



Public Works Committee Agenda Item

Date: September 23, 2013

Subject: East Adams Drainage Issue (Presidential Street Area)

Background:

In 2006, the City began exploring how possibly to improve stormwater drainage in the Presidential Street Area (PSA) - roughly bounded by State Street on the south, Jefferson on the north, Smiley on the east and Lincoln on the west. Considerable effort was initially expended on the 400 and 500 blocks of E. Washington, a persistent problem area. From that effort, a rough outline of a 10-phase project (attached) was formulated to correct some of the problems on E. Washington and elsewhere in the PSA. Earlier this year, the consultant, Rhutasel and Associates, in an attempt to close out their tasking by the City provided drawings and estimates for the first 3 phases (attached).

However, due to the connection of the phases and the resultant impact of completion of one phase upon the others, additional study or planning is needed to provide more detailed scope for the remaining phases to include cost estimates for preparing the plans (engineering drawings, specifications, etc.) for those phases and potential construction costs of those phases based on what is reasonably foreseen as needed to complete each phase. Additionally, since staff has added area to the original "10-phase area", there will be additional phases. There could be a Phase 7a and 7b instead of just a Phase 7 and there could be Phases 11 thru 14 added.

So, staff has asked Rhutasel to provide a proposal for accomplishing the additional planning needed to flesh out the existing 7 remaining phases and add additional phases based on knowledge gained since the 2006 start.

For general information, the pages from the 2004 Draft Black & Veatch Stormwater Master Plan that addresses problems with the PSA east of Lincoln Avenue are attached.

Budget Impact: There is nothing for the additional effort described above currently budgeted. From Prop S expenditures to date in FY14, however, there may be funding available as road repairs did not cost as much as anticipated and budgeted for.

Staff recommendation: Staff recommends acceptance of the Rhutasel proposal for \$ _____ to start the planning effort if funds can be found in the current budget..

City of O'Fallon

Street and Stormwater Improvements

Phasing Summary

Phase 1

- Construct stormwater forcemain from proposed stormwater detention facility at 410 E. Washington along south side of alley between Washington and Adams to existing storm sewer along Penn. Force main would be capped off on upstream end until future connection to stormwater pumping station at 410 E. Washington.
- Construct a gravity storm sewer from the proposed stormwater detention facility at 413 E. Adams to the proposed stormwater detention facility at 410 E. Washington in alley between Washington and Adams. Gravity storm sewer would be capped off at each end until future connection to stormwater detention facility at 413 E. Adams on upstream end, and future connection to stormwater pumping station at 410 E. Washington on downstream end.
- Construct a gravity storm sewer from 410 E. Washington to Orange. Gravity main would drain to the west, and be designed to collect storm water from the alley between Washington and Adams as well as transport storm water discharged from both detention facilities (410 E. Washington and 413 E. Adams) in the future.
Note: This gravity storm sewer would have to be connected to the existing storm drainage system in some manner initially to accommodate drainage from the alley until such time as future storm sewer improvements are constructed.
- Construct replacement of sanitary sewer main located in the alley between Washington and Adams from a point east of 413 E. Adams to existing sanitary manhole at Orange.
- Construct a "green" alley section from a point east of 413 E. Adams to Orange.

Note: May want to consider extending sanitary sewer replacement and "green" alley construction to more natural termination points at Hilgard.

Phase 2

- Construct a stormwater pumping station at 410 E. Washington. Connect to stormwater forcemain constructed in Phase 1. Connect to gravity storm sewer from the stormwater detention facility at 413 E. Adams constructed in Phase 1.
Note: This pumping station has been designed and detailed on the present Improvement Plans for the 400 and 500 Blocks of E. Washington. The pump station will need to be modified as necessary to accommodate the hydraulic loading from both proposed stormwater detention facilities.

City of O'Fallon

Street and Stormwater Improvements

Phasing Summary

- Construct stormwater detention facilities at both 413 E. Adams and 410 E. Washington. Both stormwater detention facilities are to be of the open pond type.
Note: Will need to address sealing of ponds to alleviate concern of seepage of stormwater impounded into ground, and subsequently into neighboring home basements; as well as, providing a paved invert to allow for complete drainage following a storm event. Could defer construction of detention facility at 413 E. Adams until Phase 9 if necessary.

Phase 3

- Construct improvements to the 400 and 500 blocks of E. Washington (Orange to Smiley).
Note: Improvement Plans for this portion of E. Washington have been prepared, and will need to be modified as necessary to accommodate the proposed phasing schedule. Gravity storm sewer system constructed as part of these improvements will drain into the stormwater detention facility at 410 E. Washington constructed in Phase 2.

Phase 4

- Construct storm sewer and drainage improvements to the existing drainageway located between Penn and Vine in the area between Washington and Adams.

Phase 5

- Construct storm sewer and drainage improvements to the existing drainageway located between Penn and Vine in the area between Adams and Jefferson.

Phase 6

- Construct storm sewer and drainage improvements to the existing drainageway located between Penn and Vine in the area between Jefferson and the outfall north of Madison.

Note: May want to consider switching Phases 4 and 6 to construct storm sewer improvements from downstream to upstream. This would provide a more logical sequence of construction and ascertain that upstream improvements are not made that would exceed the capacity of existing downstream infrastructure.

City of O'Fallon
Street and Stormwater Improvements
Phasing Summary

Phase 7

- Construct a gravity storm sewer along Orange from alley between Washington and Adams north to Adams then east along Adams and connect to storm sewer constructed in existing drainageway between Penn and Vine in Phases 4 to 6. Connect to gravity storm sewer constructed in Phase 1 from 410 E. Washington to Orange. Connect gravity storm sewer constructed in Phase 1 to pump station at 410 E. Washington to provide a gravity discharge system from both stormwater detention facilities (410 E. Washington and 413 E. Adams), and eliminate the need for the stormwater pumping station at 410 E. Washington. Remove pumps, generator and any other salvageable equipment at pump station for City to use elsewhere.

