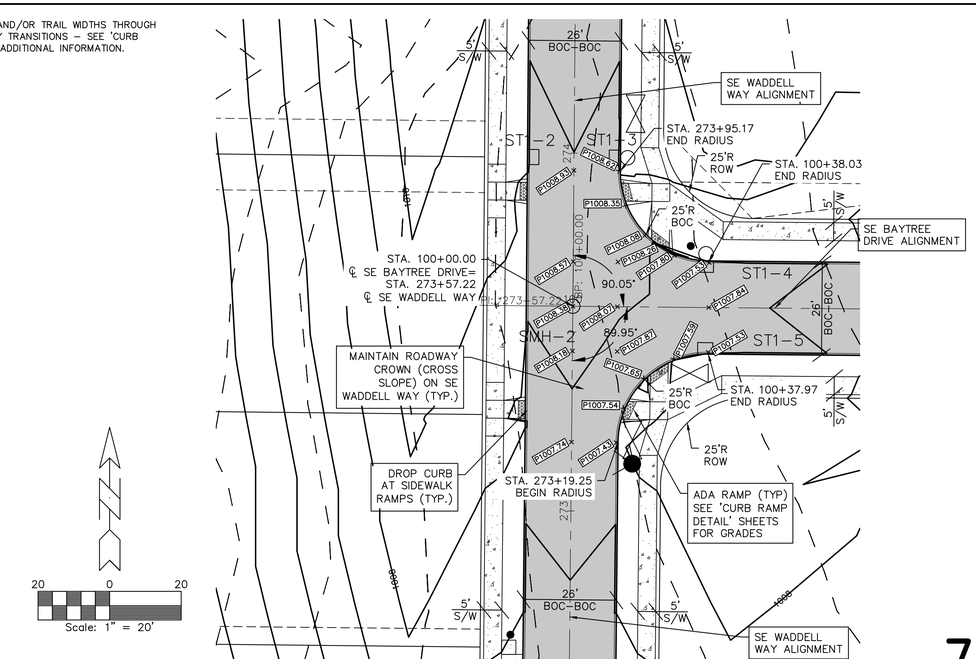
SE WADDELL WAY & SE PEMBROOKE LANE INTERSECTION DETAILS

NOTE:

MAINTAIN SHOWN SIDEWALK AND/OR TRAIL WIDTHS THROUGH THE SIDEWALK AND PARKWAY TRANSITIONS – SEE 'CURB RAMP DETAILS' SHEETS FOR ADDITIONAL INFORMATION.



SE WADDELL WAY & SE PEMBROOKE LANE INTERSECTION DETAILS



SE WADDELL WAY & SE BAYTREE DRIVE INTERSECTION DETAILS

NOTE: THIS SHEET FOR INTERSECTION PAVEMENT GRADES; SIDEWALK GRADES ON 'CURB RAMP DETAILS' SHEETS.

GLYNN VILLAGE PLAT 10 - INTERSECTION DETAILS 2

LOCATION:	SCALE: 1" = 20'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-INT-2.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 78 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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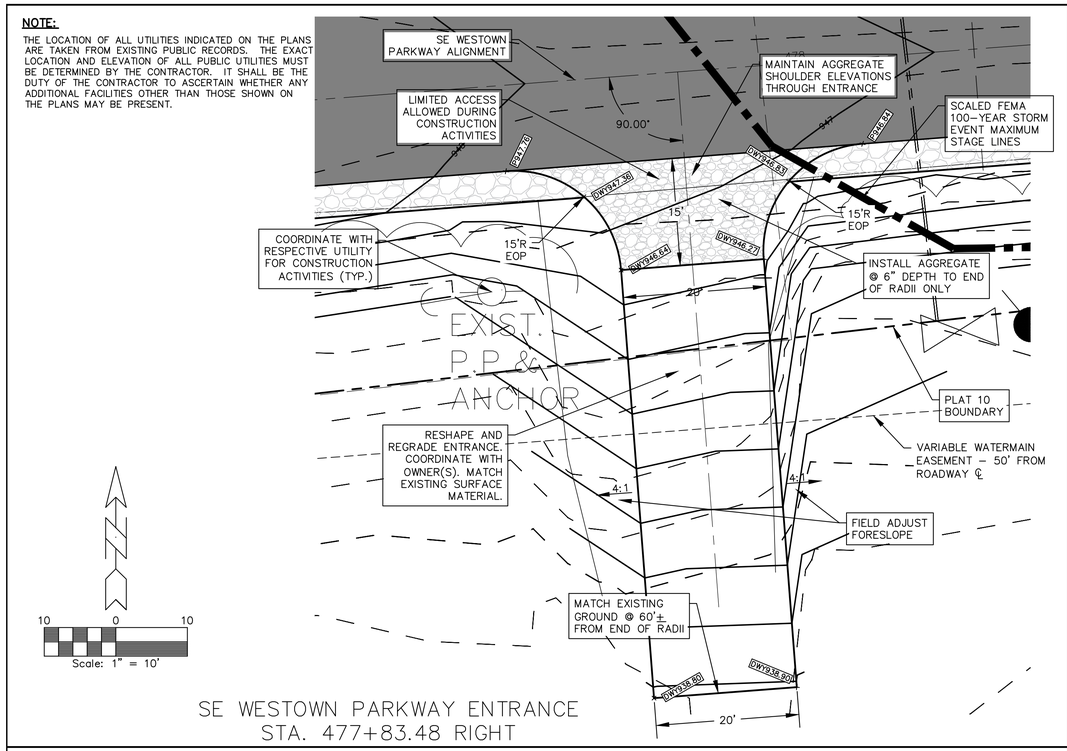
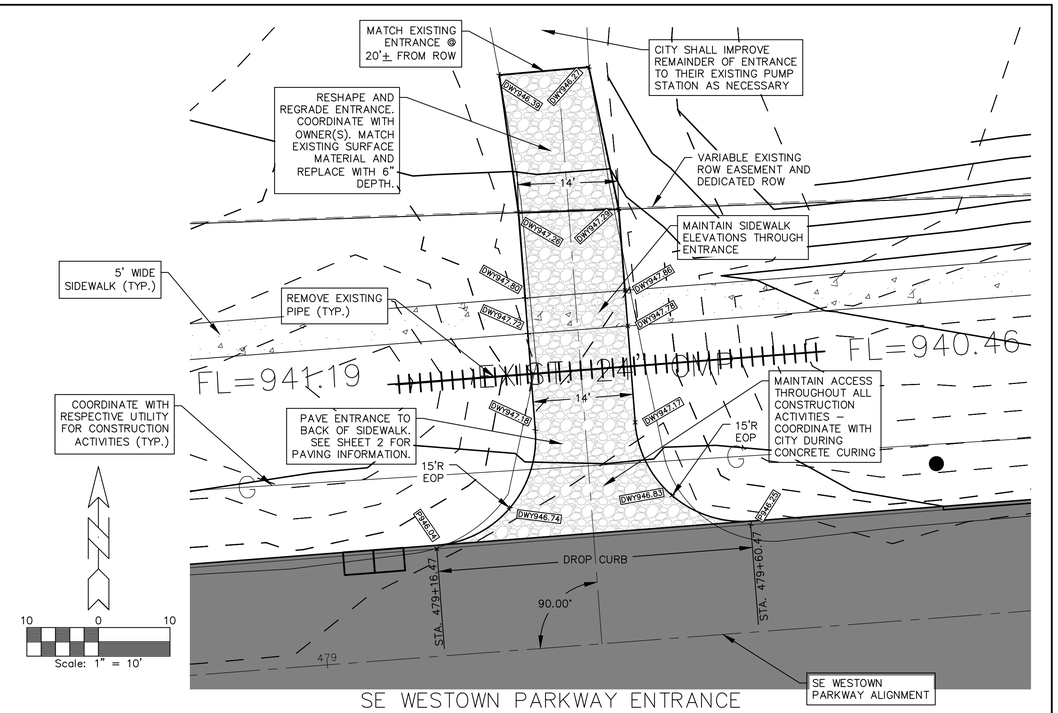
NOTE:

