

	AGEND	A ITI	ITEM EXECUTIVE SUMMARY			Agenda Item number: 3f		
ST. CHARLES	Title:	Inte	Recommendation to approve the Third Amendment to Intergovernmental Agreement between the City of St. Charles and the City of Geneva (1337 Geneva Rd.)					
SIN C E 1834	Presenter:	Russell Colby						
Meeting: Planning & Development Committee Date: May 14, 2018								
Proposed Cost: N/A			Budgeted Amount: N/A			Not Budgeted:		

Executive Summary (if not budgeted please explain):

An Intergovernmental Agreement between St. Charles and Geneva was approved in 1986 allowing for a residential development in Geneva to connect to St. Charles' sanitary sewer system. The IGA was subsequently amended in 1988 and 1990 allowing for other property in Geneva to be served by St. Charles sanitary. Proposed is a Third Amendment to the IGA in regards to the water service connection for the property located at 1337 Geneva Rd. in St. Charles.

In October 2017, the Committee recommended approval of a Map Amendment and Final Plat of Subdivision for Parkside Reserves, 1337 Geneva Rd., to allow construction of a three-unit townhome on the property, which is a vacant half-acre parcel near the St. Charles/Geneva border.

The developer is proposing to serve the development with City of Geneva water due to the proximity of the Geneva water main. Connecting to St. Charles water would require a more costly water main extension.

The City of Geneva has agreed to allow the water service connection to Geneva's water main system.

An Intergovernmental Agreement has been prepared outlining the parties responsible for infrastructure improvements and how the townhome residents will be billed for water and sewer service. Residents will be charged for water and sewer service by Geneva using Geneva usage rates for water and St. Charles usage rates for sewer. Sanitary sewer charges will be remitted to the City of St. Charles on an annual basis.

City of Geneva staff has reviewed the IGA and find it acceptable. The IGA requires approval by Geneva City Council.

Attachments (please list):

Intergovernmental Agreement, Engineering Plans

Recommendation/Suggested Action (briefly explain):

Recommendation to approve the Third Amendment to Intergovernmental Agreement between the City of St. Charles and the City of Geneva (1337 Geneva Rd.)

THIRD AMENDMENT TO INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE CITY OF ST. CHARLES, KANE AND DUPAGE COUNTIES, ILLINOIS, AND THE CITY OF GENEVA, KANE COUNTY, ILLINOIS

WHEREAS, the City of St. Charles, Kane and DuPage Counties, Illinois, and the City of Geneva, Kane County, Illinois, entered into an Intergovernmental Agreement, pursuant to the 1970 Illinois Constitution, on November 3, 1986 and subsequently amended said Intergovernmental Agreement on April 4, 1988 and June 4, 1990; and

WHEREAS, the City of St. Charles has approved a preliminary plan for a townhome consisting of three (3) residential units ("Townhouses") which is commonly known as 1337 Geneva Road and is legally described in Exhibit "A", attached hereto; and

WHEREAS, the Cities of Geneva and St. Charles find that the proposed Townhouses would be more practically served by the water system (water main) of the City of Geneva since providing such water main service by the City of St. Charles would require an unreasonably expensive main extension, whose maintenance would not be cost effective. This extension would also create a disturbance of Illinois Route 31.

NOW, THEREFORE, in consideration of the mutual promises contained herein, and the recitals of facts hereinabove made, it is hereby agreed by and between the City of Geneva, Kane County, Illinois, ("Geneva") and the City of St. Charles, Kane and DuPage Counties, Illinois, ("St. Charles") as follows:

1. Subject to satisfaction of the conditions set forth in Paragraph 2 below, Geneva shall cooperate with St. Charles in allowing the connection of a private water service line serving a property located in St. Charles to connect to Geneva's water main system in order to provide service to the townhouses as described in Exhibit "A".

- 2. St. Charles shall cause the Developer and/or water main residential user to comply with the following conditions:
- (a) That at the time of construction of the Townhomes infrastructure improvements, the Developer of 1337 Geneva Road ("Developer") shall construct water mains and any necessary appurtenant structures in accordance with current Geneva regulations, and
- (b) That the plans and specifications for water mains and appurtenant structures shall be reviewed and approved by Geneva, and
- (c) That the Developer shall pay to Geneva the customary fees, including engineering fees and legal fees, for plan review and inspection of the water main and related facilities as if the water mains and facilities were constructed for a new subdivision in Geneva, and
- (d) That the Developer shall pay to Geneva all necessary water main connection fees and other charges in accordance with the established schedule of fees and charges of Geneva for the proposed water main, and
- (e) That the Developer and each water main residential user in the Townhomes shall accept ownership of and agree to operate and maintain any new service line connection in accordance with the ordinances and regulations of Geneva, and
- (f) That the water main residential users shall be charged for their water main user fees by Geneva in accordance with the usage rates maintained by Geneva; and
- 3. That the water main residential users shall be charged for their sanitary sewer user fees by Geneva in accordance with the usage rates maintained by St. Charles, and the City of Geneva shall provide an annual report indicating the amount so collected for sanitary sewer usage from the residential users and shall make a remittance of said charges collected to the City of St. Charles on or

before April 15th of each calendar year.

- 4. The City of St. Charles will notify the City of Geneva thirty- (30) days prior to any sewage treatment rate changes going into effect.
- 5. This Agreement is solely between the parties hereto and is not intended to create any third-party beneficial relationships between St. Charles, Geneva, and the Developer or owner of a unit in the Townhomes.
- 6. That the Intergovernmental Agreement dated November 3, 1986 as amended, is hereby readopted, reaffirmed and re-executed by the parties hereto.

IN WITNESS WHEREOF, on this	day of	, 2018, the
parties affix their respective seals.		
	CITY OF ST. CHARLES,	ILLINOIS
(SEAL)	BY:	
		Mayor
ATTEST:		
City Clerk		
	CITY OF GENEVA	A, ILLINOIS
(SEAL)	BY:	
		Mayor
ATTEST:		

City Clerk

This instrument prepared by:

Jon Green President, PE, CFM Engineering Resource Associates, Inc. 3S701 West Avenue, Suite #150 Warrenville IL 60555

EXHIBIT A

1337 Geneva Road, generally located on the West Side of Geneva Road as follows:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF MEDIAPOLIS ADDITION TO ST. CHARLES AND GENEVA, ILLINOIS: THENCE SOUTH 82 DEGREES 17 MINUTES EAST ALONG THE NORTHERLY LINE OF SAID MEDIAPOLIS ADDITION PRODUCED EASTERLY 104.1 FEET TO AN IRON PIPE IN THE EASTERLY RIGHT OF WAY LINE OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY FOR THE POINT OF BEGINNING; THENCE NORTH 21 DEGREES 03 MINUTES EAST ALONG SAID EASTERLY RIGHT OF WAY LINE 59.5 FEET TO A N IRON PIPE: THENCE NORTH 75 DEGREES 25 MINUTES EAST, 140.7 FEET TO AN IRON BOLT IN THE WESTERLY LINE OF ILLINOIS HIGHWAY 31 (ALSO KNOWN AS THE WEST ST. CHARLES AND GENEVA ROAD); THENCE SOUTH 20 DEGREES 46 MINUTES EAST ALONG SAID WESTERLY LINE OF ILLINOIS HIGHWAY ROUTE 31, A DISTANCE OF 164.2 FEET TO AN IRON PIN; THENCE NORTH 82 DEGREES 17 MINUTES WEST PARALLEL TO SAID NORTHERLY LINE OF MEDIAPOLIS ADDITION AND ITS EXTENSION EASTERLY 231.6 FEET TO AN IRON PIN IN THE EASTERLY RIGHT OF WAY OF SAID CHICAGO AND NORTHWESTERN RAILWAY COMPANY: THENCE NORTH 23 DEGREES 58 MINUTES EAST ALONG THE SAID EASTERLY RIGHT OF WAY LINE 34.3 FEET TO THE POINT OF BEGINNING, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

FINAL ENGINEERING IMPROVEMENT PLANS PARKSIDE RESERVES ST. CHARLES, ILLINOIS

INDEX TO DRAWINGS

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LOCATION MAP



ENGINEERING RESOURCE ASSOCIATES, INC. CONSULTING ENGINEERS. SCIENTISTS & SURVEYORS

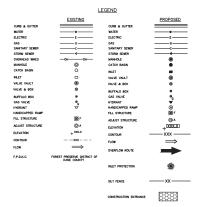
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2416 GALEN DRIVE CHAMPAIGN, ILLINOIS 61821 PHONE (217) 351-6268 FAX (217) 355-1902

3S701 WEST AVENUE, SUITE 150 WARRENVILLE, ILLINOIS 60555 PHONE (630) 393-3060 FAX (630) 393-2152

10 S. RIVERSIDE PLAZA, CHICAGO, ILLINOIS 60606 PHONE (312) 474-7841

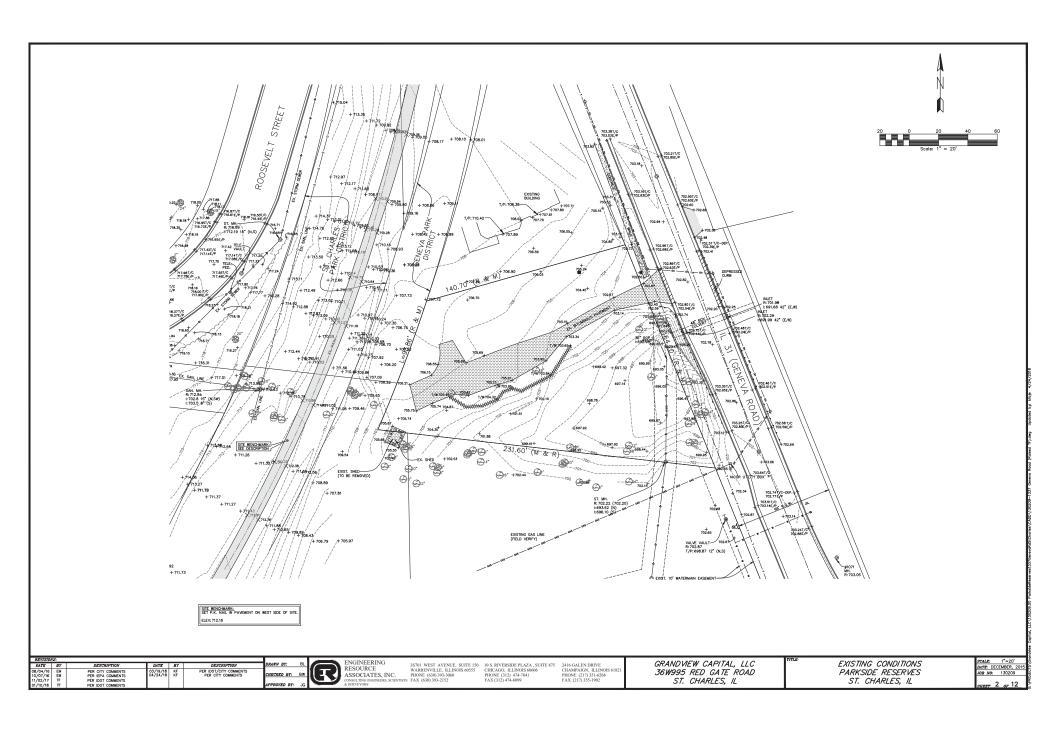
PREPARED FOR: GRANDVIEW CAPITAL, LLC 36W995 RED GATE ROAD ST. CHARLES, IL 60174 PH: (630) 513-1966 FAX: (630) 377-3812