Phase 8

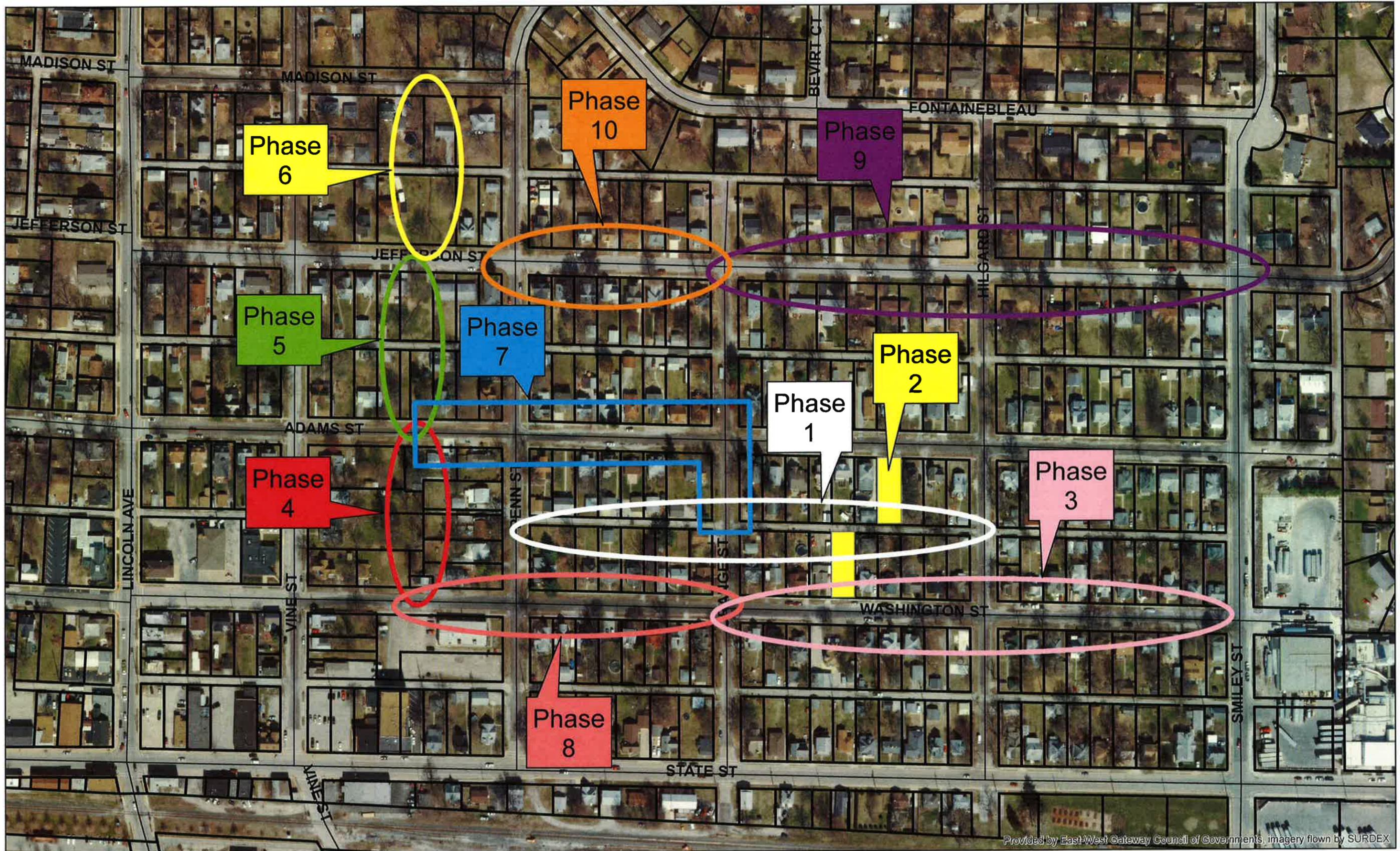
- Construct improvements to the 300 block of E. Washington (Penn to Orange).
Note: Will need to extend storm sewer system from this block of Washington to the storm sewer system constructed in the existing drainageway between Penn and Vine in Phases 4 to 6. ie. Will extend west of Penn 225± feet.

Phase 9

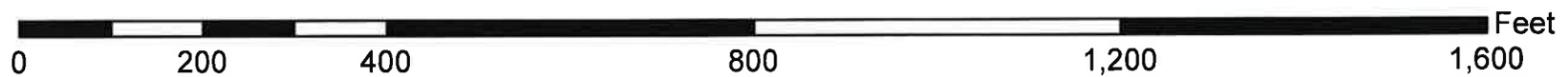
- Construct improvements to the 400 and 500 blocks of E. Adams (Orange to Smiley).
Note: Gravity storm sewer system constructed as part of these improvements will drain into the stormwater detention facility at 413 E. Adams constructed in Phase 2.

Phase 10

- Construct improvements to the 300 block of E. Adams (Penn to Orange).
Note: Will utilize gravity storm sewer constructed in Phase 7 in conjunction with these improvements. Inlets constructed in Phase 7 will be adjusted as necessary to tie in to curb constructed in this Phase.



Provided by East-West Gateway Council of Governments, imagery flown by SURDEX



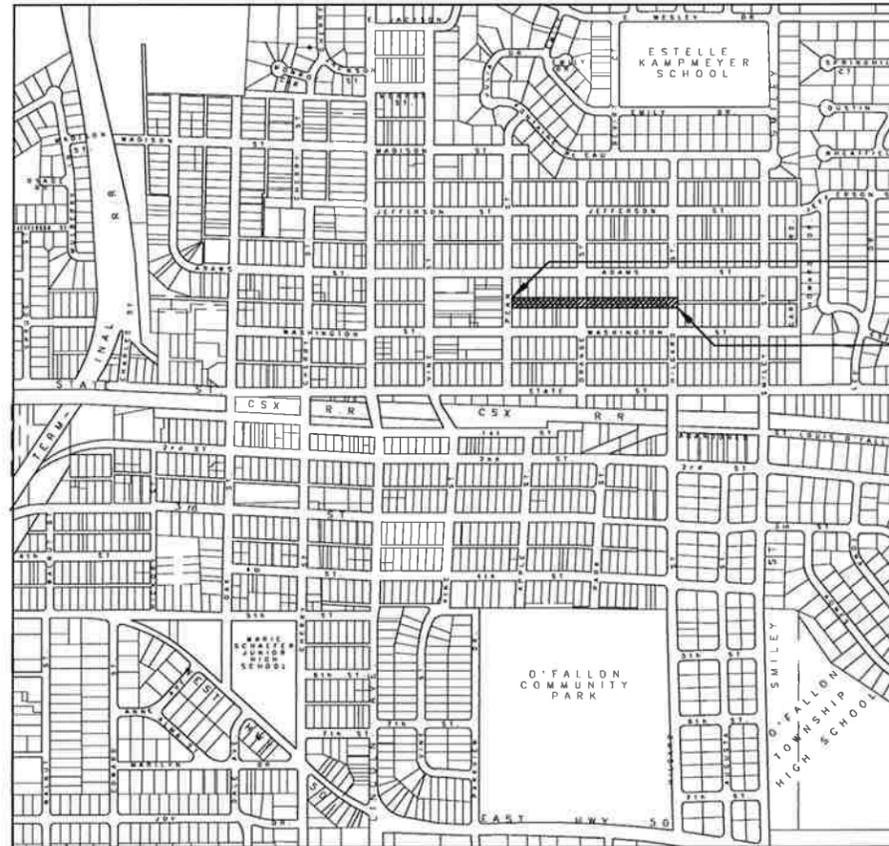
Initial Multi-Phase Plan for Presidential Streets

CITY OF O'FALLON

ST. CLAIR COUNTY, ILLINOIS

PHASED STREET AND STORMWATER IMPROVEMENTS PHASE 1 - "GREEN" ALLEY CONSTRUCTION

LOCATION MAP



VICINITY MAP



INDEX OF SHEETS

1. COVER SHEET
2. SUMMARY OF QUANTITIES, GENERAL NOTES, TYPICAL SECTIONS & DETAILS
- 3-4. ALLEY PLAN & PROFILE
- 5-6. CROSS SECTIONS

APPLICABLE IDOT HIGHWAY STANDARDS

280001-07	604001-03
420001-07	604036-02
420701-02	701901-02
602301-03	B.L.R. 17-4
602401-03	B.L.R. 21-9
602701-02	

WATER

CITY OF O'FALLON
255 SOUTH LINCOLN STREET
O'FALLON, ILLINOIS 62269
ATTN: DENNIS SULLIVAN, P.E.
618-624-4500 EXT. 3

ELECTRIC & GAS

AMEREN IP
1050 WEST BLVD.
BELLEVILLE, ILLINOIS 62221
ATTN: KELLY BAUZA
618-236-4309

SEWER

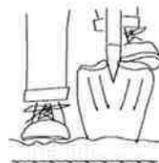
CITY OF O'FALLON
255 SOUTH LINCOLN STREET
O'FALLON, ILLINOIS 62269
ATTN: DENNIS SULLIVAN, P.E.
618-624-4500 EXT. 3

TELEPHONE

AT&T ILLINOIS
203 GOETHE STREET
COLLINSVILLE, ILLINOIS 62234
ATTN: DEAN LITZENBURG
618-346-6422

HOLD IT ! CALL BEFORE YOU DIG !

Phone J.U.L.I.E.



The owner would like to remind you that underground utility facilities can be damaged by shovel blades or other digging equipment. You can prevent damage or possible personal danger by phoning 800/892-0123 at least 48 hours before you dig. That's the toll-free number for "J.U.L.I.E.", which stands for Joint Utilities Location Information for Excavators.

If there are any pipes, cables, lines or mains in the excavation area, utility personnel will be out to mark the facilities so you can work around them.

Toll Free 800/892-0123



RHUTASEL and ASSOCIATES, INC.