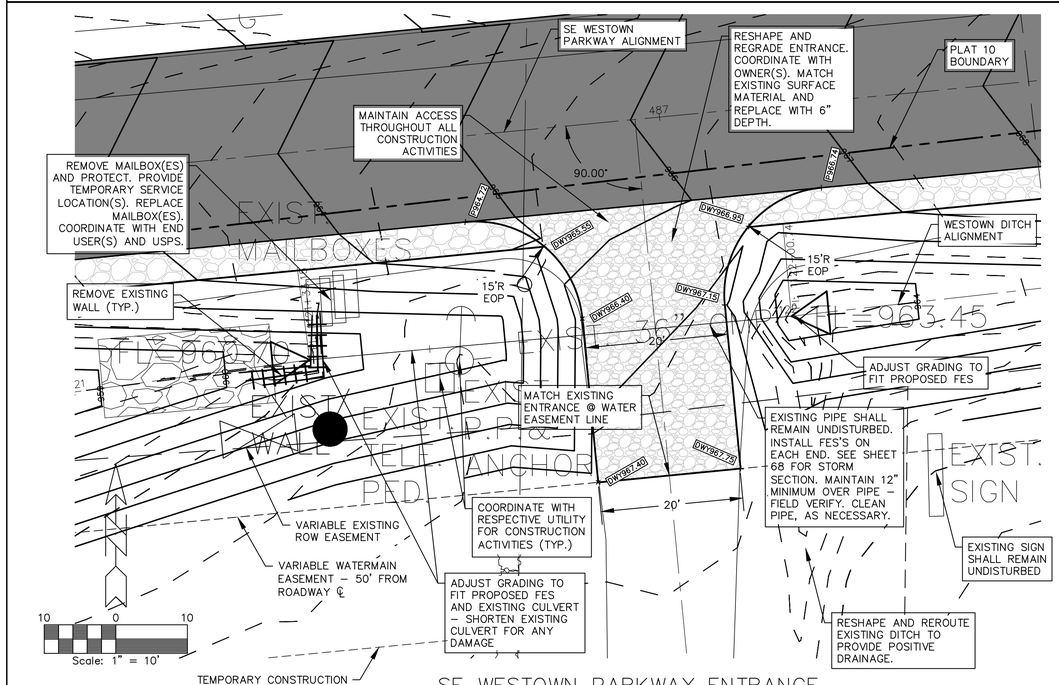
THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



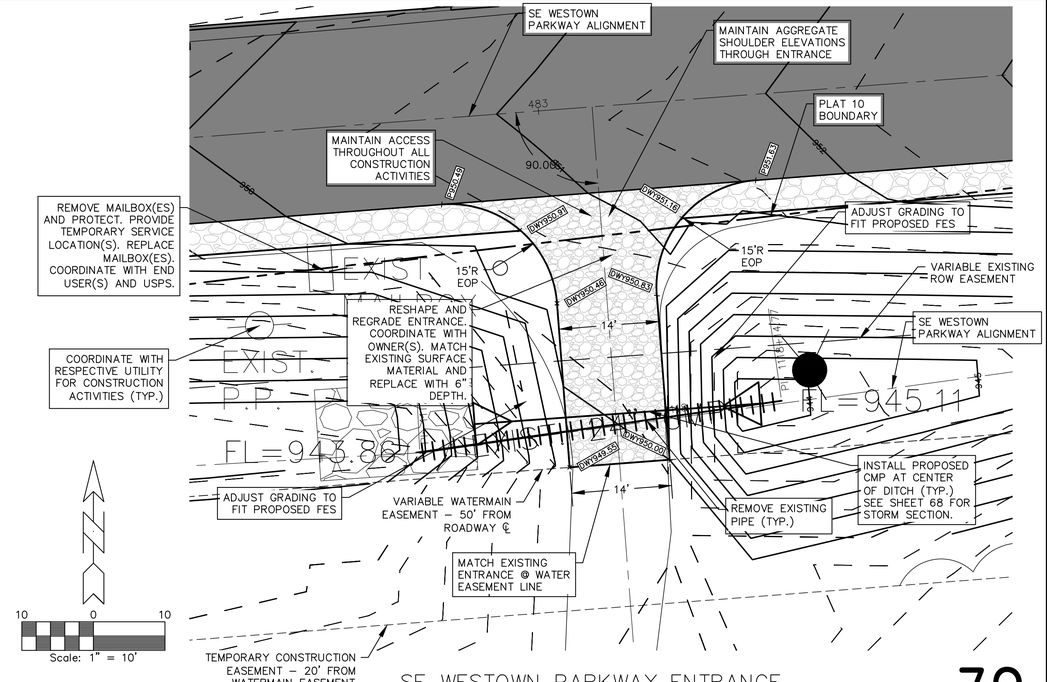
SE WESTOWN PARKWAY ENTRANCE
STA. 477+83.48 RIGHT



SE WESTOWN PARKWAY ENTRANCE
STA. 479+38.47 LEFT



SE WESTOWN PARKWAY ENTRANCE
STA. 486+96.58 RIGHT



SE WESTOWN PARKWAY ENTRANCE
STA. 483+07.52 RIGHT

GLYNN VILLAGE PLAT 10 - ENTRANCE DETAILS I - SE WESTOWN PARKWAY

NO.	REVISION	DATE	BY	FOR:

LOCATION:

SCALE: 1" = 20'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-INT-3.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 79 OF 100	FILE NO.: 15-013	

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DES MOINES, IOWA 50312
(515) 286-4823

15-013

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NOTE:

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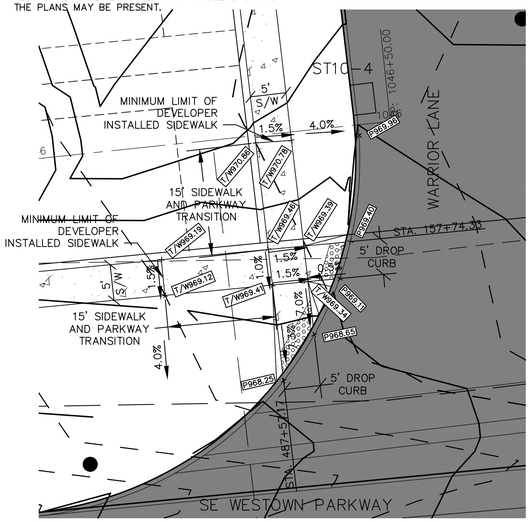
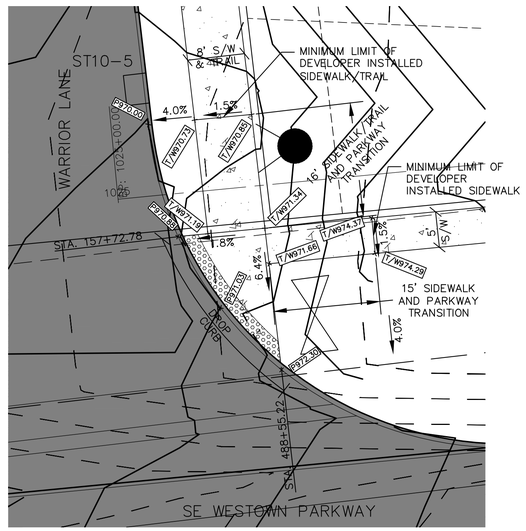


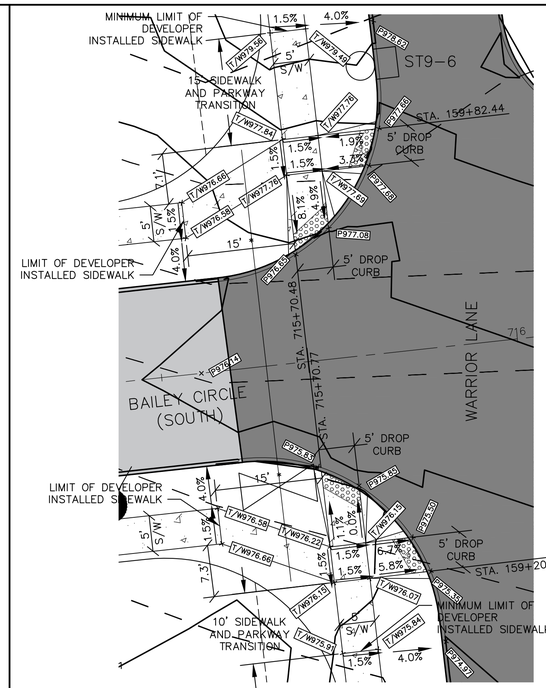
NORTHWEST QUADRANT



NORTHEAST QUADRANT

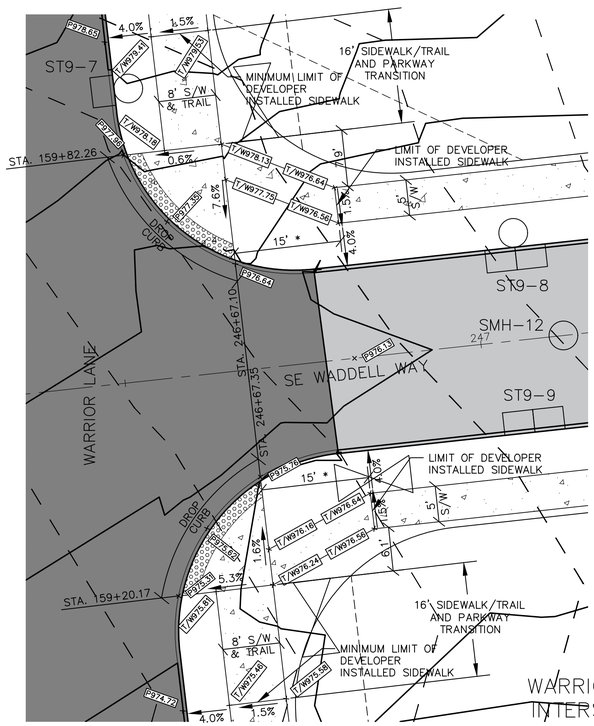
10 0 10
Scale: 1" = 10'

WARRIOR LANE & SE WESTOWN PARKWAY
INTERSECTION CURB RAMP DETAILS



10 0 10
Scale: 1" = 10'

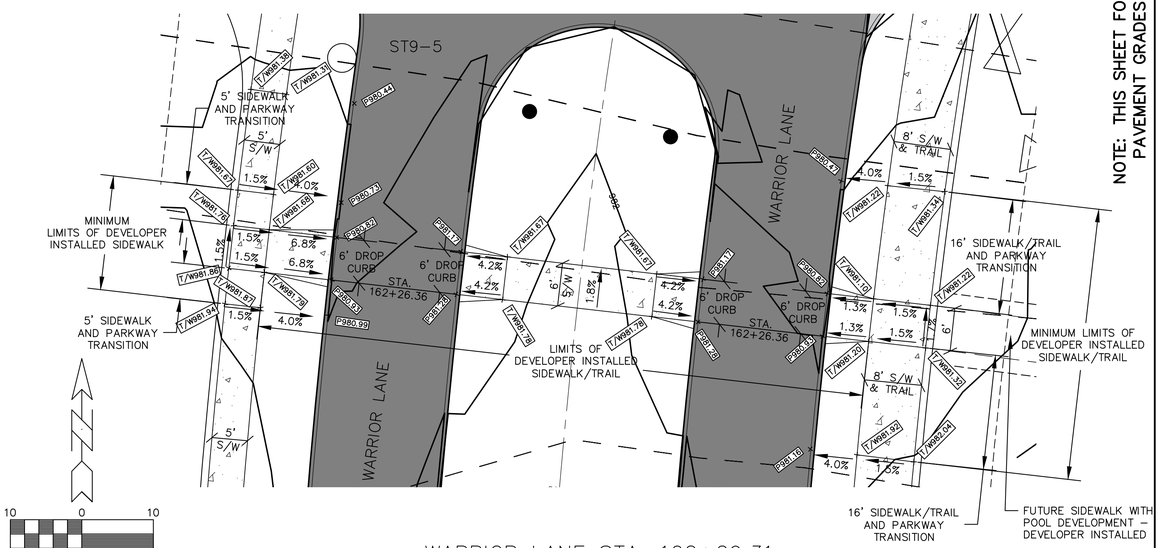
WARRIOR LANE & BAILEY CIRCLE
(SOUTH) INTERSECTION CURB RAMP DETAILS



10 0 10
Scale: 1" = 10'

WARRIOR LANE & SE WADDELL WAY
INTERSECTION CURB RAMP DETAILS

* MAINTAIN SHOWN SIDEWALK AND/OR TRAIL WIDTHS THROUGH THE SIDEWALK AND PARKWAY TRANSITIONS – SEE 'INTERSECTION DETAILS' SHEETS FOR ADDITIONAL INFORMATION.