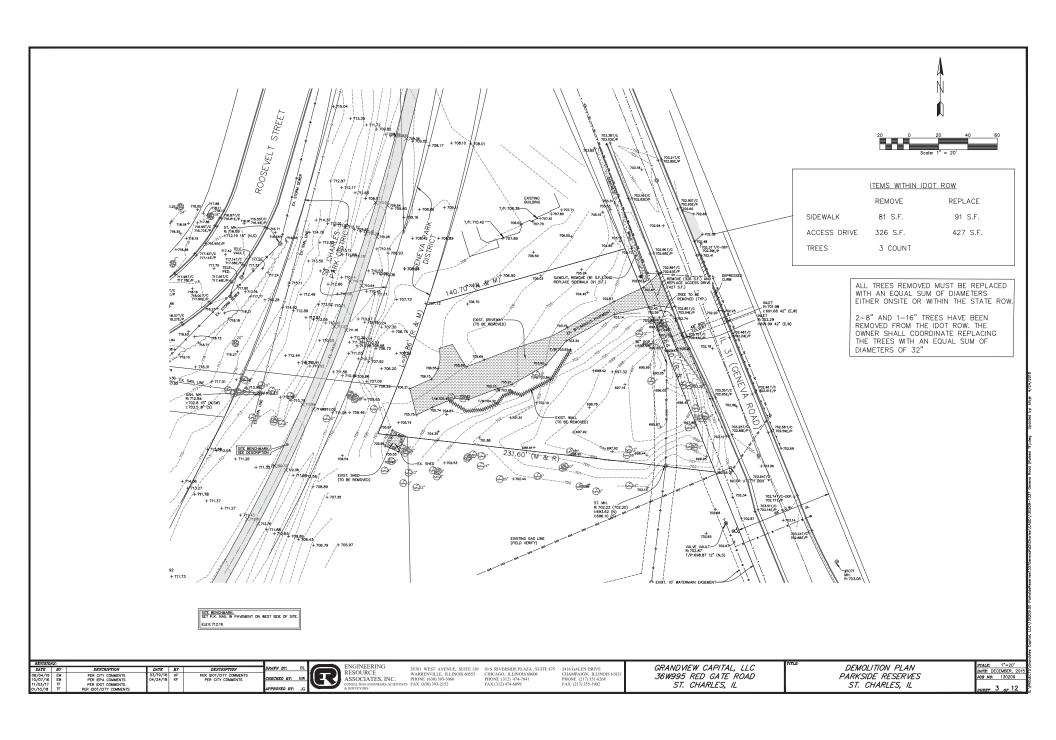


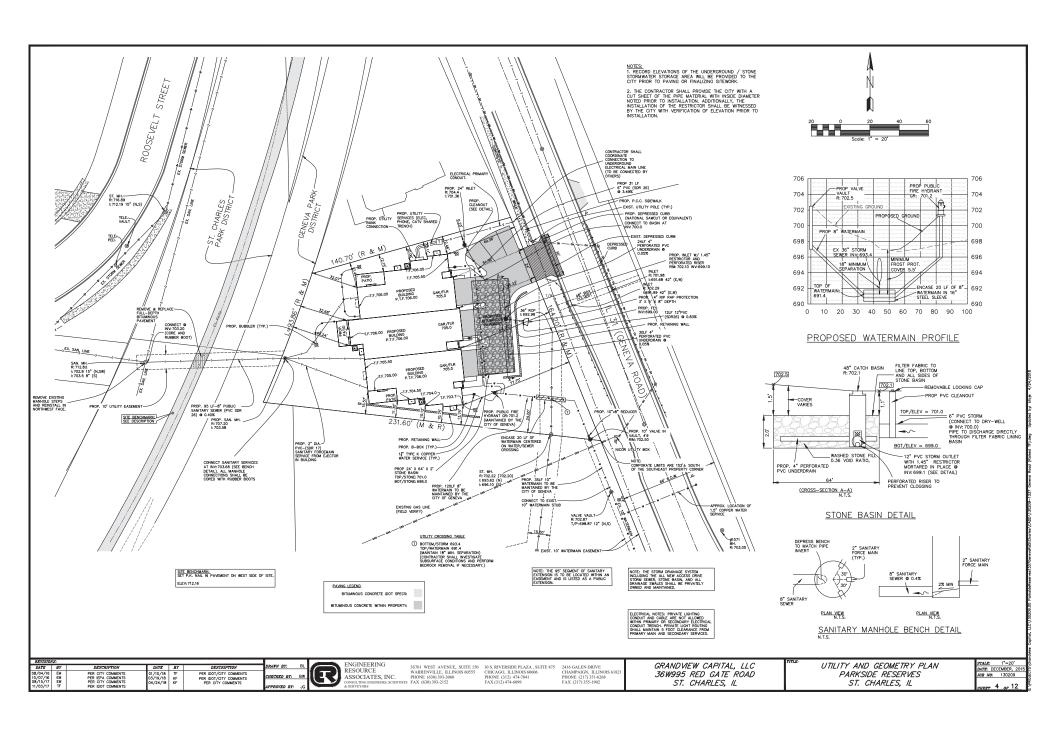
REVISED DATE: APRIL 24, 2018 REVISED DATE: MARCH 19, 2018 REVISED DATE: JANUARY 19, 2018 REVISED DATE: NOVEMBER 3, 2017 REVISED DATE: AUGUST 15, 2017 REVISED DATE: AUGUST 4, 2018 ORIGINAL SUBMITTAL: FEBRUARY 5, 2016

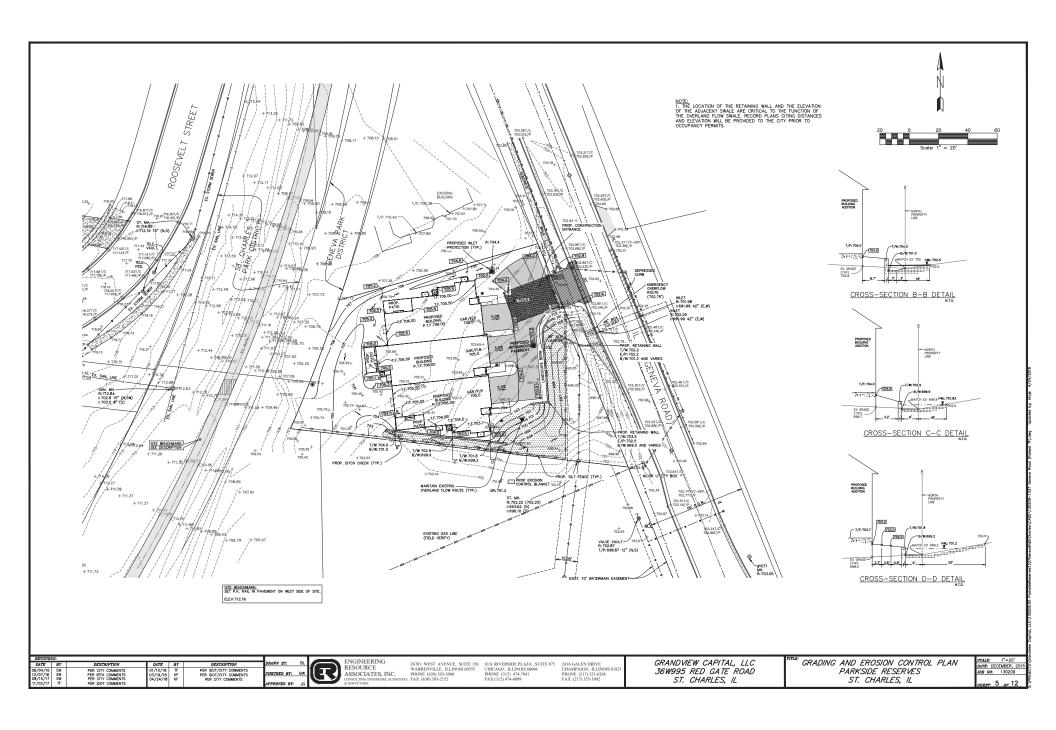


ERA JOB NO.: 130209 PROFESSIONAL DESIGN FIRM NUMBER: 184 00118









STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TELEPORARY EROSION AND SEDMENT CONTROL. SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE LINGUIS PROTES. THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO UNIT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING FORDER TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN THE PROVIDING CROUND CROUND COVER WITHIN THE PROVIDING CROUND CROUND COVER WITHIN THE PROVIDING CROUND CROUND

CERTAIN SEGMENT CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, THE OF YEAR, AND EXPECTED.

THE CONTINUED SHALL SOTALL PERMANENT EROSON CONTROL DYSTRING AND SEEDING WITHIN A THE FRAME. SPECIFIC HERBIN AND AS DESCRIBED WITH E DAMBERS, RESERVED WHAT AND AS DESCRIBED TO THE DAMBERS, RESERVED WITH A DAMBER AND ASSOCIATION. TO THE DAMBER SEGONA WE DESCRIBED WITH THE ADDRESS OF THE DAMBER AND AS SHOWN IN ICO. THE CONTINUED SHALL PRIVING ALL WORK AS DIRECTED BY THE BROWNERS AND AS SHOWN IN ICO.

SITE DESCRIPTION, DESCRIPTION OF CONSTRUCTION ACTIVITY.

- 1. THE PROJECT IS LOCATED AT 1337 GENEVA ROAD, IN THE CITY OF ST. CHARLES.
- CONSTRUCTION INCLUDES EARTHWORK, BITUMINOUS STREET IMPROVEMENTS, SANITARY & WATER IMPROVEMENTS AND
 CONSTRUCTION OF THREE SINGLE FAMILY ATTACHED RESIDENCES.

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR.

- 1. SEDIMENT CONTROL SILT FENCING SHALL BE IN PLACE PRIOR TO EARTHWORK ACTIVITIES.
- 2. SITE SHALL BE MASS-GRADED, WITH ALL PROPOSED PAVEMENT GRADED TO ROUGHLY 1-FOOT BELOW FINAL ELEVATION ON
- P. LINES.
 3. UTILITIES SHALL BE CONSTRUCTED. AFTER COMPLETION OF STORM SEWER CONSTRUCTION, SEDIMENT CONTROL FILTER BARRIER.
 AND SEDIMENT CONTROL FLOW—THROUGH (DROP—IN) FILTERS SHALL BE PLACED AT EACH OPEN—GRATE STRUCTURE.