CONSULTING ENGINEERS • LAND SURVEYORS

CORPORATE OFFICE
4 INDUSTRIAL DRIVE
FREEBURG, ILLINOIS 62243
(618) 539-3178

REGIONAL OFFICE
201 SOUTH LOCUST STREET
CENTRALIA, ILLINOIS 62801
(618) 532-1992



Tracy M. Lawless
Date of Signing
Date of License Expiration

APPROVED _____ MAYOR, CITY OF O'FALLON _____ DATE _____

OCTOBER 2012

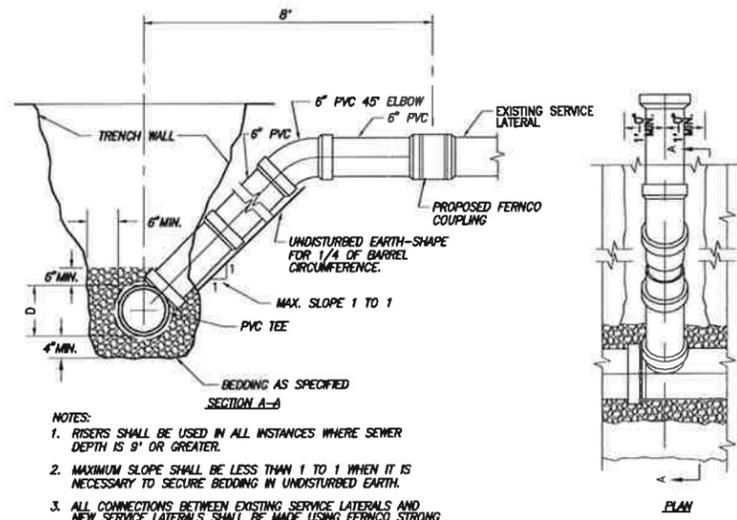
SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	573
25000100	SEEDING, CLASS 1	ACRE	0.2
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	18
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	18
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	18
25100115	MULCH, METHOD 2	ACRE	0.2
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20
28000500	INLET AND PIPE PROTECTION	EACH	3
31102300	SUBBASE GRANULAR MATERIAL, TYPE C 6"	SQ YD	617
31102712	SUBBASE GRANULAR MATERIAL, TYPE C 12"	SQ YD	784
35100100	AGGREGATE BASE COURSE, TYPE A	TON	59
35100300	AGGREGATE BASE COURSE, TYPE A 4"	SQ YD	97
40200500	AGGREGATE SURFACE COURSE, TYPE B 6"	SQ YD	58
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	20
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	65
40600300	AGGREGATE (PRIME COAT)	TON	0.5
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	29.5
42000201	PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SQ YD	97
42001200	PAVEMENT FABRIC	SQ YD	97
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4"	SQ FT	33
44000600	SIDEWALK REMOVAL	SQ FT	34
50105220	PIPE CULVERT REMOVAL	FOOT	91
54200217	PIPE CULVERTS, CLASS B, TYPE 1 12"	FOOT	49
550A2530	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 15"	FOOT	16
550A2540	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"	FOOT	128
550A2550	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 21"	FOOT	283
60107700	PIPE UNDERDRAINS 6"	FOOT	518
60218400	MANHOLES, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4
60236800	INLETS, TYPE A, TYPE B GRATE	EACH	1
60600605	CONCRETE CURB, TYPE B	FOOT	1002
67100100	MOBILIZATION	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
LR430030	CONCRETE PAVER PAVEMENT	SQ YD	617
X0323760	SANITARY SEWER SERVICE, 6" PVC, COMPLETE	EACH	22
X0840000	SANITARY SEWER REMOVAL 8"	FOOT	680
X6020076	INLETS, SPECIAL WITH SPECIAL FRAME AND GRATE	EACH	1
X6026055	SANITARY MANHOLES, SPECIAL	EACH	1
XX007811	PVC FORCE MAIN, 8"	FOOT	699
Z0056900	SANITARY SEWER 8"	FOOT	680

GENERAL NOTES

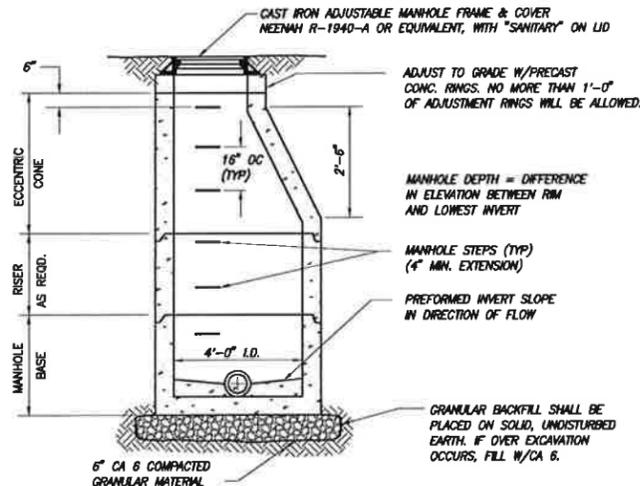
- 1.) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012.
- 2.) AN ESTIMATED QUANTITY OF 20 TONS OF AGGREGATE FOR TEMPORARY ACCESS HAS BEEN INCLUDED IN THE PLANS FOR THE PURPOSE OF MAINTAINING ACCESS TO PRIVATE PROPERTY AND SIDE ROADS THROUGHOUT CONSTRUCTION OPERATIONS DURING THIS CONTRACT.
- 3.) ALL AREAS DISTURBED FOR ANY REASON WITHIN THE CONSTRUCTION LIMITS SHALL BE SEEDED WITH CLASS 1 SEEDING. NUTRIENTS SHALL CONFORM TO ARTICLE 250.04.
- 4.) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5.) "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT THE BEGINNING AND END OF THE PROJECT PLUS THE INTERSECTING SIDE ROADS AND WILL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE IN COLOR.
- 6.) THE CONTRACTOR SHALL REMOVE, MAINTAIN IN A TEMPORARY LOCATION AND PERMANENTLY RESET ALL MAILBOXES AND TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS IN ACCORDANCE WITH ARTICLES 107.20 AND 107.25 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
- 7.) ALL ENTRANCES SHALL BE CONSTRUCTED AT RIGHT ANGLES TO THE PROPOSED CENTERLINE UNLESS OTHERWISE NOTED.
- 8.) FACTORS USED FOR APPLICATION RATES AND QUANTITY CALCULATIONS ARE AS FOLLOWS:

SEEDING	
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
TEMPORARY SEEDING	100 LBS/ACRE
PAVING	
AGGREGATE BASE COURSE	2.05 TONS/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.375 GALLONS/SQ YD
AGGREGATE (PRIME COAT)	5 LBS/SQ YD
INCIDENTAL BITUMINOUS SURFACING	2.016 TONS/CU YD



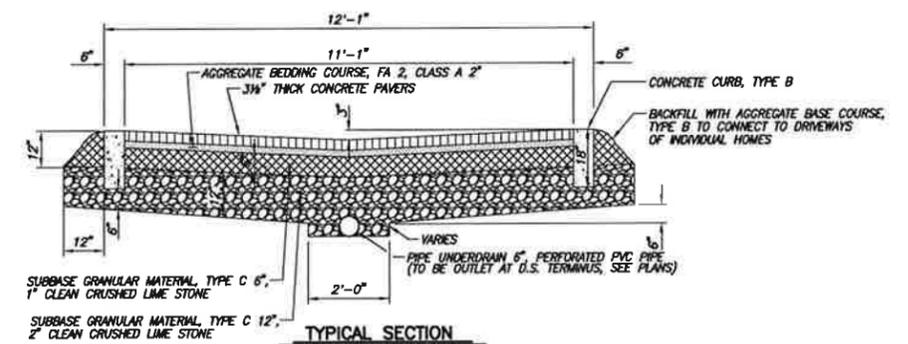
SERVICE RISER

N.T.S.