10 0 10
Scale: 1" = 10'

WARRIOR LANE STA. 162+29.31
CROSSOVER CURB RAMP DETAILS

NOTE: THIS SHEET FOR CITY APPROVED CURB RAMP GRADES; PAVEMENT GRADES ON 'INTERSECTION DETAILS' SHEETS.

GLYNN VILLAGE PLAT 10 - CURB RAMP DETAILS I

LOCATION:	SCALE: 1" = 10'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-RAMP-1.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 80 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

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2413 GRAND AVENUE
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NOTE:

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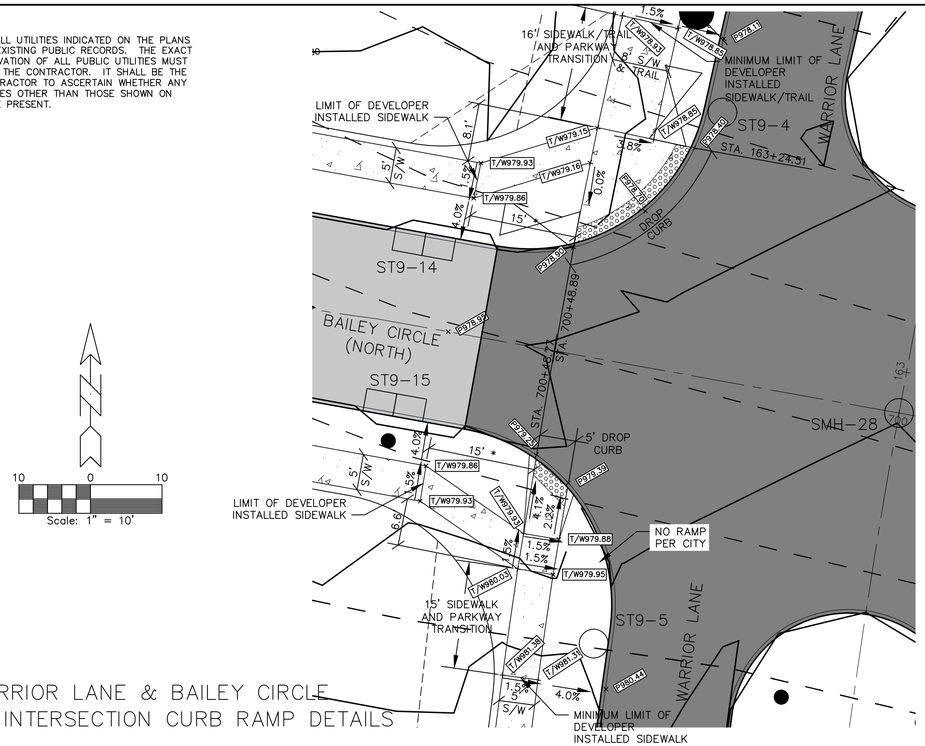
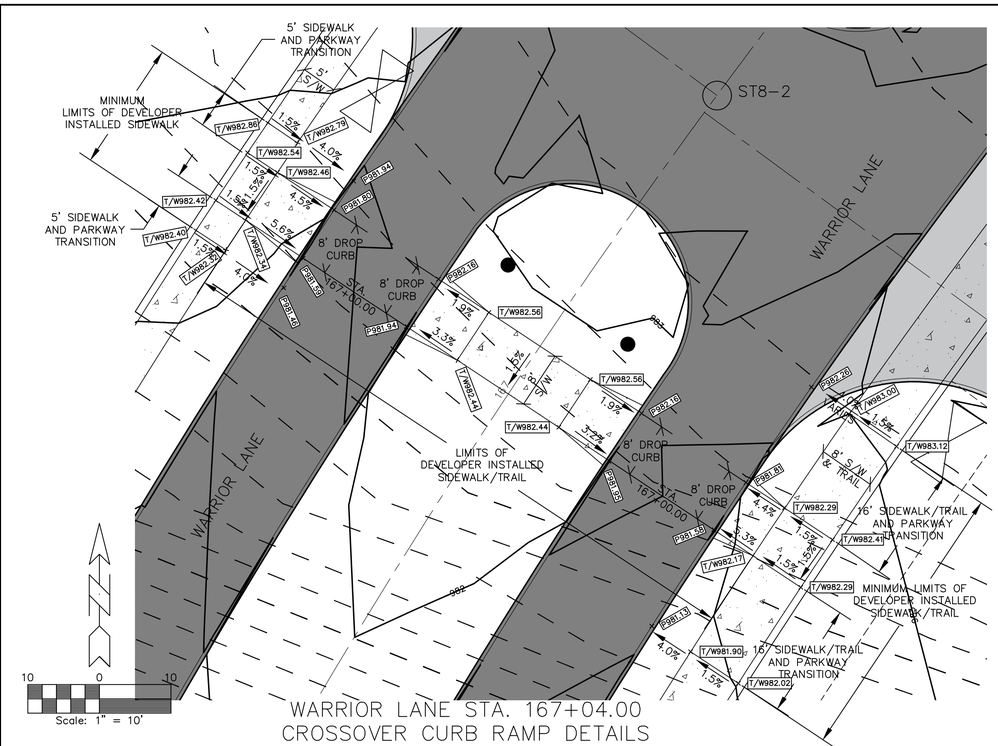
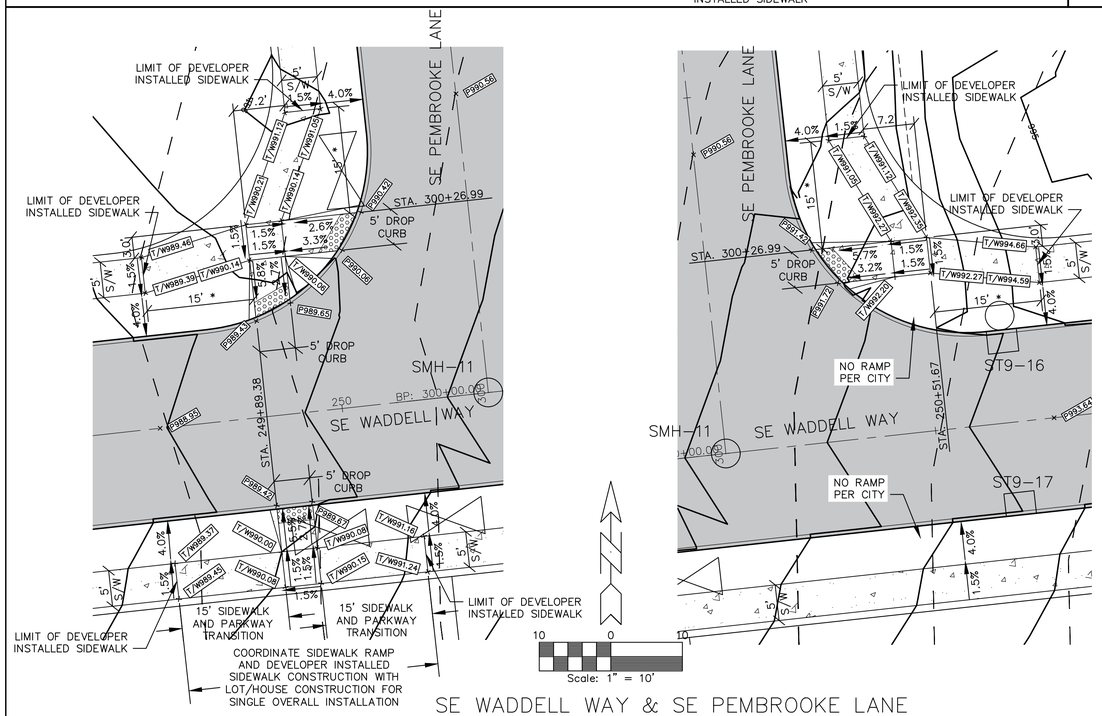


