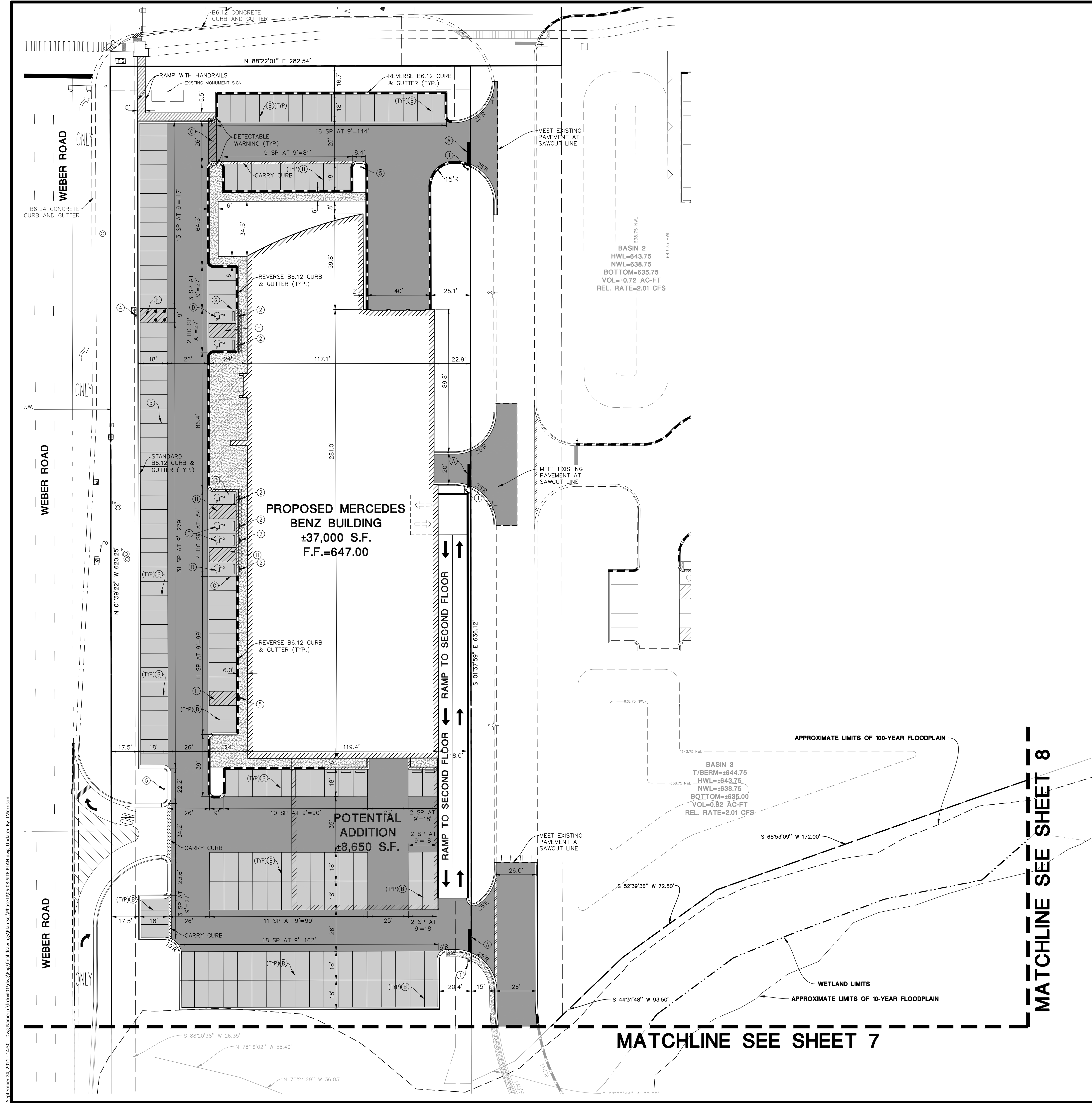


SITE STATISTICS TABLE	
PARCEL AREA	1,017,696 S.F. (23.36 ACRES)
LOT 2 AREA	347,959 S.F. (7.99 ACRES)
LOT 3 AREA	669,738 S.F. (15.38 ACRES)
TOTAL PARKING PROVIDED	1,054 SPACES
LOT 2 STANDARD PARKING PROVIDED	165 SPACES
LOT 2 HANDICAP PARKING PROVIDED	2 SPACES
LOT 3 PARKING PROVIDED	887 SPACES
LOT 2 OPEN SPACE AREA	236,528 S.F. (5.43 ACRES, 67.9%)
LOT 2 IMPERVIOUS AREA	109,430 S.F. (2.50 ACRES, 32.1%)
LOT 3 OPEN SPACE AREA	334,354 S.F. (9.06 ACRES, 58.9%)
LOT 3 IMPERVIOUS AREA	275,184 S.F. (6.32 ACRES, 41.1%)
TOTAL BUILDING AREA	37,000 S.F. (0.85 ACRES)
LOT COVERAGE	38.0%
FLOOR AREA RATIO	0.04



PAVEMENT LEGEND	
	STANDARD DUTY PAVEMENT 1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50 2" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50 8" AGGREGATE BASE COURSE, TYPE B
	HEAVY DUTY PAVEMENT 1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50 3" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50 12" AGGREGATE BASE COURSE, TYPE B
	CONCRETE SIDEWALK 6" PORTLAND CEMENT CONCRETE 4" COMPACTED AGGREGATE BASE COURSE, TYPE B
	PUBLIC SIDEWALK 6" PORTLAND CEMENT CONCRETE 4" COMPACTED AGGREGATE BASE COURSE, TYPE B