SANITARY MANHOLE DETAIL

N.T.S.



TYPICAL SECTION

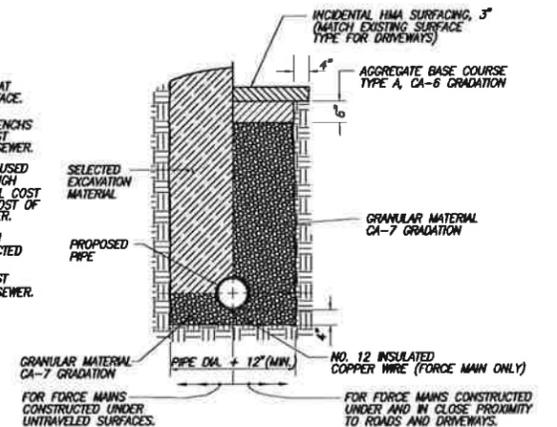
N.T.S.
(STA. 64+89.78 TO STA. 69+90.43)

SCHEDULES

STATION	PAVING SCHEDULE			
	SUB GRAN MAT C 12"	SUB GRAN MAT C 6"	CONCRETE CURB, TYPE B	CONCRETE PAVER PAVEMENT
	SQ YD	SQ YD	FOOT	SQ YD
64+89.78 TO 69+90.43	784	617	1002	617

STATION	EARTHWORK SCHEDULE			
	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
63+50.00 TO 70+50.00	573.2	430.0	2.8	427.2

- NOTES**
- 1.) FORCE MAIN SHALL BE PLACED AT A MINIMUM OF 42" BELOW SURFACE.
 - 2.) COST FOR BACKFILLING PIPE TRENCHES SHALL BE INCLUDED IN THE COST OF FORCE MAIN AND SANITARY SEWER.
 - 3.) AGGREGATE BACKFILL SHALL BE USED FOR BACKFILLING TRENCH THROUGH ALL DRIVEWAYS AND ROADS. ALL COST SHOULD BE INCLUDED IN THE COST OF FORCE MAIN AND SANITARY SEWER.
 - 4.) SEEDING, FERTILIZER AND MULCH NEEDED TO REPAIR AREAS AFFECTED BY CONSTRUCTION OF THE PIPE SHALL BE INCLUDED IN THE COST OF FORCE MAIN AND SANITARY SEWER.



SANITARY SEWER & FORCE MAIN BEDDING & BACKFILL DETAIL

N.T.S.

NOTE: NO. 12 INSULATED COPPER WIRE REQUIRED UNDER FORCE MAIN. 20' OF WIRE TO BE COILED AT U.S. END OF FORCE MAIN FOR FUTURE EXTENSION INTO WALK VENT. WIRE TO BE EXTENDED INTO RECEIVING INLET AT D.S. END OF FORCE MAIN, AND TERMINATED ABOVE Baffle WALL INSIDE OF INLET.

SYMBOL	DRAWN	AP'D	DESCRIPTION	DATE
REVISIONS				
DR. BY:	M.A.L.	AP'D BY:	T.M.L.	SCALE: N.T.S.
CK'D BY:	A.A.S.			DATE: OCTOBER, 2012

SUMMARY OF QUANTITIES, GENERAL NOTES, TYPICAL SECTIONS & DETAILS

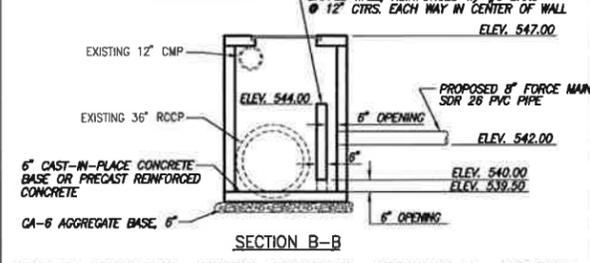
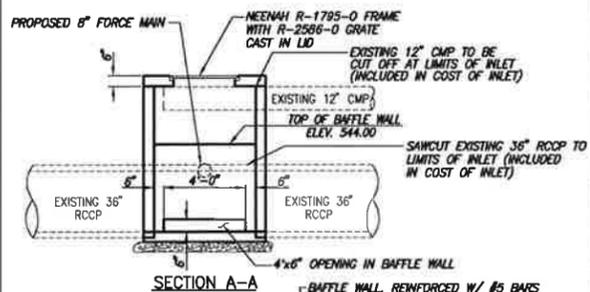
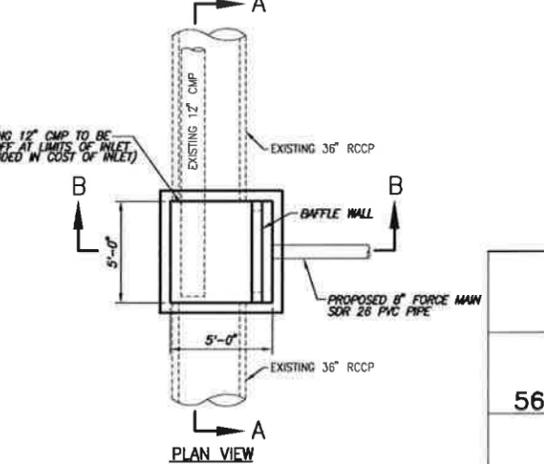
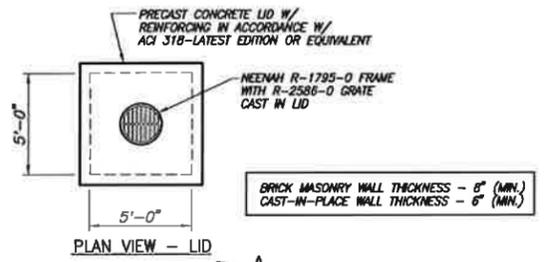
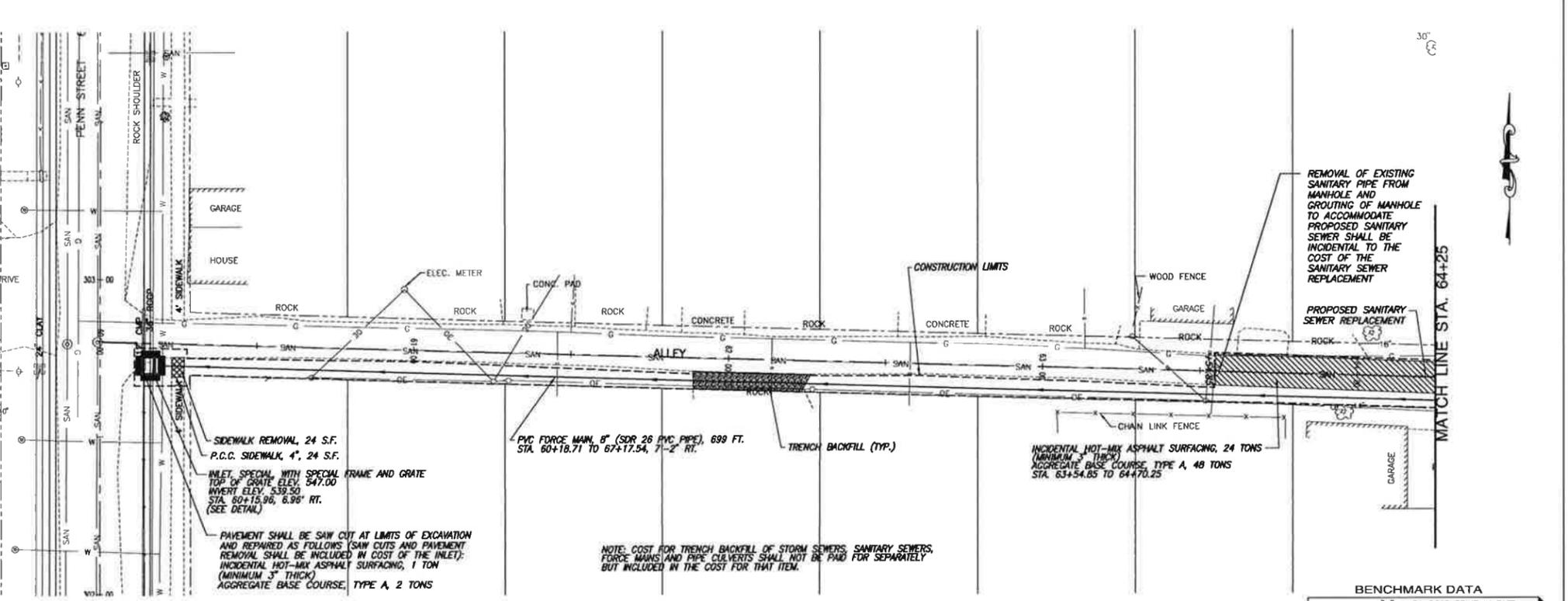
PHASED STREET AND STORMWATER PHASE 1 - "GREEN" ALLEY CONST O'FALLON, ILLINOIS