WARRIOR LANE & BAILEY CIRCLE (NORTH) INTERSECTION CURB RAMP DETAILS



WARRIOR LANE STA. 167+04.00 CROSSOVER CURB RAMP DETAILS



SE WADDELL WAY & SE PEMBROOKE LANE INTERSECTION CURB RAMP DETAILS

* MAINTAIN SHOWN SIDEWALK AND/OR TRAIL WIDTHS THROUGH THE SIDEWALK AND PARKWAY TRANSITIONS – SEE 'INTERSECTION DETAILS' SHEETS FOR ADDITIONAL INFORMATION.

NOTE: THIS SHEET FOR CITY APPROVED CURB RAMP GRADES; PAVEMENT GRADES ON 'INTERSECTION DETAILS' SHEETS.

GLYNN VILLAGE PLAT 10 - CURB RAMP DETAILS 2

LOCATION:	SCALE: 1" = 10'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-RAMP-2.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 81 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

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2413 GRAND AVENUE
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(515) 288-4823

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NOTE:

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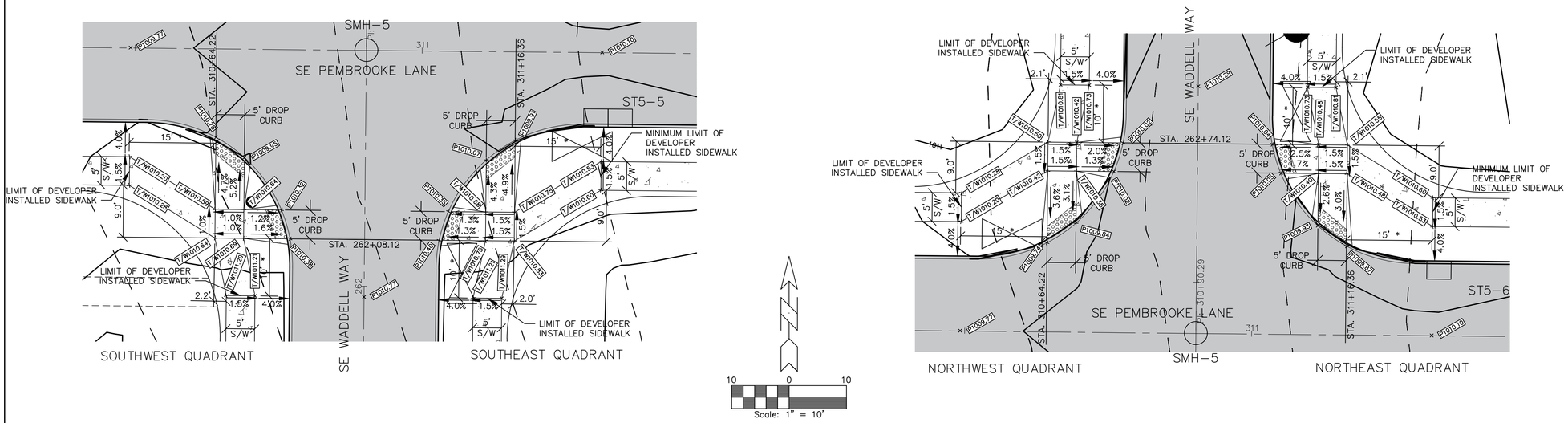
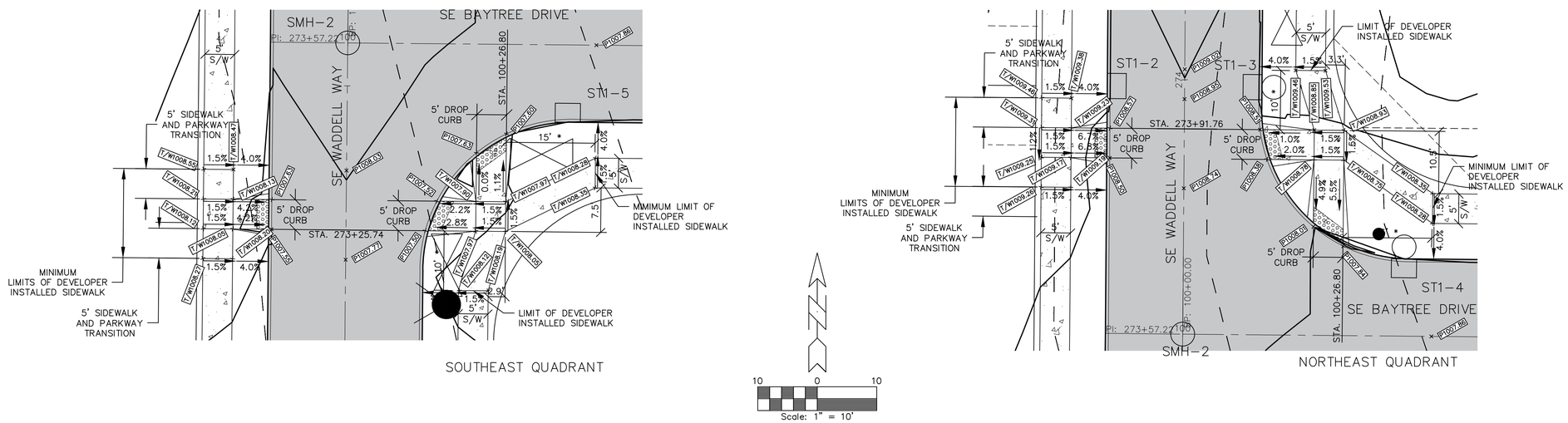


SE WADDELL WAY & SE PEMBROOKE LANE
INTERSECTION CURB RAMP DETAILS

* MAINTAIN SHOWN SIDEWALK AND/OR TRAIL WIDTHS THROUGH THE SIDEWALK AND PARKWAY TRANSITIONS – SEE 'INTERSECTION DETAILS' SHEETS FOR ADDITIONAL INFORMATION.



SE WADDELL WAY & SE BAYTREE DRIVE
INTERSECTION CURB RAMP DETAILS

NOTE: THIS SHEET FOR CITY APPROVED CURB RAMP GRADES; PAVEMENT GRADES ON 'INTERSECTION DETAILS' SHEETS.