SIGN LEGEND	
①	R1-1 STOP SIGN
②	R7-8 HANDICAP PARKING SIGN
③	K-6245 VAN ACCESSIBLE PARKING
④	NO PARKING FIRE HYDRANT
⑤	NO PARKING FIRE LANE

PAVEMENT MARKING LEGEND	
Ⓐ	24" WHITE STOP BAR
Ⓑ	4" WHITE LINE
Ⓒ	PEDESTRIAN CROSSWALK WITH 6" WHITE STRIPING PERPENDICULAR TO DIRECTION OF TRAFFIC 2' O.C. WITH 6" WHITE BORDER
Ⓓ	LETTERS AND SYMBOLS PAVEMENT MARKINGS
Ⓔ	TRAFFIC FLOW DIRECTIONAL ARROWS
Ⓕ	4" WHITE DIAGONAL AT 45° SPACED 2' O.C. W/ 4" WHITE BORDER
Ⓖ	4" YELLOW LINE
Ⓗ	4" YELLOW DIAGONAL AT 45° SPACED 2' O.C. W/ 4" YELLOW BORDER

- SITE DIMENSIONAL AND PAVING NOTES:**
- ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
 - ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
 - ALL CURB RADI SHALL BE 3' MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
 - THREE (3) DRILLED AND GROUTED 18" NO. 5 REINFORCING BARS OR EXPANSION TIE ANCHORS, 5/8" DIAMETER, SHALL BE USED TO TIE THE NEW CURB AND GUTTER TO THE EXISTING CURB AND GUTTER ON EACH SIDE.
 - BUILDING DIMENSIONS AND ADJACENT PARKING HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. BUILDING DIMENSIONS SHOWN SHOULD NOT BE USED FOR CONSTRUCTION LAYOUT OF BUILDING.
 - IMPROVEMENTS ADJACENT TO BUILDING, IF SHOWN, SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS, ETC., HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS AND DETAILS.
 - LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAY. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
 - ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
 - SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
 - THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
 - ALL CROSSWALKS AND SIDEWALK CROSSINGS ARE TO BE STRIPED

SITE STATISTICS TABLE	
PARCEL AREA	1,017,696 S.F. (23.36 ACRES)
LOT 2 AREA	347,959 S.F. (7.99 ACRES)
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TOTAL BUILDING AREA	37,000 S.F. (0.85 ACRES)
LOT COVERAGE	38.0%
FLOOR AREA RATIO	0.04

REVISIONS	
DATE	DESCRIPTION

Manhard CONSULTING
700 Springer Drive, Lombard, IL 60148 ph:630.691.8500 fx: 630.691.8585 manhard.com
Professional Engineer: Robert Manhard, No. 001-00000000
Professional Engineer: Michael Manhard, No. 001-00000000
Construction Manager: Environmental Scientists | Landscaping | Architects | Planners

MERCEDES-BENZ CAR DEALERSHIP
VILLAGE OF ROMEOVILLE, ILLINOIS
SITE DIMENSIONAL AND PAVING PLAN-NORTHWEST

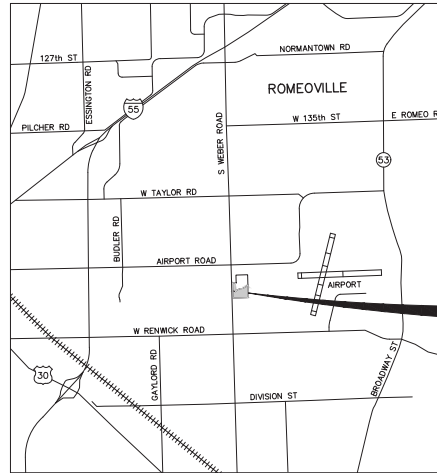
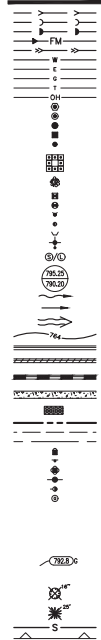
Preliminary Engineering Improvements for MERCEDES-BENZ CAR DEALERSHIP SOUTHEAST OF AIRPORT ROAD AND WEBER ROAD VILLAGE OF ROMEOVILLE, ILLINOIS

STANDARD SYMBOLS

EXISTING



PROPOSED



LOCATION MAP
N.T.S.

DEVELOPER: MERCEDES-BENZ OF ORLAND PARK
ADDRESS: 8430 W. 159TH STREET
CITY: ORLAND PARK, ILLINOIS
PHONE: (708) 460-0400

ARCHITECT: SIMON DESIGN GROUP
ADDRESS: 500 LAKE COOK ROAD, SUITE 350
CITY: DEERFIELD, ILLINOIS 60015
PHONE: (847) 572-3002

PROJECT
LOCATION

INDEX OF SHEETS

SHEET NO. SHEET DESCRIPTION

- 1 TITLE SHEET
- 2 EXISTING CONDITIONS AND DEMOLITION PLAN
- 3 SOIL EROSION AND SEDIMENT CONTROL PLAN
- 4 SOIL EROSION AND SEDIMENT CONTROL PLAN DETAILS
- 5 SITE DIMENSIONAL AND PAVING PLAN
- 6 GRADING PLAN
- 7 UTILITY PLAN
- 8 CONSTRUCTION DETAILS
- 9 CONSTRUCTION DETAILS
- 10 CONSTRUCTION DETAILS
- 11 CONSTRUCTION DETAILS
- 12 CONSTRUCTION DETAILS
- 13 VILLAGE NOTES AND SPECIFICATIONS
- 14 CONSTRUCTION SPECIFICATIONS

NOTE:

THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY MANHARD CONSULTING, LTD. ON FEBRUARY 27, 2020. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS.