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
FREEDBURG, IL 62243
TEL: (618) 539-3178

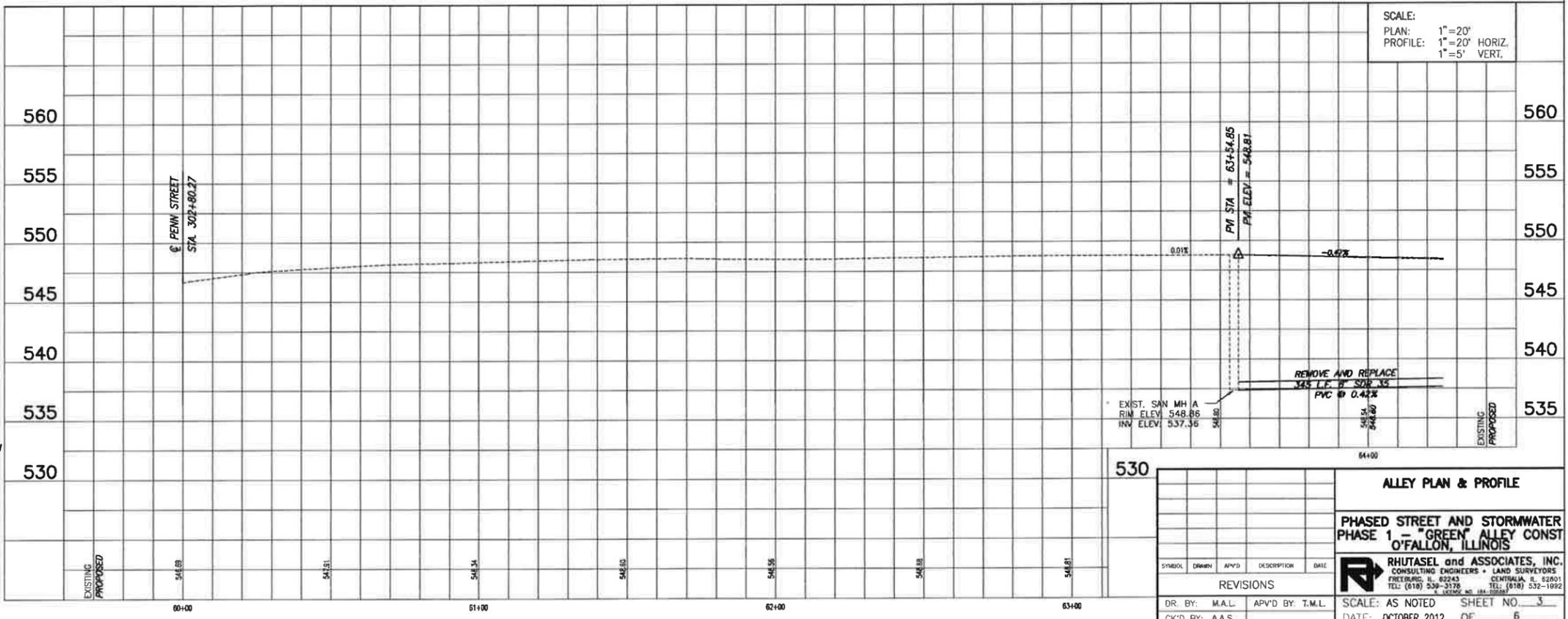
CENTRALIA, IL 62801
TEL: (618) 532-1992

SHEET NO. 2
OF 6

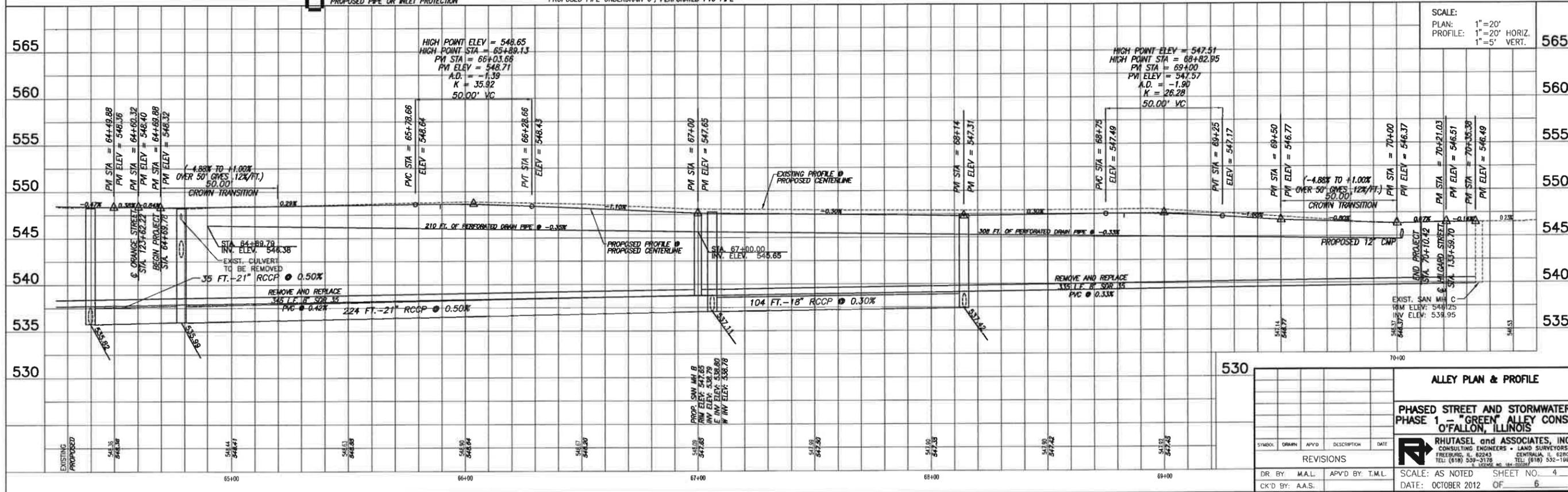
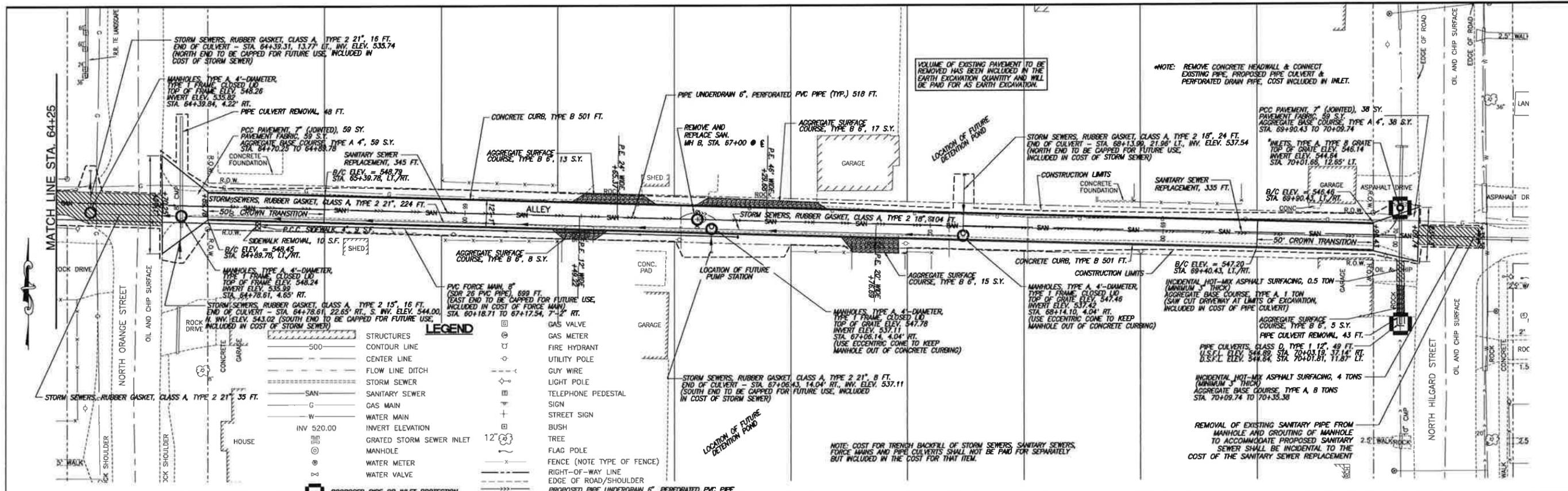
LEGEND	
	STRUCTURES
	CONTOUR LINE
	CENTER LINE
	FLOW LINE DITCH
	STORM SEWER
	SANITARY SEWER
	GAS MAIN
	WATER MAIN
	INV 520.00
	GRATED STORM SEWER INLET
	MANHOLE
	WATER METER
	WATER VALVE
	PROPOSED PIPE OR INLET PROTECTION
	GAS VALVE
	GAS METER
	FIRE HYDRANT
	UTILITY POLE
	GUY WIRE
	LIGHT POLE
	TELEPHONE PEDESTAL
	SIGN
	STREET SIGN
	BUSH
	TREE
	FLAG POLE
	FENCE (NOTE TYPE OF FENCE)
	RIGHT-OF-WAY LINE
	EDGE OF ROAD/SHOULDER