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 0.504 ACRES BY WHICH 0.504 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS, WHICH AID IN THE DEVELOPMENT OF THE STORM MATER POLLUTION-PREVENTION PLAN AS REFERENCED DOCUMENTS,

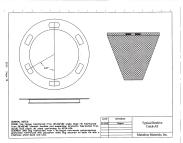
- . INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM TOPOGRAPHIC SURVEYS AND SOIL BORNINGS THAT WEBSE UTILITIES FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION AND SEDIMENT
- CONTROL SYSTEMS.

 2. PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAWINGS PATTERNS AND APPROXIMATE SUCPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE THEOPERAY PROSON CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE:

- THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE TEMPORATY SEEDING, PERMANENT SEEDING, MULCHING, PROTECTION OF TREES, PRESERVE PRACTICES INCLUDE TEMPORARY SEZEMO, PERMANENT SEZEMO, MULCHNO, PROTECTION OF TREES, PRESERVANT ON NATURAL VICETATION, AND OTHER APPROPRIATE MEMARIES AS DERICTION OF THE STEE MEMBERS. SYMMLEXTHON MEASURES. SHALL BE INTIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE STEE MEMBER CONSTRUCTION MEASURES. SHALL BE INTIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE STEE MEMBER CONSTRUCTION.
- (a.) AREAS OF EXISTING VEGETATION, WOOD AND GRASSLANDS, OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE DENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION
- (b.) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH REQUIRED TREE REMOVAL.
- (c.) AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY PERMETER SLT FENCE SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN OR DIRECTED BY THE DIRECTED.
- (4) BARE AND SPARSELY VEGETATED GROUND IN HIGH ERCORME AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SECRED AT THE BECOMING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN (7) DAYS.
- (a.) IMMEDIATELY AFTER TREE REMOVAL IS COMPLETED, AREAS WHICH ARE HIGHLY ERCORDE AS DETERMINED BY THE ENGINEER, SHALL BE TEMPORARLY SEEDED WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN LYDI DAYS.
- ESTABLISHMENT OF THESE TEMPORARY EROSION AND SEDMENT CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT, DESIRABLE CRASS SEDD WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEDDS ONTO THE CONSTRUCTION SITE UNITL PEPMANENT SEEDING AMONG AND OVER SECOND CAN BE COMPLETED.

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DESCRIPTION OF POLLUTION PREVENTION STRATEGIES DURING CONSTRUCTION:

DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STACING, PARKING OF VEHICLES OF CONSTRUCTION EQUIPMENT, STORAGE OF WATERIALS OF OTHER CONSTRUCTION RELIZED ACTIVITIES.

- WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE DISNETS SHALL RIMAIN UNDSTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERBAY TO PREVIOUS UNDICESSARY SOLE PROSPAY.
- L. PLACE TEMPORARY SEDIMENT CONTROL PRACTICES (FILTER BARRIERS, ETC.) AT LOCATIONS SHOWN ON THE PLANS.
- TEMPORARLY SEED ERCORDE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERCORDE.
 SUBSIACE AREA WITHIN THE CONTRACT LIMITS. TI. CONTINUE BULDING UP THE EMBANCHENT TO THE PROPOSED GRADE WHILE, AT THE SAME TIME, PLACING PERMANENT EXCISION CONTROL ALONG THE SLOPES.
- EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARLY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR SEVEN (77) LOCAL
- CONSTRUCTION EQUIPMENT SHALL BE STORED AND PURLED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY PUBL OR OTHER POLLUTIANT IN ACCORDANCE WITH ID'A WATER COLARTY REQUARDORS, LEAVING EQUIPMENT OR SUPPLIES SHALL BE IMPEDIATY REPARED OR REMOVED.
- THE OWNER OR HIS DESIGNATED REPRESENTATIVE SHALL INSPECT THE PROJECT WEEKLY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE AFTER RAINS OF 1/2—INCH OR GREATER OR EQUIVALENT SHOWFALL AND DIRECT LIFE WANTER SHATTONIN PERFOR.
- (f.) SEDIMENT COLLECTED DURING CONSTRUCTION FROM THE VARIOUS TEMPORARY SEDIMENT CONTROL SYSTEMS SHALL BE DEPOSID OF ON THE SITE ON A REQUIAR BASIS AS DIRECTED BY THE ENGINEET. THE COST OF THIS MANIFEMANCE SHALL BE INCLUDED IN THE UNIT BO PRICE FOR EARTH EXCANATION FOR EROSION, AND SEDIMENT CON.
- (g.) THE TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER, AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRACING

TEMPORARY SEDMENT CONTROL SYSTEMS SHALL SELECT IN PLACE WITH PROPER MAINTENANCE UNTIL PRIMAMENT ERIOSON CONTROL SI IN PLACE AND MONROW PROPERLY AND ALL PROMAMENT WEST AND SHALL SELECTION SHA

2. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN 14 DAYS AFTER FINAL GRADE IS ESTABLISHED.

CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY THE MUNICIPALITY. MAINTENANCE UP TO THIS DATE WILL BE BY

MISCELLANEOUS TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRES, IF DIRECTED.

- SLT FENCES WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS, DITCH CHECKS SHALL BE COMPOSED
 OF AGGREGATE, ROLLED EXCELSIOR, URETHANE FORM/GEOTEXTILE SLT WEDGES, AND/OR MAY OTHER MATERIAL APPROVED
 BY THE PROMPTP
- SIDMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY SECREMENT CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS, AS DRECTED BY THE ENGNEER. THE COST OF THIS MAINTENANCE SHALL BE PLAS FOR AT THE CONTRACT UNIT PROCE FOR CUBIC VARIO FOR EARTH EXCAVATION.
- A ALL ERGISON AND SEDMENT CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANAFACTURER FOR THE USE SPECIFIED IN THE REGISION AND SEDMENT CONTRICTOR HORD TO THE APPROAD, AND USE OF THE PRODUCT SHAME AND THE PRODUCT SHAME AND THE PRODUCT SHAME AND THE PRODUCT SHAME THE PRODUCT SHAM

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TDAPORARY DITCH CHECK

EMBOSION CONTROL BLANKET

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ROSION AND SEDIMENT CONTROL MEASURES

ANY STORM WATER DRAINGE STRUCTURES THAT HAVE THE POTENTIAL TO ACCEPT RUNOFF CONTINUOS SUSPENDED SUL PARTICLES SHALL BE SURROLANDED WITH FLITER BARRERS, SHALL REMANDED SHALL REMAIN PLACE LUTHE, LU, ESTURRED LARER SHALL RESALL REMAINS LEED HEAD LAREN HAS BEEN PLACE LUTHER LAREN SHALL RESALL CONTINCE WITH LARTH BELOW.

ALL TEMPORARY EROSON AND SEDMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDMENT SHALL BE PERM

1. SOIL EROSION CONTROL MUST CONFORM TO THE CITY OF ST. CHARLES ORDINANCE.

A CONSTRUCTION ENTRANCE TO THE SITE SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY WORK ON THE SITE. THE CONSTRUCTION ENTRANCE SHALL CONSIST OF 6" OF ORUSHED CONCRETE, 100 FEET IN LENGTH AND 30 FEET WIDE AT THE PROJECT SITE ENTRANCE ON 4TH AVENUE. 2. AFTER ROADWAY EXCAVATION AND PRIOR TO ANY MAJOR SITE GRADING, THE STORM SEWER AND CATCH BASINS SHALL BE INSTALLED. FILTER BARRIER AND "CATCH-ALLS" SHALL BE INSTALLED AROUND ALL MANHOLES, CATCH BASINS AND INLETS TO PREVENT SEDMENT FROM ENTERING THE SYSTEM.

ALL STOCK PILES ON THE SITE WHICH WILL NOT BE REDISTRIBUTED FOR A WEEK OR LONGER WILL BE SEEDED WITHIN SEVEN DAYS OF THE FORWARDIN OF THE STOCKPILE.

AGGREGATE BASE SHALL BE INSTALLED AS SOON AS POSSIBLE IN THE CONSTRUCTION SEQUENCE FOR ROADS TO PROVIDE REQUIRED STABILIZATION.

CONTRACTOR SHALL INSPECT EROSION CONTROL STRUCTURES WEEKLY AND WITHIN 24 HOURS OF A STORM 0.5" OR GREATER AND AS DIRECTED BY THE VILLAGE.

ALL DESIGN AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SOLE EROSION AND SEXMENT CONTINCL AS CONTAINED IN THE EPA/MPC/87-012 OR CURRENT EDITION AND THE ILLING'S PROCEDURE AND STANDARDS FOR URBAIN SOLL DESIGN AND SEQUENTATION CONTROL.

11. DUST CONTROL AND CLEANING OF ROADWAYS AS REQUESTED BY THE CITY SHALL BE THE RESPONSBUTY OF THE DEVELOPER.

12. NOTIFY THE CITY OF ST. CHARLES ENGINEERING DEPARTMENT 24 HOURS PROR TO INITIATING CONSTRUCTION.

THE CITY OF ST. CHARLES DECLIDES COMPLIANCE WITH NODES DUASE II DROSDAM

KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT NOTES:

NOTE: ALL ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND AS DIRECTED BY THE DISSIER, MANTENANCE AND CLEANING OF THE EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INCLUDED IN THE REPORTING EROSION AND SERVINDED CONTROL RAY TITM.

THE OWNER IS RESPONSIBLE FOR SUBMITTING THE NOTICE OF INTENT (NOI) TO THE IEPA AFTER THE STORM WATER POLLUTION PREVENTION PLAN (SAMPP) IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THE NOI IS POSTMARKED AT ILEAST SO DAYS REFORE COMMISSIONATE OF ANY MORK ON SIT.

PROJECTION FAIL GENERAL CHARGE AND CONTROLLED IN SERVICIONAL CONTROLLED IN THE USE IN CONTROLLED IN THE CONTROLLED IN TH

. NO WORK SHALL BE PERFORMED IN FLOWING WATER, WORK IN AND NEAR THE ORTHCAL AREAS SHOULD BE ISOLATED FROM CONCINTRATED FLOWS OR STREAM FLOW, ONCE MORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL SHALLDATION OF ALL DISTURBED AREA. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EXCISION AND SEDMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL LATEST EDITION THE KAME-DUPAGE SOL AND WATER CONSERVATION DISTRICT (KDSMCD) MUST BE NOTIFED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONTERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK ROOM TO THE CINAL INSERTION. 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NO LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY PROSICN CONTROL, PLAN SHALL BE SUBMETTED FOR REVIEW BY THE KORNEY. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT DROSCON AND SEDMENTATION AS DETERMINED BY THE KOSMICO. DURNO DEWATERING OPERATIONS, MATER WILL RE PUMPED INTO SEDMENT BASINS OR SLT TRAPS, DEWATERING DIRECTLY INTO STREAMS, WEILAMES, PIELD TRES, OR STORMMATER STRUCTURES IS PROVIDED.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL STRUCTURES.