REFERENCE BENCHMARK: (NDS PID: DP5467)

STAINLESS STEEL ROD IN SLEEVE LOCATED ON THE NORTH SIDE OF RENWICK ROAD (COUNTY ROAD 36), APPROXIMATELY 1 MILE EAST OF WEBER ROAD. MORE PARTICULARLY LOCATED APPROXIMATELY 32.5 FEET NORTH OF THE NORTH EDGE OF PAVEMENT OF RENWICK ROAD, 28.5 FEET WEST OF A FIRE HYDRANT AND APPROXIMATELY 7 FEET SOUTH OF A CHAIN-LINK FENCE.

ELEVATION=661.65 DATUM=NAVD85-GEOD 18

SITE BENCHMARK #1:
SOUTHWEST BOLT ON HYDRANT LOCATED APPROXIMATELY 490 FEET EAST OF THE CENTERLINE OF WEBER ROAD AND APPROXIMATELY 795 FEET SOUTH OF THE CENTERLINE OF AIRPORT ROAD.

ELEVATION=647.70 DATUM=NAVD85-GEOD 18

SITE BENCHMARK #2:
SOUTHWEST BOLT ON HYDRANT LOCATED APPROXIMATELY 1005 FEET EAST OF THE CENTERLINE OF WEBER ROAD AND APPROXIMATELY 795 FEET SOUTH OF THE CENTERLINE OF AIRPORT ROAD.

ELEVATION=651.77 DATUM=NAVD85-GEOD 18

SITE BENCHMARK #3:
SOUTHEAST BOLT ON HYDRANT LOCATED APPROXIMATELY 290 FEET EAST OF THE CENTERLINE OF WEBER ROAD AND APPROXIMATELY 1400 FEET SOUTH OF THE CENTERLINE OF AIRPORT ROAD.

ELEVATION=644.20 DATUM=NAVD85-GEOD 18

SITE BENCHMARK #4:
CUT SQUARE IN SOUTHWEST CORNER OF CONCRETE HEADWALL, LOCATED APPROXIMATELY 45 FEET EAST OF THE CENTERLINE OF WEBER ROAD AND APPROXIMATELY 2240 FEET SOUTH OF THE CENTERLINE OF AIRPORT ROAD.

ELEVATION=635.64 DATUM=NAVD85-GEOD 18

DRAINAGE CERTIFICATION:

I, JIM FRAYN, HEREBY CERTIFY THAT ADEQUATE STORM WATER STORAGE AND DRAINAGE CAPACITY HAS BEEN PROVIDED FOR THIS DEVELOPMENT, SUCH THAT SURFACE WATER FROM THE DEVELOPMENT WILL NOT BE DIVERTED ONTO AND CAUSE DAMAGE TO ADJACENT PROPERTY FOR STORMS UP TO AND INCLUDING THE ONE HUNDRED (100) YEAR EVENT, AND THAT THE DESIGN PLANS ARE IN COMPLIANCE WITH ALL APPLICABLE STATE, COUNTY, AND VILLAGE ORDINANCES.

JAMES FRAYN, P.E.



Manhard Consulting LTD
Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

UTILITY CONTACTS		
ELECTRIC: COMED 2 LINCOLN CENTER DAN BROOK TERRACE, IL 60181 (800) 334-7661 CONTACT:	WATER: VILLAGE OF ROMEOVILLE PUBLIC WORKS 615 ANDERSON DRIVE ROMEOVILLE, IL 60446 (815) 886-1870 CONTACT: ERIC BJORK TELEPHONE: AT&T 1844 FERRY ROAD NAPERVILLE, IL 60563 (888) 642-6748 CONTACT:	SEWER: VILLAGE OF ROMEOVILLE PUBLIC WORKS 615 ANDERSON DRIVE ROMEOVILLE, IL 60446 (815) 886-1870 CONTACT: ERIC BJORK VILLAGE CONTACT: VILLAGE OF ROMEOVILLE 615 ANDERSON DRIVE ROMEOVILLE, IL 60446 (815) 886-1870 CONTACT: MR. JONATHAN A. ZABROCKI, P.E.