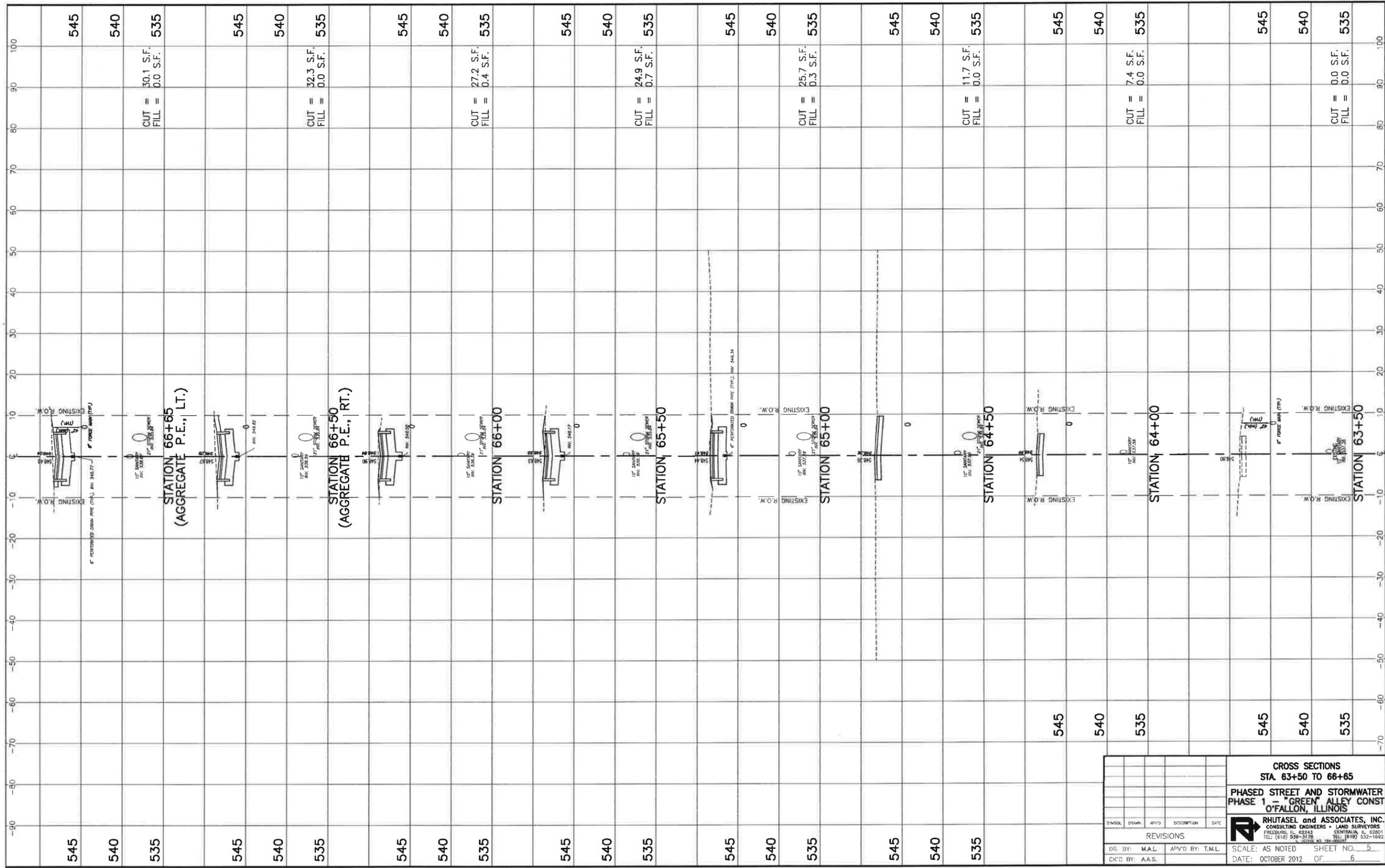


INLET SPECIAL, WITH SPECIAL FRAME & GRATE
N.T.S.