SECOND IN DISTURBED AREAS WILL BE DONE PER THE SPECIFICATIONS DETAILED ON THIS PLAN.

THE SEEDING AND MULCH WILL BE MAINTAINED AND REPARED WHEN NECESSARY UNTIL THE PROJECT IS COMPLETED.

PERMANENT SEED

KENTUCKY BLUEGRASS 100#/ACRE PEREU BLUEGRASS 70#/ACRE CREEPING RED FESCUE 50#/ACRE

TEMPORARY SEED

IDOT TEMPORARY SEED MIXTURE & RATE

SEDIMENT CONTROL INLET FILTERS CLEANING

CLEANING OF THE INLET FILTER SHALL CONSIST OF INSPECTING, CLEANING (INCLUDES REMOVAL AND PROPER DISPOSAL OF DEBRIS AND SILT THAT HAS ACCUMULATED IN THE FILTER FABRIC BAG), BY VACTORING, REMOVING AND DUMPING OR ANY OTHER METHOD APPROVED BY THE ENLINEER.

METHOD OF MEASUREMENT: CLEANING OF THE DRAINAGE STRUCTURE INLET FILTER SHALL BE MEASURED FOR PAYMENT EACH TIME THAT THE CLEANING WORK IS PERFORMED AT EACH OF THE DRAINAGE STRUCTURE INLET FILTER

COMPANY

CONTRACTOR'S CERTIFICATION

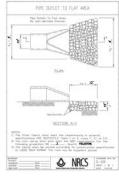
RTIFY UNDER PENALTY OF LAW THAT I UNDERS S AND CONDITIONS OF THE GENERAL NATIONAL JTANT DISCHARGE ELIMINATION SYSTEM (NPDES

COMPANY

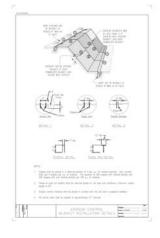
THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPOES PERMIT NUMBER ILRIO ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE

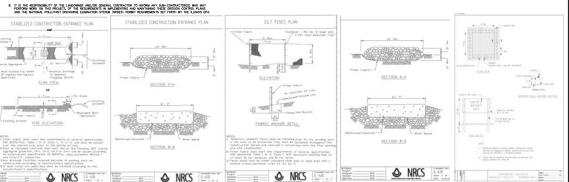
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL

AUGUST 15, 2017









REVISION				
DATE	BY	DESCRIPTION	DATE	BY
08/04/16	EM	PER CITY COMMENTS	03/19/18	KF KF
11/03/17	TF	PER IDOT COMMENTS	04/24/18	KF

RAWN BY: HECKED BY: A

ENGINEERING RESOURCE ASSOCIATES INC

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GRANDVIEW CAPITAL, LLC 36W995 RED GATE ROAD ST. CHARLES. IL

"STORMWATER POLLUTION PREVENTION PLAN PARKSIDE RESERVES ST. CHARLES, IL



- AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF ALL PHASES OF WORK, THE CONTRACTOR SHALL MOTIFY THE COLUMNIC. CITY OF ST. CHARLES. (830) 377-4400 ENGINEERING RESOURCE ASSOC. (630) 393-3060 KANE-CUPICE SMICC. (630) 584-7981 X3
- UTILITY INFORMATION IS BASED UPON FIELD MEAUREMENTS AND BEST AVAILABLE RECORDS. FIELD DATA IS LIMITED TO THAT WHICH IS VISIBLE AND CAN BE MEASURED. THIS DOES NOT PRECULDE THE EXISTENCE OF OTHER UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL NOTIFY JULLIE. (1-800-892-0123) 48 HOURS PRIOR TO ANY EXCAVATION WORK TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES.
- 4. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING DOCUMENTS: "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN THE STATE OF ILLINOIS SPEARMENT OF TRANSPORTATION, LATEST EDITION.
- "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION CONTROL AND SEDIMENTATION CONTROL IN ILLINOIS", NORTHEASTERN ILLINOIS SOIL EROSION AND SEDIMENTATION CONTROL STEERING COMMITTEE AND DUPAGE COUNTY'S TORNI WATER CONTROL CRIDNANCE, LATEST EDITION.
- 5. THE CONTRACTOR SHALL BE RESPONSEL FOR THE INSTALLATION AND MAINTENANCE OF ADDILITY SIDES AND HIMPHONE DEVICES TO PRIVED HAD POPIETT THE PRIZEL. THE MANUAL LIANGE PERPARTMENT OF TRANSPORTATION, LATEST ENTERING, SHALL BE CONSILIED. APPROPRIATE CONTROL METHODS SHOULD BE APPLIED TO THE SPECIFIC STRUKTIONS AND THESE OF CONSTRUCTION OPERATIONS BEND PERFORMED.
- 6. UNLESS WRITTEN AUTHORIZATION IS OBTAINED FROM THE CITY ENGINEER, ALL OPENINGS IN ANY PAVEMENT OR TRAVELED WAY SHALL BE BACKFILLED PRIOR TO THE END OF THE
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE MOST RECENT SET OF THE "APPROVED" FINAL ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE SAME.
- 10. CONTRACTOR SHALL RESTORE OFF-SITE SURFACES TO ORIGINAL CONDITION IF DAMAGED BY CONSTRUCTION.
- THE OWNER IS TO PROVIDE THE CITY ENGINEER WITH RECORD DRAWINGS OF ALL UTILITIES SHOWING LOCATIONS OF ALL SEWER PIPE, MAINS, SERVICE STUBS, AND STRUCTURES.
- 12. THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAL AND PROCRAMS INCIDENT HEREOF, AND THE CONNEER WILL NOT BE RESPONSIBLE FOR CONTRACTOR'S FALLINE TO PERFORM OR FURNISH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 13. THE DISNOETE MARANTS THE DESIGN, RECOMMUNDATIONS, AND SPECIFICATIONS TO HAVE BEEN PROMACATED ON CONTINUES GENERALLY DECONTRESS WHEN HE RUCHERY. THE RECOMMUNDATIONS AND SPECIFICATIONS, FOR COMPANY ON HUMBAL SIZE, CONTINUES DECONTRESS ON THE PRACE. IT SHALL BE THE CHARGE'S RECOMMUNDATED ON THE PRACE. IT SHALL BE THE CHARGE'S RECOMMUNICATION STREET, CONTINUES AND SPECIFICATION OF THE PROPORTION. THE VALUE OF THE CHARGE OF THE CHARG

- 16. CITY OF ST. CHARLES ENGINEERING DESIGN AND INSPECTION POLICY MANUAL SHALL GOVERN

- ALL WATERMAIN SHALL BE DUCTILE IRON MECHANICAL JOINT, CLASS 52, CEMENT-LINED CONFORMING TO ANWA-C151, OR AS REQUIRED BY AWMA C-150 FOR VARIOUS DEPTHS JOINTS SHALL BE PUSH-CN AND MECHANICAL CONFORMING TO AWMA C-111. FITTINGS BE CAST OR DUCTILE IRON CONFORMING TO AWMA C-110. AND AWMA C-111.
- BE CAST ON DUCILLE IRON CONFUCION ON AWAY C-110 AND AWAY C-111.

 3. AS WATERNAIN IS CONSTRUCTED, CONTRACTOR SHALL INSTALL 2"-MORE BLUE PLASTIC WARNING TAFE, BURED IN THE BACKFILL DIRECTLY ABOVE THE WATERWARN AT A DEPTH BETWEN ONE AND TWO FEET. ALONG WITH THEY CONTRACTOR SHALL BURY ON & SOLD (BULL RINGUATED) TRACER WRE. THE WIRE SHALL BE CONTINUOUS & CONNECTED TO VARIOUS WATERWAIN COMPONENTS FOR CITY REQUIREMENTS.
- . THE MINIMUM DEPTH OF WATERMAIN FROM THE TOP OF THE PIPE TO THE FINISHED GRADE SHALL BE FIVE AND A HALF (5.5) FEET.
- 5. VALVES THAT ARE 12 INCHES AND SMALLER SHALL BE IRON BODY, BRONZE MOUNTED, DOUBLE DISC, PARALLEL SEAT, NON-RISING STEM GATE VALVES, COUNTER-CLOCKWISE TO OPEN, IN FULL CONFORMANCE WITH AWWA C-500 WITH MECHANICAL JOINT ENDS (AWWA C-111).
- ALL VALVES SIX (6) INCHES AND LARGER MUST BE INSTALLED IN VALVE VAULTS. VALVE VAULTS MUST BE PRECAST REINFORCED CONCRETE CONFORMING TO ASTM C-478 AND ASTM
- 8. VALVE VAULTS SHALL NOT HAVE MORE THAN TWO (2) PRECAST ADJUSTING RINGS WITH AN 8 INCH MAXIMUM TOTAL HEIGHT ADJUSTMENT.
- CASTINGS SHALL HAVE "WATER" AND "CITY OF ST. CHARLES" EMBOSSED ON THE LIDS. CASTINGS SHALL BE NEENAH R=1713, TYPE B.
- WATERMAIN BEDDING SHALL BE 4 INCHES OF CRUSHED GRAVEL OR CRUSHED STONE AGGREGATE ASTM C-33 SIZE NO. 67. THE BEDDING STONE SHALL BE EXTENDED TO THE SPRINGLINE OF THE PIPE.
- I. LELLY MONTH AT THE THINNESS AND CONTINUED ALL FOR THE CONTINUED AND C
- 13. CONCRETE THRUST RESTRAINTS SHALL BE PRECAST OR POURED CLASS SI CONCRETE AND PROVIDED AT ALL TEES, PLUIGED ENDS, HYDRAINTS AND BRIDGS RETWEEN 11.75 DEDREES AND 90 DECREES. CARE SHOULD BE TAKEN WHEN POURING CONCRETE SO THAT THE MIX WILL NOT INTERFERE WITH ACCESS TO JOINTS OR WITH HYDRAINT DRAINAGE.
- 14. CASING PIPES SHALL BE STEEL, CONFORMING TO ASTM A-120 WITH 0.375 INCH MINIMUM