ABBREVIATIONS	
ADJ. ADJUST	F/L. FLOW LINE
AGG. AGGREGATE	FM. FORCE MAIN
ARCH. ARCHITECT	G. GRADE AT FOUNDATION
B.A.M. BITUMINOUS AGGREGATE MIXTURE	G/W. GUY WIRE
B-B. BACK TO BACK	HDWL. HEADWALL
B/C. BACK OF CURB	HWL. HIGH WATER LEVEL
B/P. BOTTOM OF PIPE	HYD. HYDRANT
B/W. BACK OF WALK	INL. INLET
B-BOX. BUFFALO BOX	INV. INVERT
BT. BITUMINOUS	IR. IRON PIPE
BM. BENCHMARK	LT. LEFT
B.O. BY OTHERS	MAX. MAXIMUM
C.E. COMMERCIAL ENTRANCE	MB. MAILBOX
CB. CATCH BASIN	M/E. MEET EXISTING
CH. CENTERLINE	MIN. MINIMUM
CMP. CORRUGATED METAL PIPE	NML. NORMAL WATER LEVEL
CONC. CONCRETE	P.C. POINT OF CURVATURE
CY. CURB YARD	P/CC. POINT OF COMPOUND CURVE
D. DITCH	P/G. PROFILE GRADE LINE
DIA. DIAMETER	P/I. POINT OF INTERSECTION
DP. DUCTILE IRON PIPE	R. RIGHT-OF-WAY
DWM. DOWNSPUT	RM. REMOVED
DS. DRAIN TILE	REV. REVERSE
E-E. EDGE TO EDGE	R/L. RIGHT
ELEV. ELEVATION	SAN. SANITARY
E/P. EDGE OF PAVEMENT	S.F. SQUARE FOOT
EX. EXISTING	SHO. SHOULDER
F-E. FIELD ENTRANCE	SL. STREET LIGHT
F-F. FACE TO FACE	SM. SANITARY MANHOLE
FF. FINISHED FLOOR	ST. STATION
FS. FLARED END SECTION	STD. STANDARD

MANHARD CONSULTING, LTD. IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.

Manhard CONSULTING LTD.