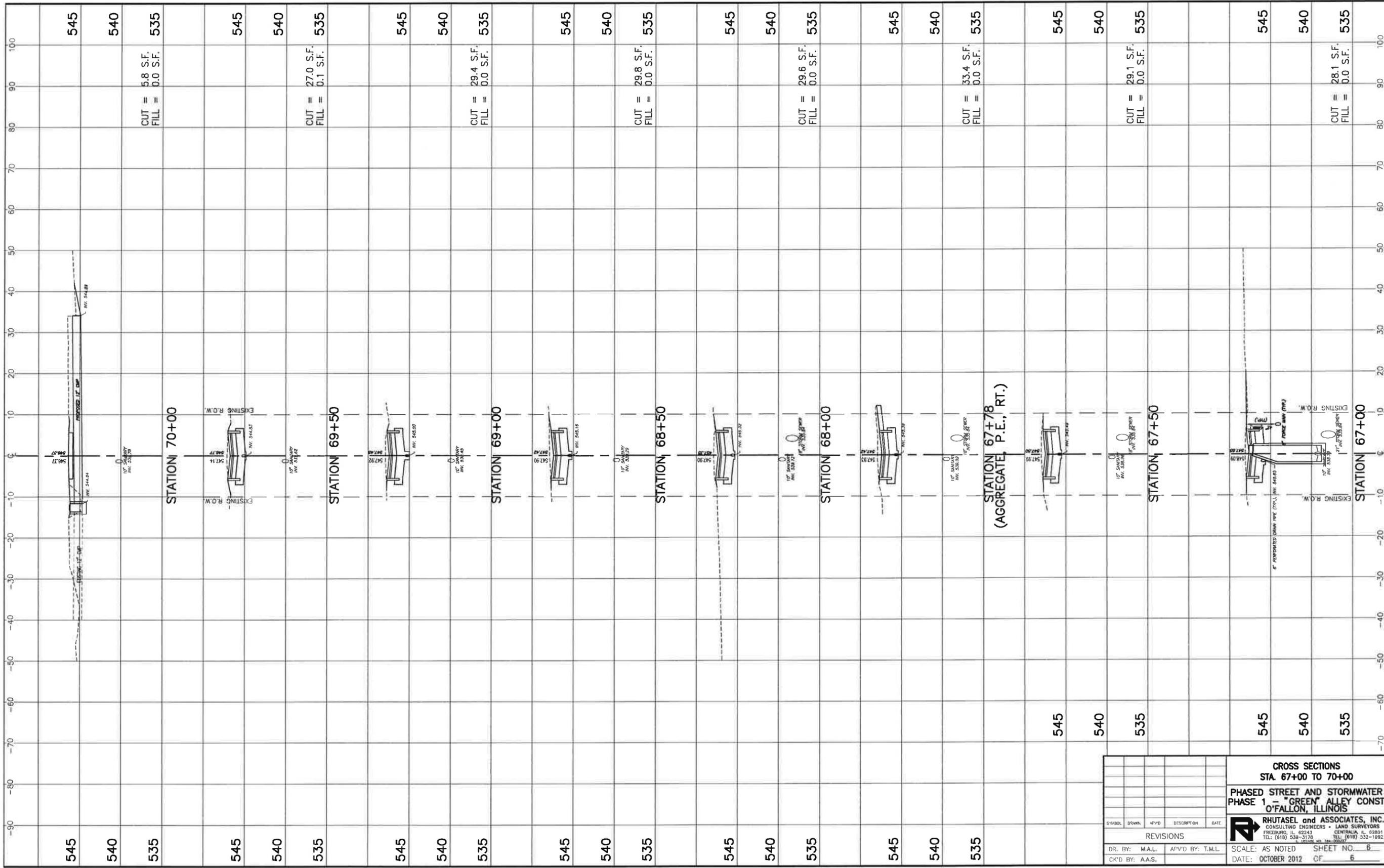
ALLEY PLAN & PROFILE				
PHASED STREET AND STORMWATER PHASE 1 - "GREEN" ALLEY CONST O'FALLON, ILLINOIS				
RHUTASEL and ASSOCIATES, INC. CONSULTING ENGINEERS & LAND SURVEYORS FREETOWN, IL 62243 CENTRALIA, IL 62801 TEL: (618) 539-3176 TEL: (618) 532-1892 FAX: (618) 539-3177 FAX: (618) 532-1892				
REVISIONS				
DR. BY:	M.A.L.	APVD BY:	T.M.L.	SCALE: AS NOTED SHEET NO. 3
CK'D BY:	A.A.S.	DATE:	OCTOBER 2012	OF 6





SYMBOL	DRAWN	APVD	DESCRIPTION	DATE

DR. BY: M.A.L. APVD BY: T.M.L. SCALE: AS NOTED SHEET NO. 5
 CK'D BY: A.A.S. DATE: OCTOBER 2012 OF 6



**CROSS SECTIONS
STA. 67+00 TO 70+00**

**PHASED STREET AND STORMWATER
PHASE 1 - "GREEN" ALLEY CONST
O'FALLON, ILLINOIS**

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
FREDERICK, ILL. 62243
TEL: (618) 539-3178
CENTRALIA, ILL. 62801
TEL: (618) 532-1992

SYMBOL	DRAWN	APVD	DESCRIPTION	DATE
REVISIONS				
DR. BY:	M.A.L.	APVD BY:	T.M.L.	SCALE: AS NOTED
CK'D BY:	A.A.S.			DATE: OCTOBER 2012

SHEET NO. 6
OF 6



(Construction) Estimate of Cost

Location and brief description (Sta. and land description of beginning; Sta. only for end for county and road districts; street limits for municipality.)
Construction of "Green" Alley located between Washington and Adams Streets and extending from Orange to Smiley
Streets. Construction consists of concrete paver pavement on an aggregate subbase, concrete curb, sanitary sewer
replacement, PVC force main, and storm sewer improvements.

Total Project Length	1,022 ft.
Net Length	1,022 ft.

Surface Type	Conc. Paver
Width	12'-1"

Shoulder Type	N.A.
Width	N.A.

Bridge or Culvert	
Length	N.A.
Width	N.A.

Item Number	Items	Unit	Quantity	Unit Price	Total Cost	
CARRIED FORWARD						
20200100	Earth Excavation	Cu Yd	573.00	14.00	\$8,022.00	
25000100	Seeding, Class 1	Acre	0.20	2,800.00	\$ 560.00	
25000400	Nitrogen Fertilizer Nutrient	Pound	18.00	3.00	\$ 54.00	
25000500	Phosphorus Fertilizer Nutrient	Pound	18.00	3.00	\$ 54.00	
25000600	Potassium Fertilizer Nutrient	Pound	18.00	3.00	\$ 54.00	
25100115	Mulch, Method 2	Acre	0.20	2,800.00	\$ 560.00	
28000250	Temporary Erosion Control Seeding	Pound	20.00	10.00	\$ 200.00	
28000500	Inlet and Pipe Protection	Each	3.00	150.00	\$ 450.00	
31102300	Subbase Granular Material, Type C 6"	Sq Yd	617.00	10.00	\$6,170.00	
31102712	Subbase Granular Material, Type C 12"	Sq Yd	784.00	18.00	\$14,112.00	
35100100	Aggregate Base Course, Type A	Ton	59.00	26.00	\$1,534.00	
35100300	Aggregate Base Course, Type A 4"	Sq Yd	97.00	6.00	\$ 582.00	
40200500	Aggregate Surface Course, Type B 6"	Sq Yd	58.00	8.00	\$ 464.00	
40201000	Aggregate for Temporary Access	Ton	20.00	26.00	\$ 520.00	
40600100	Bituminous Materials (Prime Coat)	Gallon	65.00	3.00	\$ 195.00	
40600300	Aggregate (Prime Coat)	Ton	0.50	100.00	\$ 50.00	
40800050	Incidental Hot-Mix Asphalt Surfacing	Ton	29.50	150.00	\$4,425.00	
42000201	Portland Cement Concrete Pavement 7" (Jointed)	Sq Yd	97.00	50.00	\$4,850.00	
42001200	Pavement Fabric	Sq Yd	97.00	10.00	\$ 970.00	
42400100	Portland Cement Concrete Sidewalk, 4"	Sq Ft	33.00	8.00	\$ 264.00	
44000600	Sidewalk Removal	Sq Ft	34.00	4.00	\$ 136.00	
50105220	Pipe Culvert Removal	Foot	91.00	15.00	\$1,365.00	
542D0217	Pipe Culverts, Class D, Type 1 12"	Foot	49.00	65.00	\$3,185.00	
550A2530	Storm Sewers, Rubber Gasket, Class A, Ty. 2 15"	Foot	16.00	85.00	\$1,360.00	
550A2540	Storm Sewers, Rubber Gasket, Class A, Ty. 2 18"	Foot	128.00	97.00	\$12,416.00	
550A2550	Storm Sewers, Rubber Gasket, Class A, Ty. 2 21"	Foot	283.00	106.00	\$29,998.00	
60107700	Pipe Underdrains 6"	Foot	518.00	16.00	\$8,288.00	
60218400	Manholes, Ty. A, 4' Dia., Ty. 1 Fr., Closed Lid	Each	4.00	1,600.00	\$6,400.00	
				<input checked="" type="checkbox"/> Page Total	<input type="checkbox"/> Total Estimated Cost	\$107,238.00