- 15. HORIZONTAL SEPARATION WATERMAINS AND SEWERS:
- WATERMAINS SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
- 2.) WATERMAINS MAY BE LOCATED CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN: A.) LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET; AND
- B.) THE WATERMAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER: AND C.) THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
- 3.) WHEN IT IS IMPOSSBLE TO MEET (1) OR (2) ABOVE, BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTULE IRON PIPE, ASSESTOS-COLKENT PESSURE PIPE, PIPE STRESSED CONNETTE PIPE, OR PLOY PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSIRE—THESTED TO THE MANIMUM DEPECTED SURCHARGE HEAD BEFORE BACKFLITTED.
- 16. VERTICAL SEPARATION WATERMAINS AND SEWERS:
- 1) A NATEMAN SHALL SE SPARKED FROM A SIGNE OF THE RIVER IS A HAMMAN OF IS INCRES AND FIRE CORNER OF THE SHAN OF OSSER WEARNESS INTERNACE OSSES STORM SERIES, SANTARY SERIES OF SERIES SERVICE CONNECTIONS. THE VERTICAL SPARATION SHALL SE MANTINGED FOR THAT POPULATION OF THE WITEMAN LOCATED WITHIN THE OUT LITE INCREMENTAL OF ANY SERIES OF DIGNA POINCED. A LIDERTO OF AUTOMATION THE SERVER OF DRAW.
- BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SUP-ON OR MECHANICAL JOINT CAST OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN:
- A.) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (1) ABOVE, OR:
- B.) THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
- 3.) A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR FORM LINES TO PREVENT SETLING AND BREAKING THE WATERMAIN, AS SHOWN ON THE PLANS OR APPROVED BY THE ENGINEER.
- 4.) CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST THE FET.
- 17. INSTALLED WATERMAIN SHALL BE PRESSURE—TESTED IN ACCORDANCE WITH CITY OF ST. CHARLES ENGINEERING DESIGN & INSPECTION POLICY MANUAL AND THE DEPARTMENT OF PUBLIC WORKS PRIOR TO FINAL ACCOPTANCE.
- 18. INSTALLED WATERMAIN SHALL BE DISINFECTED AND TESTED ACCORDING TO THE REQUIREMENTS OF THE "STANDARDS FOR DISINFECTION WATERMAINS", AWWA C-601, AND AS REQUIRED SHALL OF OTY CODE. ALL DISINFECTION, AS REQUIRED, SHALL DE PERFORMED BY AN INDEPENDENT FIRM CONSISTING SOFTERNEY, AND SHALL BE APPROVED BY THE CITY OF THE COMPANIES OF THIS OPERATION AND SHALL BE APPROVED BY THE CITY.
- 19: FRE INDEXES SHALL BEET THE STANDARDS OF THE AWAR C-502. HIDDRINGS FINAL INCLUDE
 A SUMMENT OF SHREET, THE CITY TOWNS OF THE AWAR C-502. HIDDRINGS FINAL INCLUDE
 A SUMMENT OF SHREET, THE CITY TOWNS OF THE AWAR C-502. HIDDRINGS SHALL INCLUDE
 ANA AUXILIARY CATE VALVE SHALL BE PROVIDED ON THE HYDRANT BRANCH LINE—WINNAM SY-NICH
 (C) DIAMETERS.
- 20. ALL FIRE HYDRANTS REQUIRE VALVE BOX STABILIZER AND VALVE BOX GRIP.
- 21. WATER SUPPLIES, INCLUDING FIRE HYDRANTS, SHALL BE IN OPERATION PRIOR TO THE START OF CONSTRUCTION OF ANY BUILDING IN ACCORDANCE WITH LOCAL FIRE PROTECTION DISTRICT ORDINANCE.
- 22. FIRE HYDRANT OUTLETS SHALL BE A MINIMUM OF TWENTY INCHES (20") AND NOT MORE THAN THIRTY-SIX INCHES (36") ABOVE FINISHED GRADE.
- 23. EACH HYDRANT SHALL HAVE THE PUMPER (STEAMER) CONNECTION FACING THE PRIMARY STREET AND SHALL BE ACCESSIBLE SO THAT A CONNECTION CAN BE MADE BETWEEN THE HYDRANT AND THE APPRAIUS LOCATED IN THE STREET WITH TWENTY FEET (207) OF SUITON HOSE.
- 24. THE CITY OF ST. CHARLES PUBLIC WORKS DEPT. SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO SCHEDULE ALL FINAL INSPECTIONS.

- REINFORCED CONCRETE PIPE STORM SEWER SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C-76 CLASS IV. PIVC PIPE STORM SEWER (4 MOH MA) 6 INOH) SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM D-7034 (560 AS). GALVAWARDE CORRUGATED STEEL CULVERT PIPE SHALL MEET OR EXCEED THE REQUIREMENTS OF AASHTO M-246, TYPE 8, MINILLOW MALL THICKNESS 14 GAUGE.
- MANHOLES AND CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE ASTM C-478
 AND ASTM C-443 CONFORMING TO THE FOLLOWING MINIMUM SIZE CRITERIA UNLESS SPECIFIED
 OTHERWISE:
- A.) FOR SEWER EIGHTEEN (18) INCH DIAMETER OR LESS, MANHOLE SHALL HAVE A FORTY-EIGHT (48) INCH INSIDE DIAMETER.
- B.) FOR SEWER TWENTY-ONE (21) INCH TO THIRTY-SIX (36) INCH IN DIAMETER, MANHOLE SHALL HAVE A SIXTY (60) INCH INSIDE DIAMETER.
- C.) FOR SEWER GREATER THAN THIRTY-SIX (36) INCH DIAMETER, MANHOLE SHALL HAVE AN OFFSET RISER PIPE OF FORTY-EIGHT (48) INCH INSIDE DIAMETER.
- NO MORE THAN TWO PRECAST ADJUSTING RINGS WITH A MAXIMUM HEIGHT ADJUSTMENT OF 8 INCHES SHALL BE ALLOWED.
- STORM SEWER MANHOLE JOINTS SHALL BE SEALED WITH PORTLAND CEMENT MORTAR, "O-RING" GASKETS, OR MASTIC MATERIAL.
- 6. MANHOLE FRAME AND COVER CASTINGS SHALL BE NEEMAH NO. R-17:3 WITH TYPE G OPEN OR CLOSED LID, EMBOSSED WITH "STORM" AND "OTY OF ST. CHARLES". INLET AND CATCH BASIN CASTINGS IN CARSSY MEAS SHALL BE ENEMAH R-28:4 No. R-4340-B. LID BEAT COURS & GUITER CASTINGS SHALL BE NEEMAH R-2391 A OR R-3278-1 DEPRESSED BB.12 CURB & GUITER CASTINGS SHALL BE NEEMAH R-3004-2 UNITES OTHERWISE NOTES.
- INLETS SHALL BE TWENTY-FOUR (24) INCH DIAMETER PRECAST REINFORCED CONCRETE CONFORMING TO ASTM C-478.
- 8. FOUR INCHES OF CRUSHED GRAVEL OR CRUSHED STONE AGGREGATE (ASTM C-33, SIZE NO. 67) SHALL BE USED AS BEDDING UNDER THE PIPE. THE BEDDING STONE SHALL BE GRADED ALONG THE ENTRE LEXENT OF PIPE TO PROVIDE FULL BEARING. THE BEDDING STONE SHALL EXTEND TO THE SPRINGLINE OF THE PIPE.
- 9. THE CONTRACTOR SHALL INSTALL EARTHEN CLAY SEPAGE BLOCKS ON ALL STORM SEWER LINES ENTERING THE DETENTION PORDS. THE BLOCKS SHALL BE PLACED APPROXIMATELY 10—FT OUTSIDE OF THE HIGHWAITER LEVEL ON EACH STORM LINE. THE BLOCKS SHALL BE 5-FEET LONG & FULLY COMPACTED FROM THE BOTTOM OF THE TRENCH TO THE CROWN OF THE PIPE.
- 10. RIM GRADES IN CURB AND GUTTER ARE EDGE OF PAVEMENT ELEVATIONS.
- 11. ALL CONTINE TRUL THE AND FOR BRANK PRESS DECONTRINSO DERING CONTINUED ON OPERATIONS AND ASSOCIATION OF THE PROPERTY OF STORM SHEET SYSTEM. IF THE CANADA EL ACCOUNTING THE THIN THE PROPERTY OF SHEET SHEET SYSTEM OF THE OF SHARES SET CONDITION. A RECORD OF ALL FEED ILL OF DRAWIN PRESCUENTED SHALE, EXPORT OF THE CONTINUED OF AND THE OWNER OF THE CONTINUED SHALE SHEET S
- 12. ALL FOOTING DRAINS AND DOWNSPOUTS SHALL DISCHARGE TO THE STORM SYSTEM 13. ANY PIPES OR MANHOLES CONTAINING SEDIMENT SHALL BE CLEANED OUT PRIOR TO FINAL

- 2. THE MINIMUM BUILDING SANTARY SEMER SERVICE SIZE SHALL BE SX (6) INCHES IN DIAMETER. THE SERVICE LIGHTAR, SHALL SERVICE LIGHTAR, SHALL SERVICE LIGHTAR, SHALL SERVICE LIGHTARY SHALL SERVICE LINES SHALL BE FULGED WITH A MATER—TRAIT FACTORY MADE PLUE. THE PLUE SHALL BE RACKFILED TO WITHSTAND AIT TEST PRESSURE AND MARKED WITH A 4 X 4 GENES STAKE.
- MANHOLES SHALL BE PRECAST REINFORCED CONCRETE- ASTM C-478 WITH TONGUE AND OROOVE JOINTS SEALED WITH GASKETS CONFORMING TO ASTM C-443 OR BITUMINOUS JOINTING MATERIAL.
- NO MORE THAN TWO PRECAST ADJUSTING RINGS WITH A MAXMUM HEIGHT ADJUSTMENT OF EIGHT INCHES SHALL BE ALLOWED.
- 6. MANHOLES SHALL INCLUDE EXTERNAL CHIMNEY SEALS.
- ALL SANITARY SEWER CONSTRUCTION REQUIRES FOUR (4) INCHES OF CRUSHED GRAVEL OR CRUSHED STONE BEDDING UNDER THE PIPE. BEDDING STONE SHALL EXTEND TO A POINT TWELVE INCHES ABOVE THE TOP OF THE PIPE.
- . THE INSTALLATION OF SANITARY SEWER AND APPURTANCES SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-2321 FOR PVC DISC AND EXTRACE
- B BACKFILLING OF THE TRENCH SHALL BE ACCOMPLISHED BY CAREFUL REPLACEMENT OF THE EXCAVATED MATERIAL AFTER THE PIPE, BEDROIN, AND THE COVEN MATERIAL HAVE BEEN THE FIPE, BEDROIN, AND THE COVEN MATERIAL HAVE BEEN OF A PAYEMENT EDGE, SIDEWAIN, OR CURB AND GUTTER SHALL BE BACKFILLED TO THE TEPS OF THE TRENCH WITH CA-6 MATERIAL.
- 10. "BAND-SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OF DISSIMILAR MATERIALS. ALL CHANGES OF MATERIAL SHALL OCCUR INSIDE A
- . WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHOULD BE USED:
- A.) CIRCULAR SAWCUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
- B.) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL)AND REPLACE WITH A WYE OR TEE THE LIFE OF THE BELLINGS REPLACE WITH A WILL ON THE C.) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SMILAR COUPLINGS TO HOLD IT PIRMLY IN PLANT.
- MANHOLE CASTINGS SHALL BE NEENAH R-1713 WITH A SELF-SEALING LID EMBOSSED WITH "SANITARY SEWER" AND "CITY OF ST. CHARLES".
- 14. ALL SANTARY SEWER PIPES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF WATER AND SEWER MAIN CONSTRUCTION IN ILLINOSA, SA JUNIMUM, AND WITH KANS TESTED SHALL SEVERAL SE
- 15. OVERHEAD SEWERS ARE REQUIRED FOR ALL RESIDENCES.