GLYNN VILLAGE PLAT 10 - CURB RAMP DETAILS 3

LOCATION:	SCALE: 1" = 10'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-RAMP-3.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 82 OF 100	FILE NO.: 15-013

NO.	REVISION	DATE	BY	FOR:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

15-013

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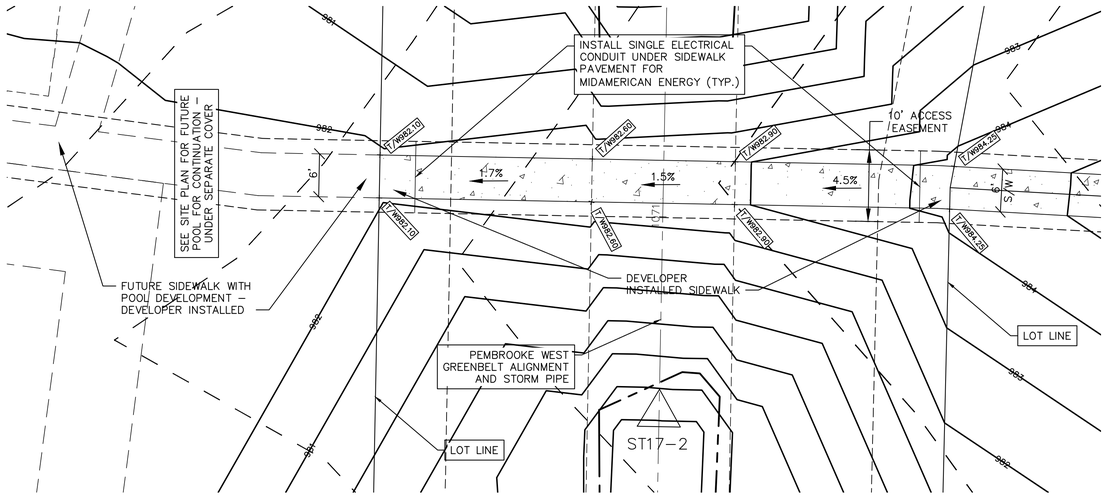
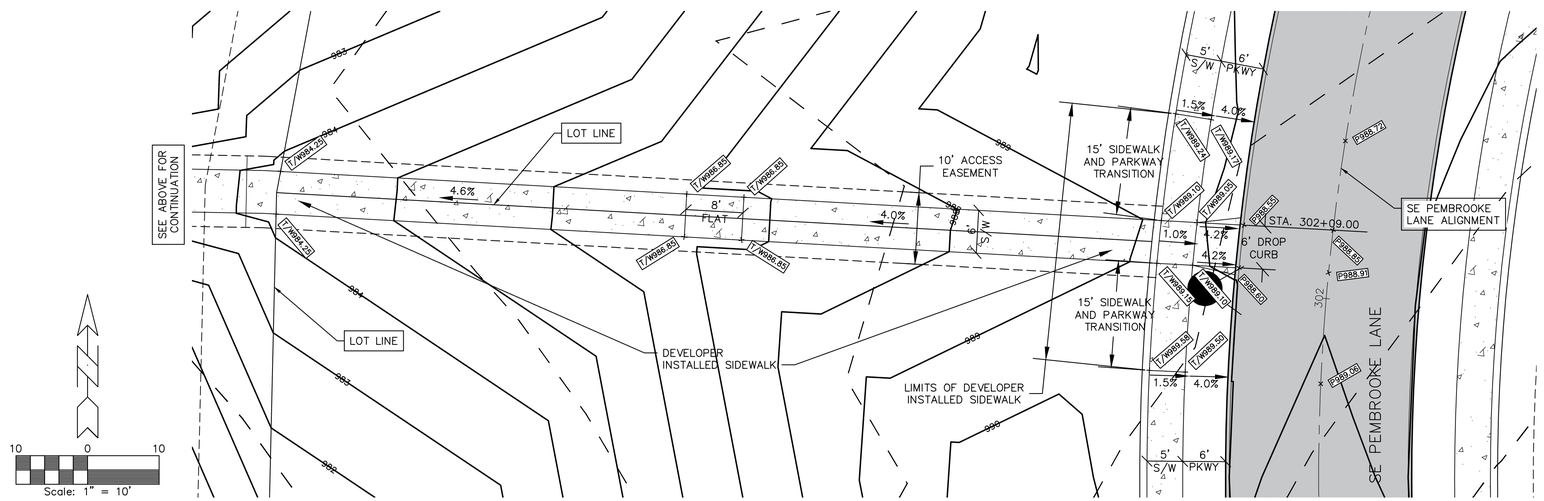
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.





SE PEMBROOKE LANE STA. 302+06.00
ACCESS CURB RAMP DETAILS

NOTE: THIS SHEET FOR CITY APPROVED CURB RAMP GRADES; PAVEMENT GRADES ON 'INTERSECTION DETAILS' SHEETS.

GLYNN VILLAGE PLAT 10 - CURB RAMP DETAILS 4 - POOL ACCESS

NO.	REVISION	DATE	BY	FOR:

LOCATION:

SCALE: 1" = 10' | DESIGNED BY: JRK | DRAWN BY: PJV
DWG: 15-013-RAMP-4.dwg | CHECKED BY: DJS | DATE: 02/24/2016
FIELD BOOK: | SHEET 83 OF 100 | FILE NO.: 15-013