200 Eastman Drive, Suite 100, Naperville, IL 60563
Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

PROJECT NO. 2020-01

SCALE: AS SHOWN

DRAWN BY: JCF

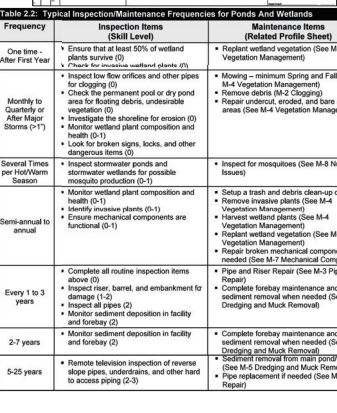
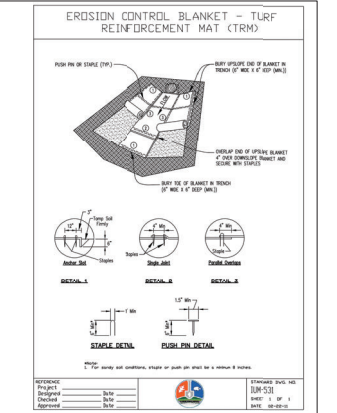
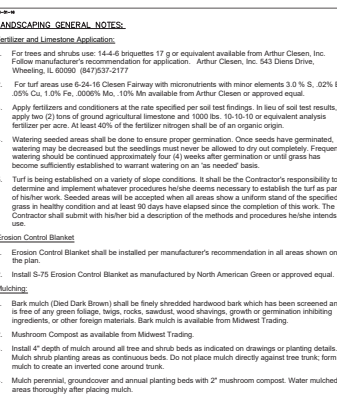
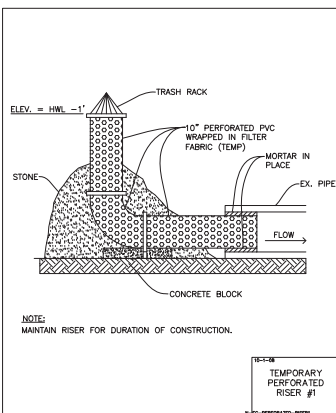
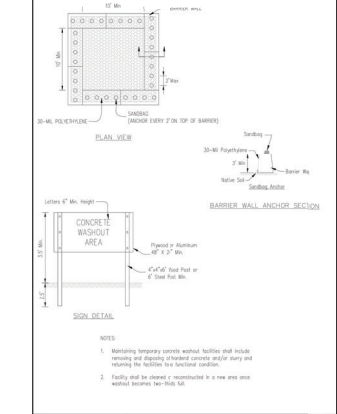
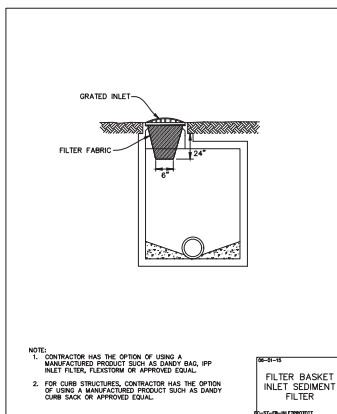
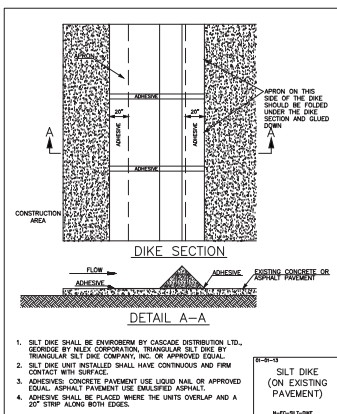
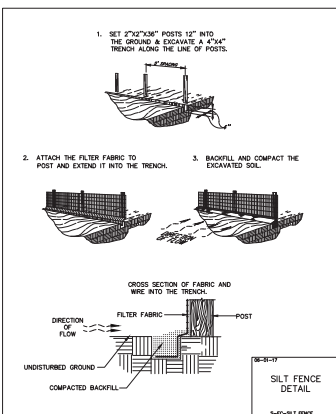
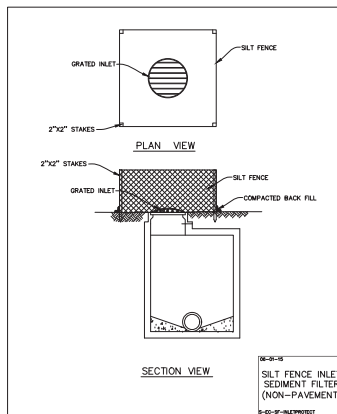
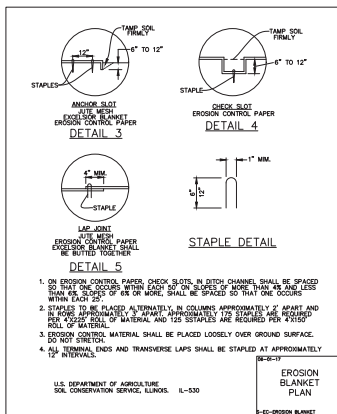
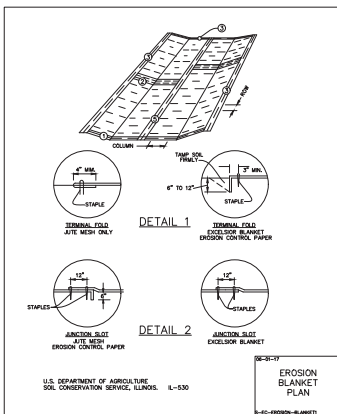
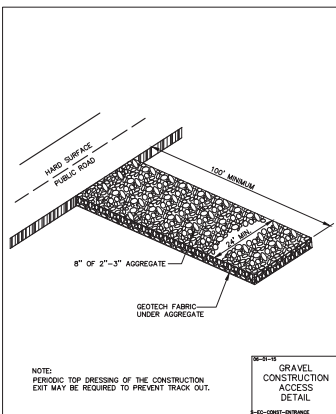
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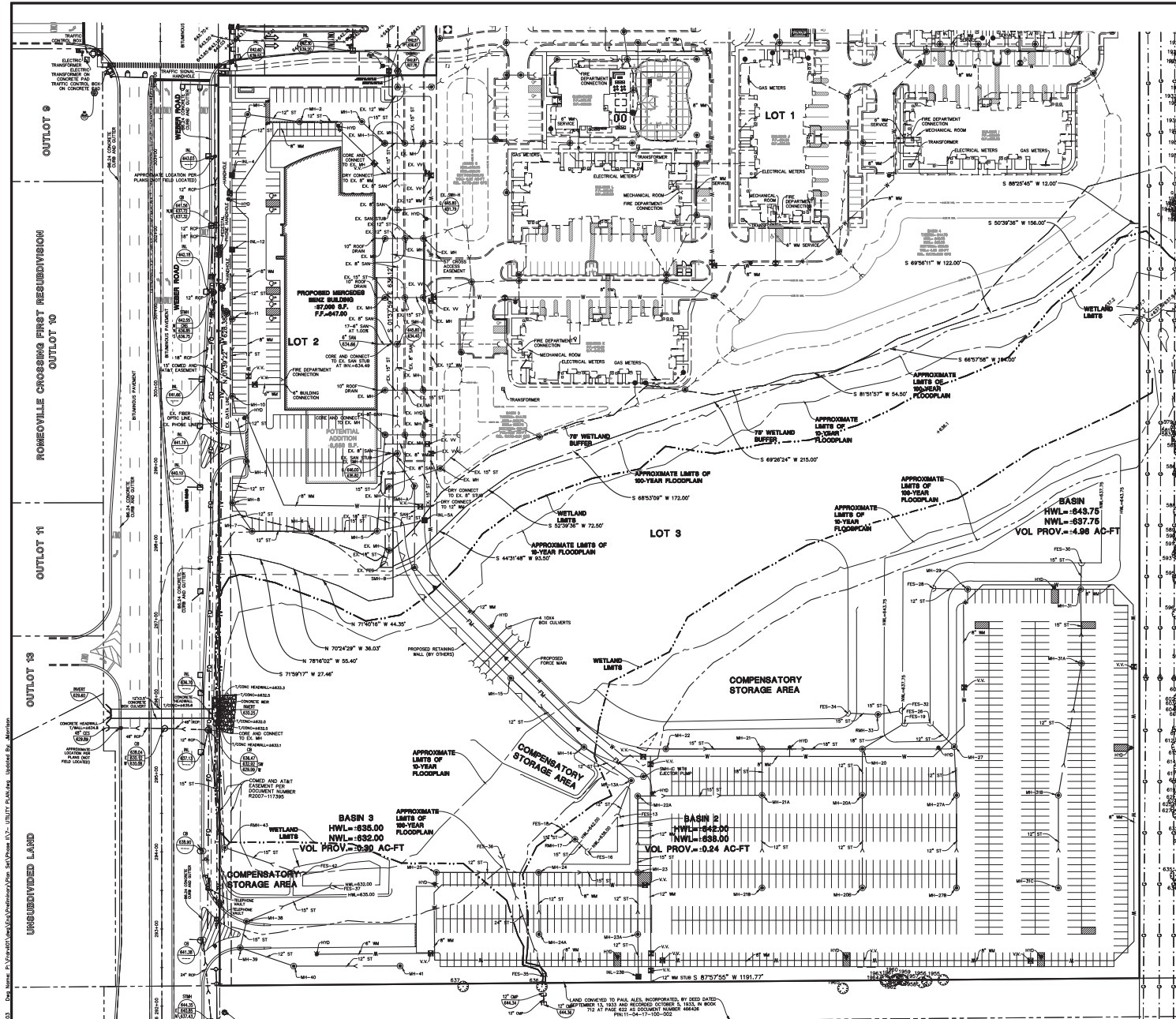
SHEET 1 OF 14