PAVEMENT, SIDEWALK, AND CURB & GUTTER:

- 1. PAVEMENT THICKNESS SHALL COMPLY WITH THE CITY OF ST. CHARLES REQUIREMENTS.
- 2. EXPANSION JOINTS ARE TO BE CONSTRUCTED AT 40' MAXIMUM SPACING, ALL PC'S AND PT'S OF INTERSECTION RETURNS (RADII) AND ALL OTHER SHORT RADII, AND 4' EACH SIDE OF CURB AND QUITER FRAMES. THO NO. 4 REINDROKING BARS SHALL BE PLACED CONTINUOUSLY BETWEEN EXPANSION. JOINTS. EXPANSION JOINTS SHALL BE DOWELD AND SPACED NO MORE THAN SIXTY PEET ON CENTER.

- PROTECT OF ADMINISTRATION OF THE PROTECTION OF T
- 7. ALL EXISTING PAYEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT TO A NEAT EDGE ALONG LIMITS OF PROPOSED REMOVAL BEFORE REMOVAL OPERATIONS BEGIN.

- THE ENTIRE SITE SHALL BE GRADED SO THAT NO STORM WATER RUNOFF AND LIKEWISE SOIL SEDIMENT CAN FLOW UNRESTRICTED FROM THE SITE.
- ANY STORM WATER DRAINAGE STRUCTURES THAT HAVE THE POTENTIAL TO ACCEPT RUNOF CONTAINING SUSPENDED SOIL PARTICLES SHALL BE SURROUNDED WITH STAKED SILT FENCE

- STOCKPILES OF SOIL AND OTHER EROSCHARLE BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSCION AND SEDMENT CONTROL MEASURES (L.e. PERHETER ISLIT TEXAC). STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
- 5. ALL SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN PAYED OR VEGETATED, AND SHALL ALSO BE CHECKED AT REGULAR INTERVALS TO MAINTAIN THER EFFECTIVENESS IN TERMS OF TOTAL CONTACT WITH THE EARTH BEION. SILT FENCING CAN REMAIN IN PLACE THROUGH THE CONSTRUCTION OF THE HOUSES/BUILDINGS TO SERVE AS EROSION CONTROL FOR THAT CONSTRUCTION.
- SEEDING SHALL BE DONE PER "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", BY THE ILLINO'S ENVIRONMENTAL PROTECTION AGENCY DIVISION OF WATER POLILLING CONTROL LATEST EDITION AND DUPPAGE COUNTY STORM WATER CONTROL ORDINANCE
- E. TO PREVENT SOIL FROM LEXANGE THE SITE ON CONSTRUCTION VEHICLE WHEELS, STABUZED CONSTRUCTION WORK INTRANCES SHALL BE CONSTRUCTED OF GRAVEL. AND SHALL EXTEND AT LEAST 100 FEET INTO THE JOB SITE. THE EXISTING PAVELENT SUMFACES SHALL BE INSPECTED DAILY FOR SOIL DEBRIS AND SHALL BE CLARGED WHEN INCESSARY.
- THE OWNER SHALL HAVE THE DETENTION POND VOLUME VERIFIED BY A LICENSED ENGINEER OR SURVEYOR PRIOR TO THE INSTALLATION OF TOPSOIL AND SEEDING/SOD. THE COST OF SAID VERIFICATION SHALL BE BORNE BY THE OWNER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF ANY EXCESS EXCAVATED MATERIAL.
- DISPOSAL OF DEBRIS EXCAVATION AND PAVEMENT REMOVAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND CONSIDERED AS AN INCIDENTAL EXPENSE.

- EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS MAY REQUIRE EARTH EXCAVATION AND COMPACTED EARTH FILL MATERIAL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS.
- PLACEMENT OF THE EXCAVATED MATERIAL SHALL BE IN AREAS DESIGNATED BY THE OWNER FOR FUTURE USE, WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRICTURE DILL MATERIAL PLANTAGE OF THE PROPERTY.
- COMPACTION OF THE EXCAVATED MATERIAL PLACED IN AREAS NOT REQUIRING STRUCTURAL FILL SHALL BE MODERATE.
- EXCESS MATERIALS, IF NOT UTILIZED AS FILL OR STOCKPILED FOR FUTURE LANDSCAPING, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE CONTENT OF THE PROPERTY.
- 6. PLACEMENT AND COMPACTION OF MATERIALS SHALL CONFORM TO I.D.O.T. SPECIFICATIONS.
- 8. PARMENT FOR THE REMOVAL OF UNSUITABLE MATERAL (EXCLUDING TOPSOL EXCAVATION) SHALL BE BASED ON THE QUANTITIES AS FIELD MEASURED BY THE ENGNEET. THE CONTRACTO MINISTRATE METHERS, AS DIGHT FINES SHALL ROLLING THE COMPLETE RESOLUTION, OF THE MATERIAL PREVIOUS HIM A SUITABLE MATERIAL SOLUTION TO THE SHALL ROLLING SECRETAIN OF THE CONTRACTOR FROM A BORROW SOURCE, AND COMPACTION TO THE RESURED SECRIFICATION OF THE CITY.

- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE DITTIES IS FRAMENY ELECTRIC CONDUST RAW AND CONNECTION OF THE PRODUCT SECURITY OF THE PRODUCT OF THE PRODUC
- 2. THE CONTRACTOR MILL BE RESPONSIBLE FOR INSTALLING A 2" X 2" SPLICE BOX, PROVIDED BY THE CITY, MARK THE UTILITY POLE 4194500 AS PER THE CITY SPECIALATIONS. HIS LOCATION IS A SIGNAL ON THE ROUT ST BOX, AND MILL ROUTED BOY APPROVAL, AS RELL, AN ADDITIONAL 3" DOSCUT MUST BE RESTALLED BY THE CONTRACTOR FROM THE NEW JOYLEY AND ADDITIONAL STATE ADDITIONAL STATE AND ADDITIONAL STATE ADDITIONAL STATE AND ADDITIONAL STATE ADDITIONAL
- THE ST. CHARLES MUNICIPAL ELECTRIC UTILITY IS A "ZERO STANDARD" UTILITY, WHICH MEANS THAT THE DEVELOPER PAYS 100% OF THE COSTS TO GET THE DEVELOPMENT ONTO OUR SYSTEM, WE MILL WORK COLLABORATIVELY TO PROVIDE SERVICE
- THE CITY WILL INSTALL THE NEW TRANSFORMER PAD BUT THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE TRANSFORMER GROUND GRD AND TRANSFORMER PAD GRAVEL BASE AS PER THE CITY'S ELECTRIC SPECIFICATIONS.
- THERE APPEARS TO BE A POSSIBLE CONFLICT BETWEEN THE NEW CONSTRUCTION SITE AND THE EXISTING OVERHEAD ELECTRIC UTILITIES ON GENEVA ROAD. THE PROPOSED ENTRANCE DRIVEWAY MAY REQUIRE RE-LOCATING THE EXISTING STREETLIGHT & SERVICE POLE AT 4154POZ TO THE SOUTH. IF THE CITY STREETIGHT & SERVICE POLE AT 4154-02 TO THE SOUTH. IF THE CITY
 DETERMINES THAT THE EXISTING POLE 4154-02 LIES TO CLOSE TO THE PROPOSED ENTRANCE DRIVEWAY AND IT NEEDS TO
 BE RELOCATED, IT WILL BE RESOLVED BY THE CITY AT THE CUSTOMER'S EXPENSE.
- IF THE CUSTOMER REQUESTS THAT ANY EXISTING OVERHEAD CONDUCTORS ON THE WEST SIDE OF GENEVA ROAD NEED TO BE RELOCATED, IT WILL BE DONE BY THE CITY'S CREWS AT THE CUSTOMER'S EXPENSE.

RAWN BY: HECKED BY: A

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GRANDVIEW CAPITAL, LLC 36W995 RED GATE ROAD ST. CHARLES. IL

GENERAL NOTES PARKSIDE RESERVES ST. CHARLES, IL

SCALE: NONE DATE: DECEMBER, 20 JOB NO: 130209

B. Materialy:

- Drop Connections: Drop connections shall be constructed of Dectile Iron Pipe, Class 52 or PVC SDR 26, per manufactures specifications. All drop manhole piping shall be encased in concrete (refer to standard drop manhole detail).
- 2) Frame & Lid: Frame: Nersonh R-1713 or R-1916C in Floodplain Lid: Neenah R-1713 or R-1916C type "B" with the words "City of St. Charles SANITARY" cast into surface.
- 3) Joints: All joints shall conform to ASTM D-3212 for PVC pipe and ASTM A-746 for ductile iron. Both pipe types shall be joined by means of a flexible gasket. Gaskets for PVC joints shall be in conformance with ASTM A 21.11-79 (AWWA C111).
- 4) Manhole: New sanitary manholes are to be precast reinforced concrete eccentric type with a minimum 48° LD, burst section; Cone sections shall have a 3 inch intergrally cast precast concrete colline. Prep penetrations are to be sealed via the use of a cast in place flexible synthetic robber pipe sheeve which is to be fastened to the pipe with two staintess steel bands. Barrel sections shall be seaded using (2 busty robber with per tongone and grows section. Chimney seals are to be internal type, manufactured by "Cretex" or approved equal by Pathole Works. All now or adjuncted upon shall be maded of test reinforced places, using an approved level of the period o
- 5) <u>Services</u>; Sanitary services shall be constructed for all build-able lots. Services shall be constructed of PVC SDR 26 pipe, six (6) inch minimum diameter, and shall be extended to the rights-of-way limits. All connections to the public main shall be at a manibole or at a "wye" fitting approved by Public Works Division. Once installed all services extending a the City right-of-way limits shall be located utilizing a 2" x 4" wooden stake painted red.
- 6) Sewer Pipe, Materials: Sanitary sewer shall be constructed of the following materials:
 - . Depth less than 20': PVC SDR 26 or Ductile Iron Pipe, Class 52 Denth greater than 20°: Ductile Iron Pipe, Class 52 or PVC SDR 21
 - Force Main: Ductile Iron Pipe, Class 52 or PVC SDR 21
- 7) Thrust Blocks (force main): Thrust blocking shall be a combination pre-cast masonry blocks
- 8) Trench Backfill: All utility and service trenches wihin (3) feet of paved surfaces, or at a distance specified by the Engineer, shall be backfilled with CA-7 (Virgin Crushed Limestone). FA-6 (clean beach sand) material shall be used in all other unpaved locations. Limestone): PV-0 (usean toeach sains) internant sain or eases in an ionter uniqueze on comins. All Backfill internal shall be properly compacted unless otherwise directed by the appropriate Engineering Division, Backfill under crising pavements, where an open cut of the pavement has been approved, shall be Flowable Fluth unterest the IDOT standards of Controlled Low Strength Material (CLSM) Mixture #1. No fly ash will be permitted in this with conference flowing month dentity. mix (refer to City pipe trench detail)

R. Materialy

<u>Casing</u>: Where water main protection is required, encasement shall consist of PVC SDR 26, or steel casing with "Cascade type CCR-STD" spacers or approved equal.