Made by T.M.L. Date 10/10/2012

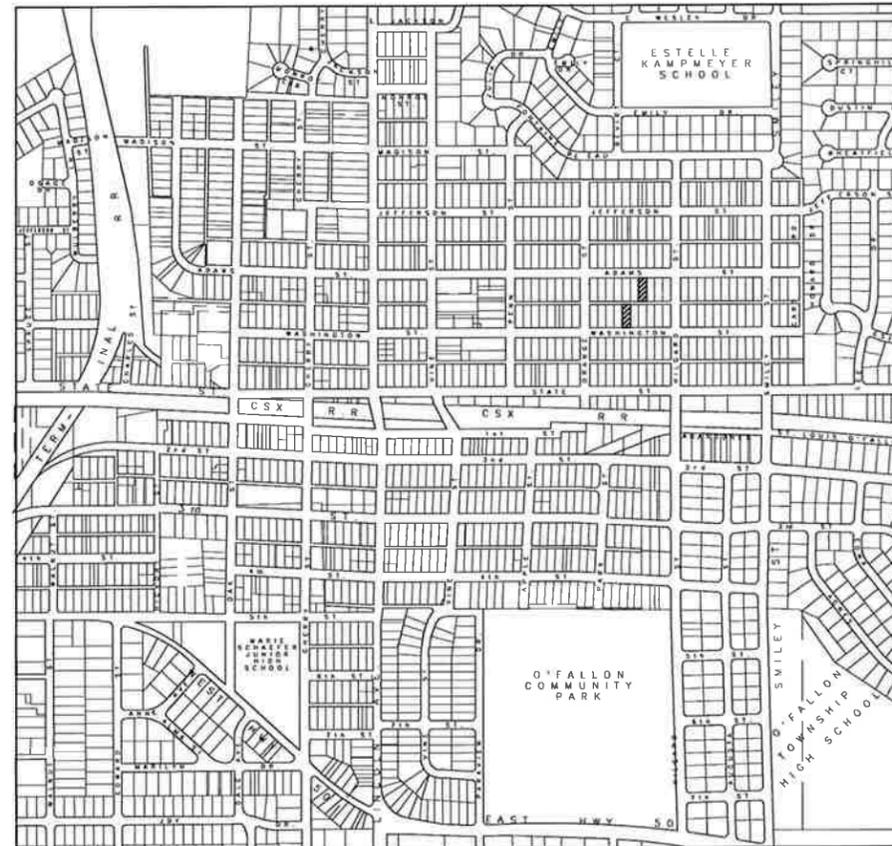
Checked by _____ Date _____

CITY OF O'FALLON

ST. CLAIR COUNTY, ILLINOIS

PHASED STREET AND STORMWATER IMPROVEMENTS PHASE 2 - DETENTION PONDS & PUMP STATION

LOCATION MAP



VICINITY MAP



INDEX OF SHEETS

1. COVER SHEET
2. SUMMARY OF QUANTITIES & GENERAL NOTES
3. DETENTION SITE PLANS AND DETAILS
4. PUMP STATION SITE PLAN
- 5.-6. PUMP STATION DETAILS
7. PUMP STATION ELECTRICAL DETAILS
8. PUMP STATION ELECTRICAL SITE PLAN

APPLICABLE IDOT HIGHWAY STANDARDS

280001-07
542301-03
606401-01



AREAS TO BE IMPROVED

WATER

CITY OF O'FALLON
255 SOUTH LINCOLN STREET
O'FALLON, ILLINOIS 62269
ATTN: DENNIS SULLIVAN, P.E.
618-624-4500 EXT. 3

ELECTRIC & GAS

AMEREN IP
1050 WEST BLVD.
BELLEVILLE, ILLINOIS 62221
ATTN: KELLY BAUZA
618-236-4309

SEWER

CITY OF O'FALLON
255 SOUTH LINCOLN STREET
O'FALLON, ILLINOIS 62269
ATTN: DENNIS SULLIVAN, P.E.
618-624-4500 EXT. 3

TELEPHONE

AT&T ILLINOIS
203 GOETHE STREET
COLLINGSVILLE, ILLINOIS 62234
ATTN: DEAN LITZENBURG
618-346-6422

HOLD IT ! CALL BEFORE YOU DIG !
Phone J.U.L.I.E.



The owner would like to remind you that underground utility facilities can be damaged by shovel blades or other digging equipment. You can prevent damage or possible personal danger by phoning 800/892-0123 at least 48 hours before you dig. That's the toll-free number for "J.U.L.I.E.", which stands for Joint Utilities Location Information for Excavators.

If there are any pipes, cables, lines or mains in the excavation area, utility personnel will be out to mark the facilities so you can work around them.

Toll Free 800/892-0123



RHUTASEL and ASSOCIATES, INC.

CONSULTING ENGINEERS • LAND SURVEYORS

CORPORATE OFFICE
4 INDUSTRIAL DRIVE
FREEBURG, ILLINOIS 62243
(618) 539-3178

REGIONAL OFFICE
201 SOUTH LOCUST STREET
CENTRALIA, ILLINOIS 62801
(618) 532-1992

	I hereby certify that the portion of this engineering document described below was prepared by me or under my direct supervision and responsible charge, and that I am a duly Licensed Professional Engineer under the laws of the State of Illinois.
	John Bellapain
	Date of Signing
	Date of License Expiration

Sheets covered by this seal: 7 & 8.

	I hereby certify that the portion of this engineering document described below was prepared by me or under my direct supervision and responsible charge, and that I am a duly Licensed Professional Engineer under the laws of the State of Illinois.
	Tracy M. Lawless
	Date of Signing
	Date of License Expiration

Sheets covered by this seal: 1 thru 6.

APPROVED _____ MAYOR, CITY OF O'FALLON _____ DATE _____

MARCH, 2013

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	2,140
25000100	SEEDING, CLASS 1	ACRE	0.33
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	30
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	30
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	30
25100115	MULCH, METHOD 2	ACRE	0.33
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50
28000500	INLET AND PIPE PROTECTION	EACH	2
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	30
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1
54213666	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 21"	EACH	1
54247110	GRATING FOR CONCRETE FLARED END SECTION 18"	EACH	1
54247120	GRATING FOR CONCRETE FLARED END SECTION 21"	EACH	1
550A2540	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"	FOOT	11
550A2550	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 21"	FOOT	27
60615400	PAVED DITCH, TYPE A-15	FOOT	149
64100120	SIGHT SCREEN, WOODEN FENCE, TYPE P 8"	FOOT	749
67100100	MOBILIZATION	L. SUM	1
20047700	PUMP STATION COMPLETE	L. SUM	1

GENERAL NOTES

- 1.) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012.
- 2.) ALL AREAS DISTURBED FOR ANY REASON WITHIN THE CONSTRUCTION LIMITS SHALL BE SEEDED WITH CLASS 1 SEEDING. NUTRIENTS SHALL CONFORM TO ARTICLE 250.04.
- 3.) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 4.) THE CONTRACTOR SHALL REMOVE, MAINTAIN IN A TEMPORARY LOCATION AND PERMANENTLY RESET ALL MAILBOXES AND TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS IN ACCORDANCE WITH ARTICLES 107.20 AND 107.25 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
- 5.) ALL ENTRANCES SHALL BE CONSTRUCTED AT RIGHT ANGLES TO THE ALLEY CENTERLINE UNLESS OTHERWISE NOTED.
- 6.) FACTORS USED FOR APPLICATION RATES AND QUANTITY CALCULATIONS ARE AS FOLLOWS:

<u>SEEDING</u>	
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
TEMPORARY SEEDING	100 LBS/ACRE

SUMMARY OF QUANTITIES & GENERAL NOTES				
PHASED STREET AND STORMWATER PHASE 2 - DETENTION & PUMP O'FALLON, ILLINOIS				
STABOL	DRAWN	APVD	DESCRIPTION	DATE
REVISIONS				
DR BY: M.A.L.	APVD BY: T.M.L.	SCALE: N.T.S.		SHEET NO. 2
CK'D BY: A.A.S.		DATE: MARCH, 2013		OF 8

RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 FREEBURG, IL 62243 CENTRALIA, IL 62801
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