PROJ. RVL01



- SOIL EROSION AND SEDIMENTATION CONTROL GENERAL NOTES:**
- ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "ILLINOIS URBAN MANUAL".
 - MAINTENANCE AND REPLACEMENT OF EROSION CONTROL ITEMS, WHEN DIRECTED BY THE OWNER, SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
 - THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF SAID MEASURES SHALL BE MADE IMMEDIATELY.
 - INSTALL ALL PERIMETER SILT FENCING PRIOR TO ANY CLEARING OR GRADING. ON-SITE SEDIMENT CONTROL MEASURES AS SHOWN AND SPECIFIED BY THIS EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE CONSTRUCTED AND FUNCTIONAL PRIOR TO INITIATING CLEARING, GRADING, STRIPPING, EXCAVATION OR FILLING ACTIVITIES ON THE SITE.
 - STORM WATERS FALLING ON THE ENTIRE SITE SHALL BE DIVERTED INTO THE DETENTION BASINS, PRIOR TO BEGINNING MASS EXCAVATION. THE CONTRACTOR SHALL CONSTRUCT DITCHES, DIVERS, SEDIMENTATION TRAPS AND SILTATION CONTROL MEASURES AS REQUIRED TO INTERCEPT SURFACE WATERS BEFORE THEY FLOW ONTO ADJACENT PROPERTY AND CONVEY THEM TO THE DETENTION BASINS.
 - STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 7 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA.
 - TEMPORARY SEED MIXTURE SHALL BE APPLIED AT 64 LBS./ACRE.
 - INLET PROTECTION SHALL BE INSTALLED UNDER THE GRATING OF EACH DRAINAGE STRUCTURE.
 - STABILIZATION OF TOPSOIL STOCKPILES SHALL BE INITIATED IMMEDIATELY UPON COMPLETION UNLESS THEY WILL BE DISTURBED WITHIN FOURTEEN (14) CALENDAR DAYS. STABILIZATION OF STOCKPILES MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. ALL SOIL STORAGE PILES SHALL BE PROTECTED FROM EROSION WITH SILT FENCE ON THE DOWN SLOPE SIDE OF THE PILES.
 - DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS. DEWATERING DIRECTLY INTO FLOWING STORMWATER STRUCTURES IS PROHIBITED. DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.
 - WATER PUMPED DURING CONSTRUCTION OPERATION SHALL BE FILTERED.
 - DUST CONTROL SHALL BE PERFORMED ON A DAILY BASIS USING WATER DISPERSED FROM A TRUCK MOUNTED TANK WITH STANDARD DISCHARGE HEADER TO PROVIDE A UNIFORM RATE OF APPLICATION. CONTRACTOR TO COORDINATE DUST CONTROL REQUIREMENTS WITH VILLAGE ROAD FOR MOBILIZATION.
 - TEMPORARY GRAVEL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED, ADJUSTED OR RELOCATED AS NECESSARY TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADWAYS. ANY SEDIMENT REACHING A PUBLIC ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING BEFORE THE END OF EACH WORKING DAY.
 - ANY LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF ANY GUTTER OR DRAINAGE STRUCTURE DURING CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.
 - OVERLAND FLOW SHALL BE DIRECTED TO THE DETENTION BASINS PRIOR TO LEAVING THE SITE.
 - THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE CLIENT OR OTHER JURISDICTIONAL GOVERNMENTAL ENTITIES.
 - ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL JURISDICTIONAL GOVERNMENTAL AGENCY REQUIREMENTS WITHIN 30 DAYS OF FINAL STABILIZATION.
 - ALL ACCESS TO AND FROM THE CONSTRUCTION SITE IS TO BE RESTRICTED TO THE CONSTRUCTION ENTRANCE. ANY DAMAGE DONE TO EXISTING UTILITIES, ACCESS ROADS, CURBS, OR OTHER STRUCTURES MUST BE REPAIRED BY THE DEVELOPER.
 - ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE EFFECTIVE PERFORMANCE OF THEIR INTENDED FUNCTION.
 - MAJOR AMENDMENTS OF THE SITE DEVELOPMENT OR EROSION AND SEDIMENTATION CONTROL PLANS SHALL BE SUBMITTED TO THE DEPARTMENT OF COMMUNITY DEVELOPMENT TO BE APPROVED IN THE SAME MANNER AS THE ORIGINAL PLANS.
 - ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING (NOT FLUSHING) BEFORE THE END OF EACH WORKDAY AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL.
 - THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE, TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.
 - ALL STORM SEWER FRAMES AND GRATES/LIDS SHALL BE MARKED WITH "DUMP NO WASTE" AND "DRAINS TO CREEK".
 - A NOTICE OF INTENT (NOI) MUST BE SUBMITTED TO THE MPDS PERMITTING AUTHORITY AND POSTMARKED AT LEAST 30 DAYS BEFORE COMMENCING ANY WORK ON-SITE FOR ALL CONSTRUCTION SITES OVER ONE ACRE, INCLUDED IN THE NOI SHALL BE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), WHICH INCLUDES THE APPROPRIATE BMP'S TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE.
 - AN INCIDENT OF NON-COMPLIANCE (INC) MUST BE COMPLETED AND SUBMITTED TO THE EPA IF, AT ANY TIME, AN EROSION OR SEDIMENT CONTROL DEVICE FAILS.
 - A NOTICE OF TERMINATION (NOT) MUST BE COMPLETED AND SUBMITTED TO THE EPA WHEN ALL PERMANENT EROSION CONTROL MEASURES ARE IN PLACE WITH A 70% ESTABLISHMENT OF VEGETATION.
 - SEE "SEASONS AT ROMKOVILLE STORMWATER POLLUTION PREVENTION PLAN (SWPPP)" BY MANHARD CONSULTING FOR MAINTENANCE PLAN.
 - BIODEGRADABLE EROSION CONTROL MEASURES SHALL BE USED IN LIEU OF PHOTO DEGRADABLE CONTRACTOR SHALL USE CUREX (NAG 575) OR APPROVED EQUAL.