C.B./M.H., Type "D":

C.B., "bechive type":

Curb Inlet C.B.; C.R. "behind the curb type":

Neenah R-3506-A2 Neenah R-3305 Neenah R 1713 (Refer to Lid Dutail) Neenah R 1713 (Refer to Lid Dutail) Neenah R-1713 Neenah R-4340-B

3) Manhole: Manholes shall be reinforced concrete with steps provided 16" on-center. All

- manholes shall have a minimum inside diameter which conform to the following:

 18° storms corner and smaller four (4) foot inside diameter
 - 11" to 48" storm sewer -Larger than 48" storm sewer -
- five (5) foot inside diameter special design required
- 4) Sewer Pipe, Materials: Main line storm sewer shall be constructed of one of the following:
 - a. Pre-cast reinforced concrete pipe, with "O-ring" joints;
 - b. PVC pipe, rigid, (Min. SDR 26, push-on gasket joints);
 - c. All joints shall conform to ANSI 21.11 for ductile iron pipe.
 - d. Ductile iron pipe, (Class 52), minimum;
 - I DOGUE THE PROF. CLOB 25. IMPRICATE AND THE PROF. THE PROF. CLOB 25. IMPRICATE AND THE PROF. THE PROF.
 - f The type of pipe material will be dependent upon the depth and pipe criteria, and as approved by the City of St. Charles.
 - g. For RCP/CSP pipe, lifting holes shall not be allowed on pipes less than 84" in
- All storm sewer smaller than 15-inches in diameter that will be publicly owned and maintained shall be PVC pipe, rigid, (Min. SDR 26, push-on gasket joints).
- Flared End Section: Flared end sections and subsequent riprap material shall be designed
 and specified per the Illinois Department of Transportation "Standard Specification for Road
 and Bridge Construction" latest edition. Flared end sections shall be constructed of a concrete material only or approved by the appropriate Engineering Division.

C: Materials:

1) Corporation Stops:

Compression fittings.
i. Mueller R.3500K.N (1".1 W.3")
ii. Ford

FB1000-4-Q-NL 1" FB1000-6-Q-NL 1 W" FB 1000-7-Q-NL 2"

iii. A. Y. McDonald 4701-BQ (1", 1 55", 2") iv. O Series Brass

2) Curb Stops: a. Compri

ression fittings. Mueller B-25155-N (1"-1 ½"-2")

B-44-444-Q-NL 1" B-44-666-Q-NL 1 1/7 B-44-777-Q-NL 2"

Y. McDonald 6104-Q (1", 1 15", 2") iv. O Series Brass

Buffalo Type:
 For 1" thru 2", Mueller H-10300 Copper service

b. A. Y. McDorald, 5615 1 ¼"

5) Fire Hydrant:

Approved Models: (Refer to standard Fire Hydrant Detail)

i. Mueller Super Centurion 200 ii. Waterous Pacer Model WB-67-250

iii. Clow Medallion

iv. All hydrants shall have

3) Curb Box: (Minnearolis pattern, lid marked "WATER"

nyurans snat nave.

1. 6" nechunical joint connection

2. 5 % valve opening

3. 5" cover over hydrant lateral

4. 6" valve on lateral

"Hydrafinder" standard bydrant locator, installed

Nalve box shall have a valve box stabilizer installed *
 "(Valve box adaptor #2 type A, as made by Adaptor, Inc. or approved

- 6) Fire Hydrant Paint: Safety Red, Sherwin Williams 'Shercryl' 6403-31922, B66R300
- 7) Bolts Placed Underground: All below grade factory installed bolts and fasteners shall be 304-
- Valves: 4" the ough 16" diameter" Right-hand closing Resilient Wedge gate valves, conforming to AWWA Standard C-509 as manufactured by the Clow Corporation, Waterone Company or approved equal. All below grade factory installed bolts and fasteners shall be 304 grade stainless steel

Valve Vault Lid. .. Neenah R-1712, Type B or approved equal

The word "WATER" shall be east into the surface of the lid.
 Vaulist are not required for nyurant maximay valves except when a pressure tap for a hydraft lateral is in a roadway.

10) Watermain Pipes:

" Durril: Iron Class 52, conforming to AWWA Standard C-151,

- Deach: brot Class \$2, conforming to AWA'S Standard C-151.
 Cement Limit, econforming to AWA'S Standard C-154.
 Mechanical or pash-on-joints shall conform to AWA'G C-154.
 Mechanical or pash-on-joints shall conform to AWA'G AWA'

A: Design Requirements:

Generally: Street Systems shall be designed to meet the requirements of the applicable jurisdiction (e.g., City, IDOT, KDOT, DUDOT, and ST Charles Township). Any proposed street dedication shall be in accordance with the following standards.

2) Right-of-way and Pavement Requirements:

	Street Designation	Minimum R.O.W. Width	Minimum Street Width	Minimum Structural Number	Minimum Horizontal Centerline Radius	Minimum Tangent
Resident	ist					
	Estate	66 ft.	26 ft.	2.40	200 ft.	50 ft.
	Local	66 ft.	33 ft.	2.90	200 ft.	50 ft.
	Collector	80 ft.	39 ft.	3.65	200 ft.	100 ft.
	Amerial	100 ft.	52.0.	See Note 1.	500 ft.	200 ft.
Industria	a .					
	Local	66 ft.	40 ft.	3.00	200 B.	50 ft.
	Collector	80 ft.	44 ft.	See Note 1	300 B.	100 ft.
	Arterial	100 ft.	52 ft.	See Note 1	500 ft.	200 ft.

Note 1: Heavily traveled streets in industrial and residential areas shall be considered on an nis and pavement designs shall be based on specific engineering data for each street

Str _{et} Designation		Minimum Grattent		Maximum Gradient	Minimum Soil Support (LB,R.)	Maximum A.D.T.	
Residential							
Estate		0.5%		7.0%	3.0	400	
Local	*	0.5%		7.0%	3.0	1,000	
Collector		0.5%	*	5.0%	3.0	3,500	
Angriel	*	0.5%		5.0%	3.0	10,000	
Industrial							
Local		0.5%		5.0%	3.0	1,000	
Collector		0.5%		5.0%	3.0	3.500	
Arterial		0.5%		5.0%	3.0	10,000	

- 3) Pavement Lengths:
 - Maximum residential block length shall be per title 16.08.030. b. Cul-de-sac shall have a maximum length of as defined in Title 12,30,050(B)4
- 4) Pavements: Pavements shall be designed and constructed so as to obtain a minimum twenty (20) year service life with minimal maintenance after acceptance of the pavement by the City of Sc. Charles. The design engineer should consider such factors as construction and end use traffic loading sub-base IBR, etc., in determining the structural make up of the pavement
 - Proceeding Materials and Minimum thickness: The following two pavement sections are the MINIMUM acceptable to the City. Their use must be supported by relating to reduce the design of the continuous recognition.

- 1. A minimum of 9" Portland Cement Concrete pavement (PCC)
- designed in accordance with IDOT standards. All Portland Cement Concrete shall be treated with a protective cost application.

 Concrete pavements shall be reinforced in accordance with IDOT standards.
- standards.

 3. Concrete povement shall have a minimum 4-inch of sub-base granular material. Type B. Milled asphalt meeting aggregate sub-grade specifications cannot be used for sub-base granular material. Type B.

 4. Portland Cement Concrete shall have minimum 14-day compressive strength pt 3500 psi.

 5. In cases where an additional cross section may be needed for fix sub-
- grade, the use of 9" of aggregate material meeting aggregate sub-grad gradation (i.e. crushed concrete) and a 3" milled asphalt cap may be used. Milled as that or the blending of asphalt millings with a
- used. Milled aephal or the blending of aephalt millings with enabled concrete or other crushed agreepen material in and almered for use in either the sub-grade or sub-base material.

 ii. Fload how the sub-grade or sub-base material.

 Iii. Pleache bose paraceness shall have minimum of four inch (47) Sub-base Gennular Material. Type B. Milled aephalt meeting Agreepse Sub-grade specifications cannot be used for Sub-base granular Material Type B.

 Iii. As Mark Asphalt Base Course, 67

 - Hof-Mix Apphalt Base Course, 6"
 Hof-Mix Apphalt Binder Course, IL-190, NS0, 2 1s"
 Hof-Mix Apphalt Surface Course, Mix "C", NS0, 1 1s"
 Hof-Mix Apphalt Surface Course, Mix "C", NS0, 1 1s"
 In cases where an additional cross section may be needed for bg sabgrade, the use of 9" of Aggregate Material meeting Aggregate Subgrade gradation 9 Iz. crushed concrete and a 3" milled apphalt or the bonding of apphalt milling, with may be used. Milled apphalt or the bonding of apphalt milling, with crushed concrete or other crushed aggregate material is not allowed for use in either the sub-grade or sub-base material.

Note: All asphalt is to be laid by a self-propelled mechanical spreader

Sub-grade; All sub-grade material shall have a minimum Illinois Bearing Ratio (IBR) of 3.0. All unsuitable sub-grade material, including sub-grade material having an IBR

less than 3.0 shall be removed and replaced with a suitable fill material, or the pavement must be designed to compensate for the soil condition. The soil support IBR values selected for use by the engineer shall represent a minimum value for the

- Pavement Design Shall Include; In addition to the information provided in the right
 of-way and pavement requirements, pavement design shall include the following:
 - Public Alleys shall be constructed of reinforced Portland Centent Concrete (PCC) designed in accordance to specifications listed above for rigid
 - pavements.
 ii. Maximum allowable pavement grade = 7% and minimum allowable pavement
 - grade = 0.5%;
 iii. Driveway grades shall have a minimum slope of 1% and a maximum slope of 8%. All driveway grades in excess of 5% shall substantiate that vehicular
 - bottom clearances are met.