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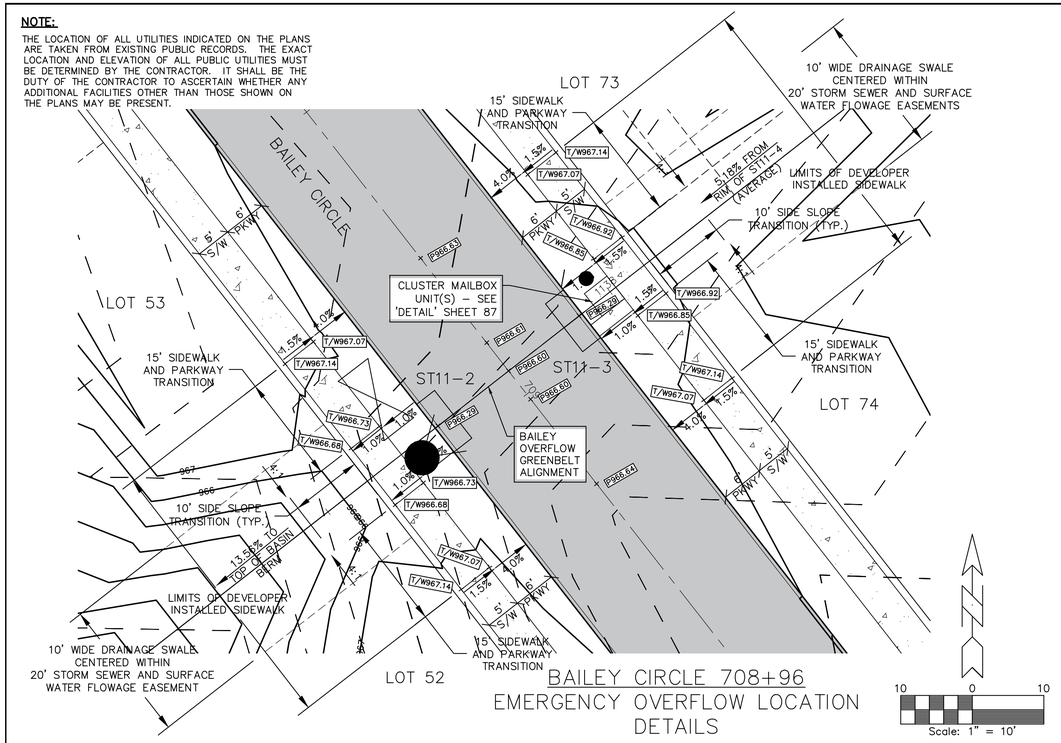
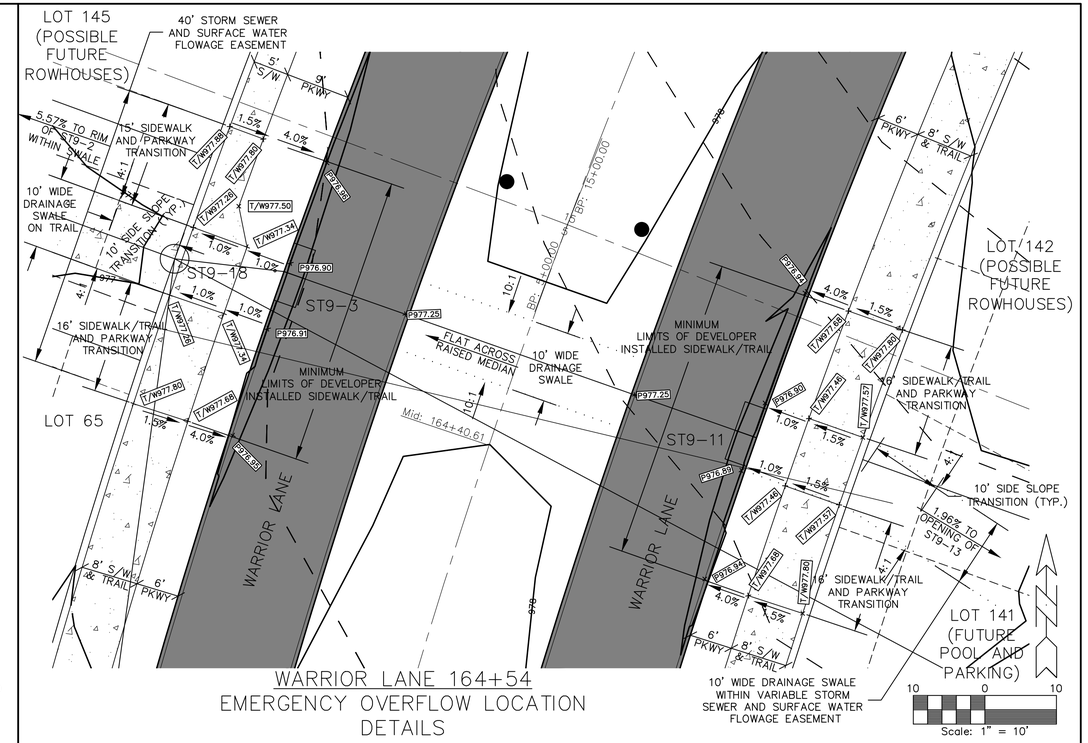
NOTE:

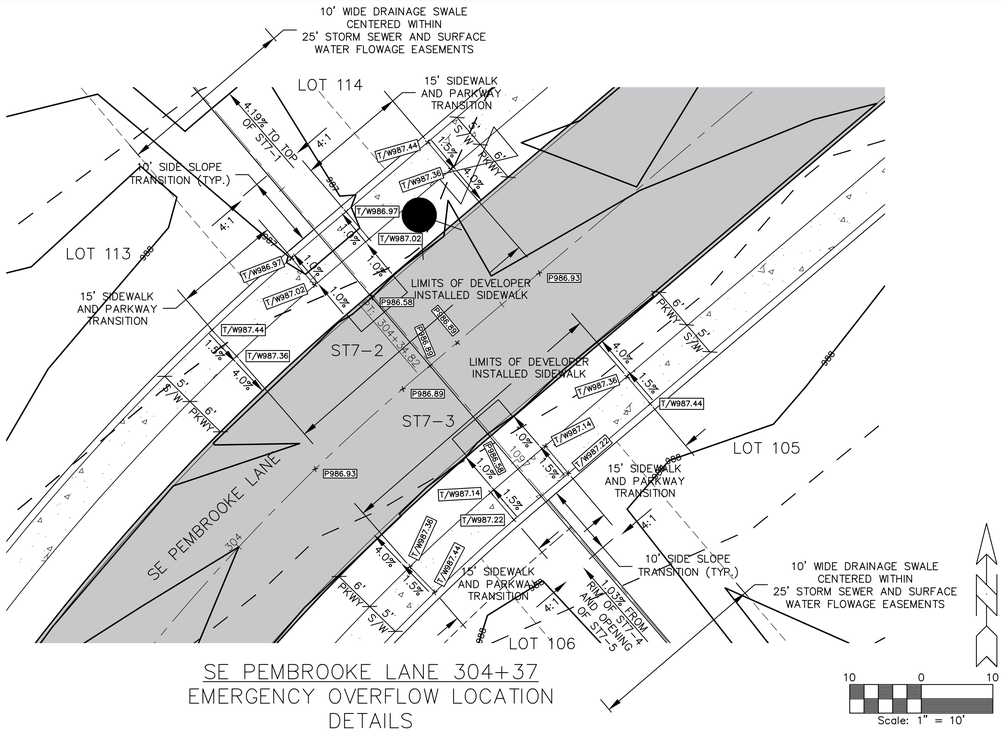
THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



BAILEY CIRCLE 708+96
EMERGENCY OVERFLOW LOCATION DETAILS



WARRIOR LANE 164+54
EMERGENCY OVERFLOW LOCATION DETAILS



SE PEMBROOKE LANE 304+37
EMERGENCY OVERFLOW LOCATION DETAILS

NOTE: ALL OVERFLOW SWALES SHALL BE 1.5 FOOT MINIMUM DEPTH, UNLESS OTHERWISE NOTED.