Table 2.1 Inspection Skill Level Descriptions	
Skill Level	Description
0	No special skills or prior experience required, but some basic training via manual, video, or other materials is necessary.
1	Inspector, maintenance crew member or citizen with prior experience with ponds and wetlands
2	Inspector or contractor with extensive experience with pond and wetland maintenance issues
3	Professional engineering consultant



UTILITY NOTES:

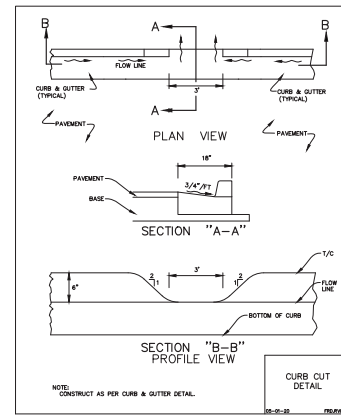
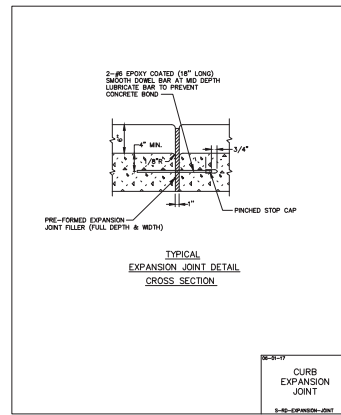
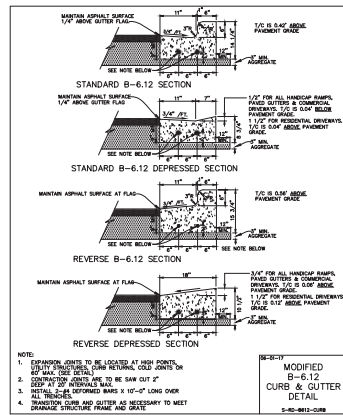
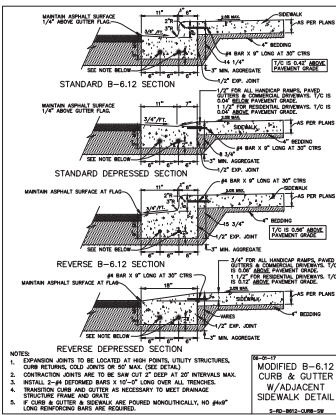
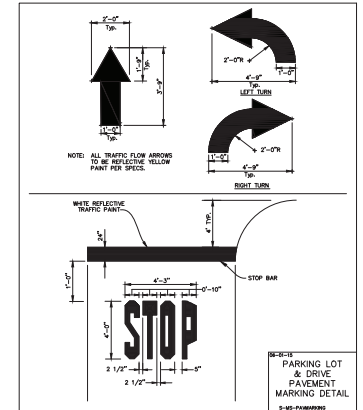
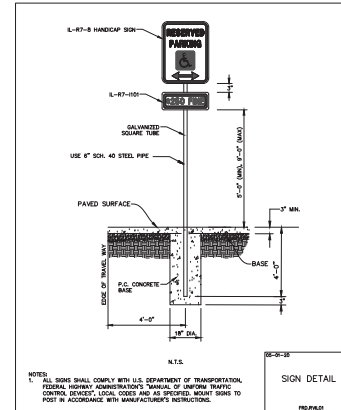
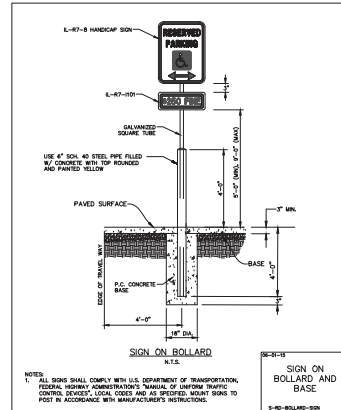
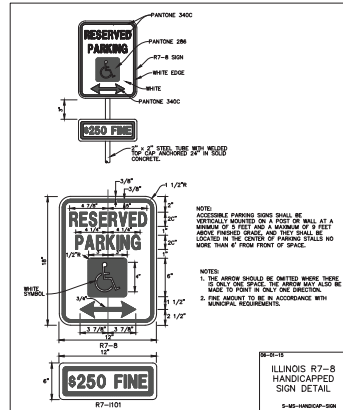
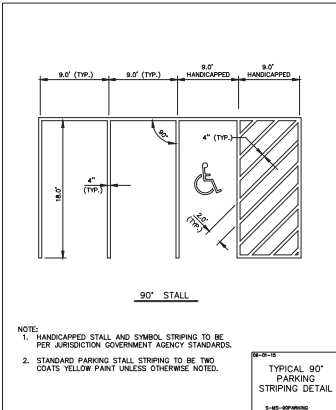
1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL CONTACT I.U.L.L.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
3. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
4. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
5. AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
6. ALL WATER MAIN SHALL BE 6" BELOW FINISHED GRADE TO TOP OF MAINS UNLESS NOTED OTHERWISE.
7. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
8. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
9. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
10. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
11. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
12. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
13. ALL D.I. WATERMAIN FITTINGS SHALL BE WRAPPED.