 Vertical curves shall be used when the absolute value of the algebraic difference between the intersectine naverments, controlling a controlling and the state of the algebraic difference between the intersectine naverments, controlling and the state of the state Vertical curves shall be used when the absolute value of the algebraic difference between the intersecting powerments' contentiones exceed 1.5%. The minimum length of vertical curves shall be one hundred (100) feet for one and one-half (1.5) percent absolute value of the algebraic difference of grafe. For each additional (1.0) percent, or fraction thereof, of absolute value of the algebraic difference in grade over one and one-half (1.5) percent, a fity-foot increment, or fraction thereof, shall be added to the length of the vertical termination of the rest of the control of the percent and the control of the rest of the control of the rest of the control of the percent and the perc

 - Two minor streets: 25'
 Minor and collector streets: 30'
 - Tow collector streets: 40' 4. Truck routes or zoned manufacturing: 45'
 - 4. Truck routes or round manufacturing: 45°
 Y. Curb and pure shall be a Bel A. Exturier type unless otherwise directed by the City of St. Charles appropriate Engineering Division. Carbs shall be City of St. Charles appropriate Engineering Division. Carbs shall be City City with City Commitmes open year count. 4s it rebut a 1° expansion points shall be placed at 60° intervals, and contraction joints shall be at 15° intervals and all points of curvature. All Boxs, naturary services and stoms greated locations shall be marked on the curb with a "W". "S" or "ST", as the care may be. All Portainal Centern Concrete shall be treated with a protective country.
 - application.
 vii. 26-foot wide bituminous pavement shall have a 4" crown as measured from the flag of the curb. 26-foot wide concrete pavement shall have a 4" crown as measured from the flow line of the gutter.
 - viii. Pavement Patches

Note: All pavement patches shall be replaced in kind with the following revisions:

1. Flexible Pavement

Patches shall have a minimum of 6" Hot-Mix Asphult Base Course, placed over a 4" compacted sub-base of granular material. 2 %" of Hot-Mix Asphall Binder Course, IL-190, NSO, and 1 %" of Hot-Mix Asphall Surface Course, Mix "C", NSO shall be laid subsequent to the Base Course, Close details for pavement patching).

2. Rigid Pavement

Concrete pavements shall be replaced with a minimum of 14 day, 3500 Concrete pavements shall be replaced with a minimum of 14 day, 3500 psi, 9° of Portland Cennett Concrete mis placed over a 4° compacted granular sub-base. The existing pavement shall have 86 eposy-coated dowed bars. 2° in length, stilled at 27° on center, grounded in place. All Portland Cennett Concrete shall be treated with a protective cost application, (See details for pavement patching). PCC shall be a 6.1 bag mix, 5.8% air entrained.

For pavements with a concrete base and asphalt surface, the concrete shall be placed at the same thickness as the existing pavement, but shall be a minimum of 8° thick. 86 Epoxy-coated dowel bars, 2° in length, shall be placed at 24° on center, grounded in place

There shall be a minimum of 2 ½° surface asphalt placed over the concrete, Steel plates shall be placed over all Portland Cement Concrete patches until concrete is cured or a minimum of 3 days. (See details for

ix. Storm inlets and catch basins placed within the roadway surface shall be acsigned to incorporate an under drain system of perforated PVC pipe in accordance with the attached detail.

5) Sidecules: a. Posle' Sidesulks are to be constructed of a minimum of five (5) inch thick by five (5). a. Posle' Sidesulks are to be constructed (PCC) with (5-8%) air entrainment, All Pogland Comert Concrete shall be treated with a protective coat application. b. Pulyic walks that cross driveways are to be thickened to a minimum of (6) inches or the

c. Sidewalks shall be constructed of one (1) foot off the street R.O.W. line unless otherwise

Sidewalks shall be constructed of one (1) foot off the street R.O.W. line unless oth directed by the appropriate Engineering Division; Sidewalks shall be continuous through driveways. All utilitys service locations shall be marked on the curb with a "W", "S" and "ST"; A I" expansion joint shall be provided at 50' intervals, and contraction joints shall be foot intervals. g. Ramping and sloping of sidewalks at intersections shall be in accordance with the specifications and standards as set forth by the Illinois Department of Transportation, the American Disabilities Act (ADA), and the Illinois Disability Code.

Note: All concrete shall be treated with a protective coat application of linseed oil or curing compound equivalent for temperatures over 40 degrees.

HECKED BY:

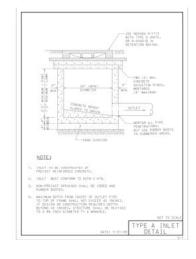
ENGINEERING RESOURCE

FAX (630) 393-2152

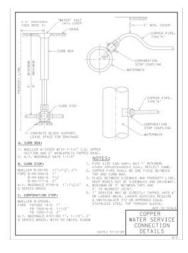
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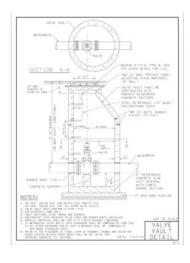
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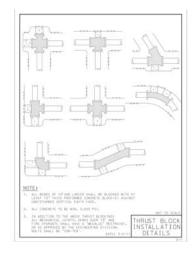
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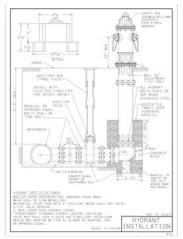


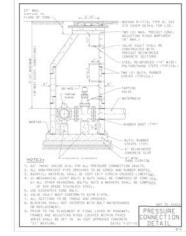


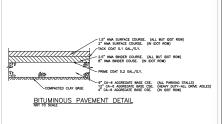


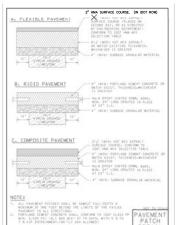












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ENGINEERING RESOURCE ASSOCIATES, INC. CONSULTING ENGINEERS, SCIENCE

 38701 WEST AVENUE, SUITE 150
 10 S. RIVERSIDE PLAZA, SUITE 875
 2416 GALEN DRIVE

 WARRENVILLE, ILLINOIS 60555
 CHICAGO, ILLINOIS 60606
 CHAMPAIGN, ILLINOIS 61821

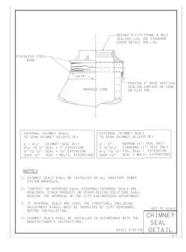
 PHONE (630) 393-3090
 PHONE (12) 347-44099
 PHONE (217) 335-1902

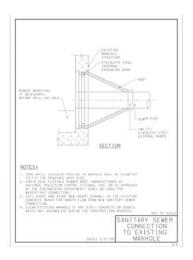
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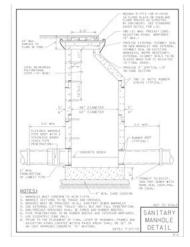
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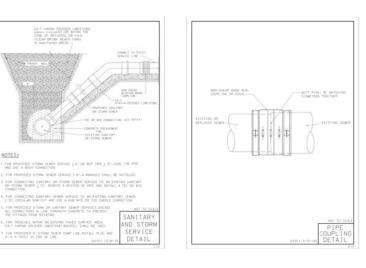
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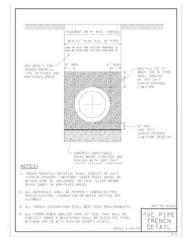
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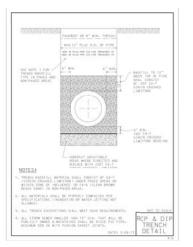


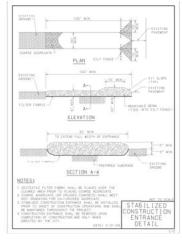


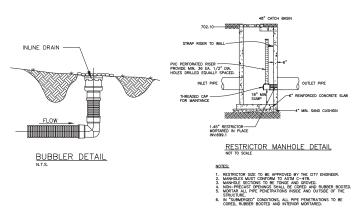












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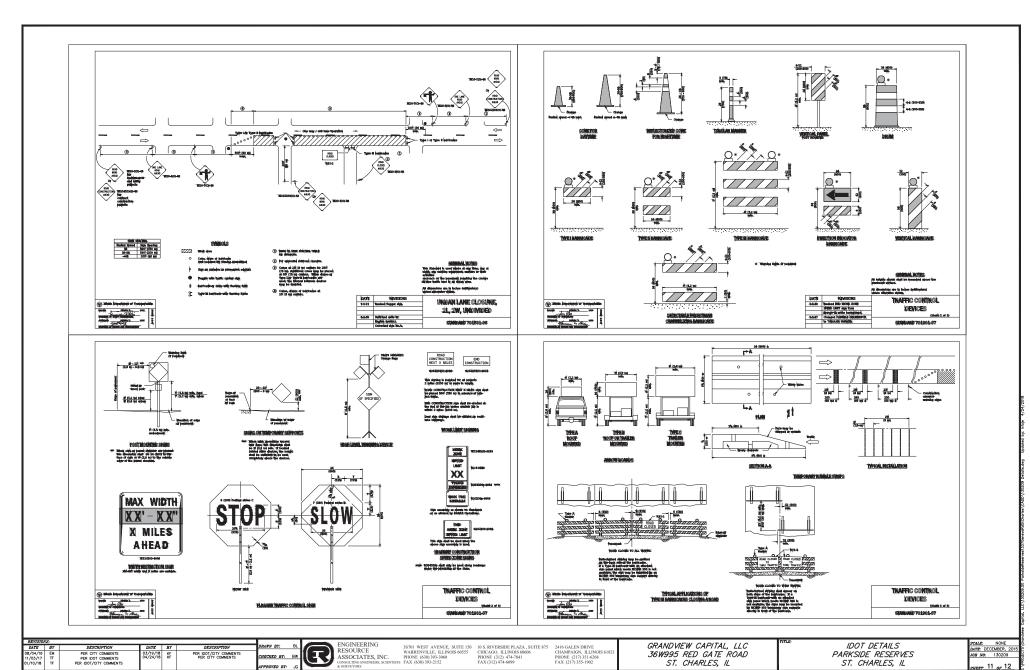
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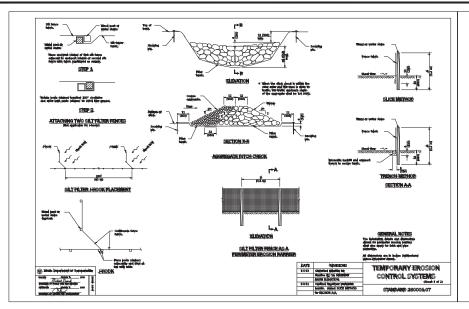
ENGINEERING RESOURCE ASSOCIATES, INC. 35701 WEST AVENUE, SUITE 150 10 S. RIVERSIDE PLAZA, SUITE 875 2416 GALEN DRIVE WARRENVILLE, ILLINOIS 60555 CHICAGO, ILLINOIS 60606 CHAMPAIGN, ILLINOIS 61821 PHONE (630) 393-3060 PHONE (312) 474-7841 PHONE (217) 351-4268 SISTS FAX (630) 393-2152 FAX (312) 474-6999 FAX (312) 7355-3192

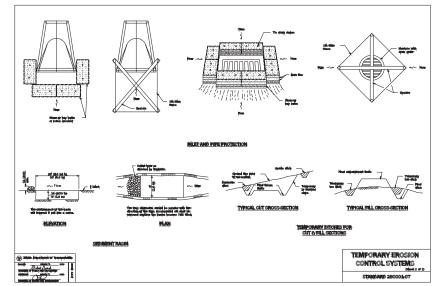
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01/10/18	TF	PER IDOT/CITY COMMENTS	l .						

HECKED BY: BY

ENGINEERING RESOURCE ASSOCIATES, INC. CONSULTING ENGINEERS

GRANDVIEW CAPITAL, LLC 36W995 RED GATE ROAD ST. CHARLES, IL

IDOT DETAILS PARKSIDE RESERVES ST. CHARLES, IL

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