GLYNN VILLAGE PLAT 10 - EMERGENCY OVERFLOW LOCATION DETAILS I

NO.	REVISION	DATE	BY	FOR:

LOCATION:

SCALE: 1" = 10'	DESIGNED BY: JRK	DRAWN BY: PJV	
DWG: 15-013-EOFR-1.dwg	CHECKED BY: DJS	DATE: 02/24/2016	
FIELD BOOK:	SHEET 84 OF 100	FILE NO.: 15-013	

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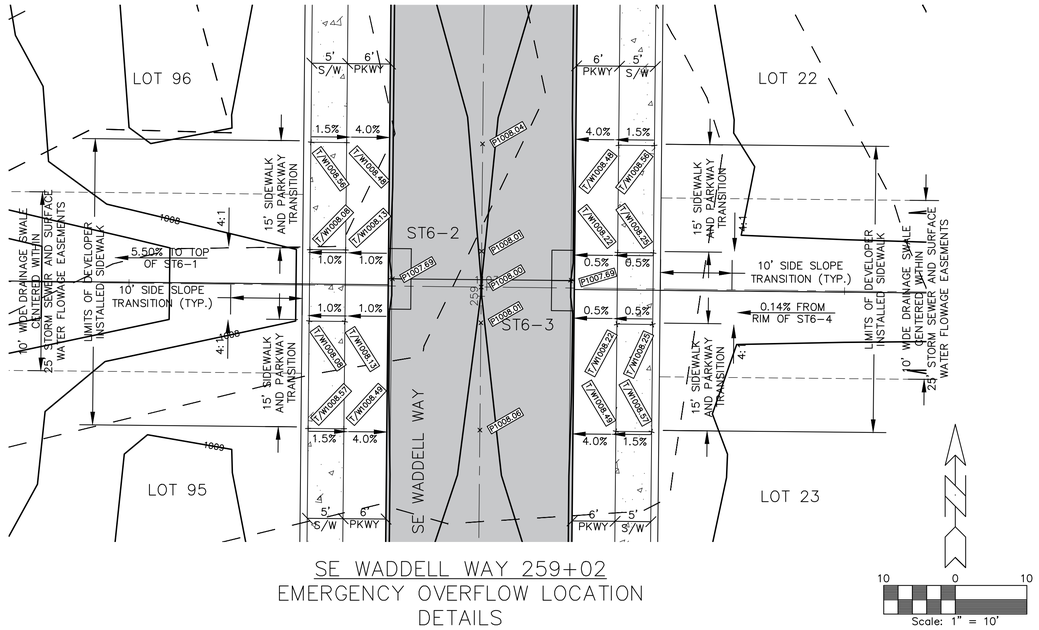
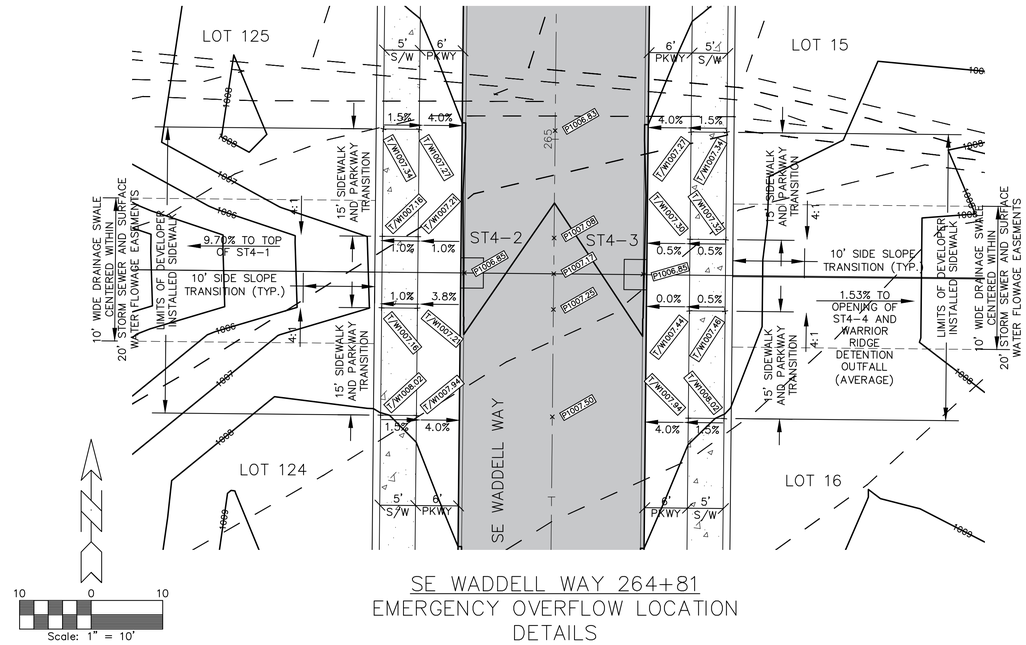
NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

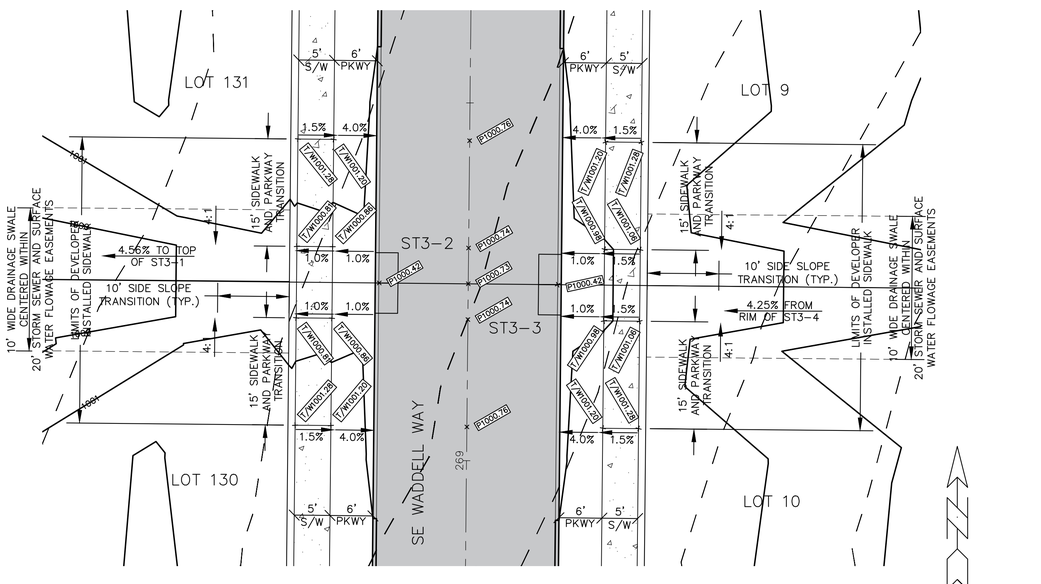


SE WADDELL WAY 259+02
EMERGENCY OVERFLOW LOCATION DETAILS



SE WADDELL WAY 264+81
EMERGENCY OVERFLOW LOCATION DETAILS

NOTE: ALL OVERFLOW SWALES SHALL BE 1.5 FOOT MINIMUM DEPTH, UNLESS OTHERWISE NOTED.



SE WADDELL WAY 269+25
EMERGENCY OVERFLOW LOCATION DETAILS

GLYNN VILLAGE PLAT 10 - EMERGENCY OVERFLOW LOCATION DETAILS 2

LOCATION:	SCALE: 1" = 10'	DESIGNED BY: JRK	DRAWN BY: PJV
	DWG: 15-013-EOFR-2.dwg	CHECKED BY: DJS	DATE: 02/24/2016
	FIELD BOOK:	SHEET 85 OF 100	FILE NO.: 15-013

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