MERCEDES-BENZ CAR DEALERSHIP
VILLAGE OF ROMEOVILLE, ILLINOIS
UTILITY PLAN

DATE: 06-07-21
DRAWN BY: LES
CHECKED BY: JON
SHEET
7 OF 14
FRD.VL01

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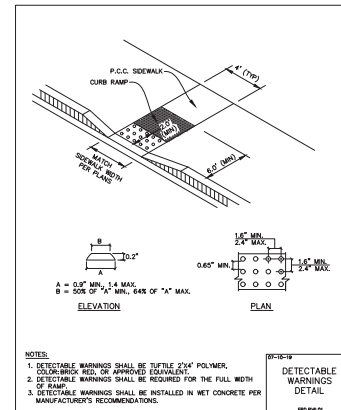
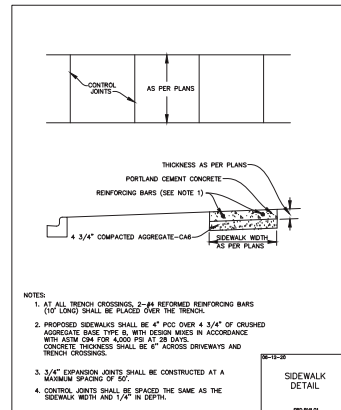
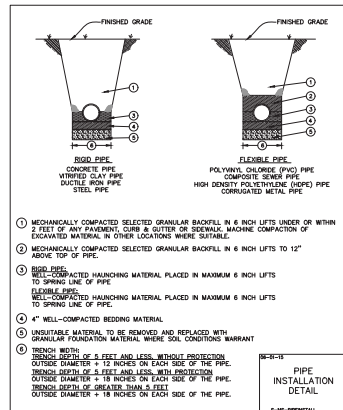
Manhard
CONSULTING LTD.
1000 West Lake Street, Suite 200
Romeoville, IL 60446
TEL: 815.461.1111
WWW.MANHARDCONSULTING.COM



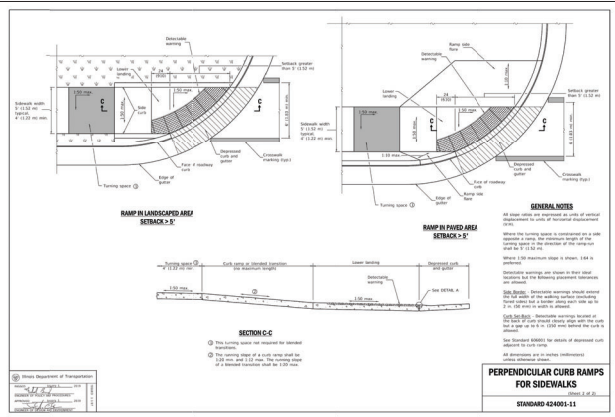
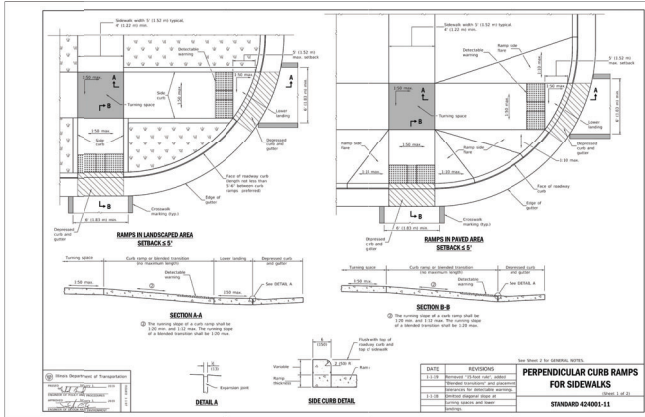
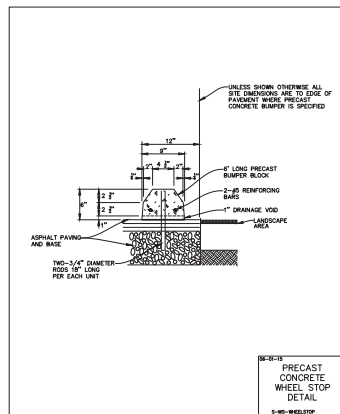
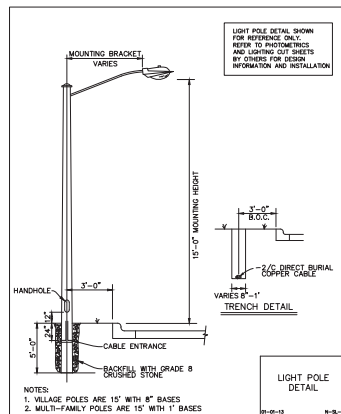
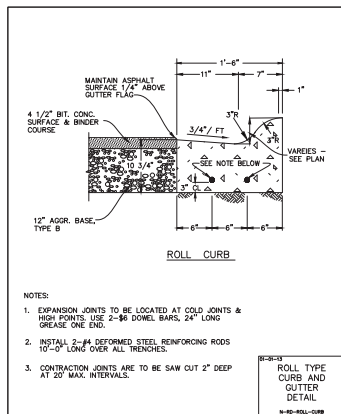
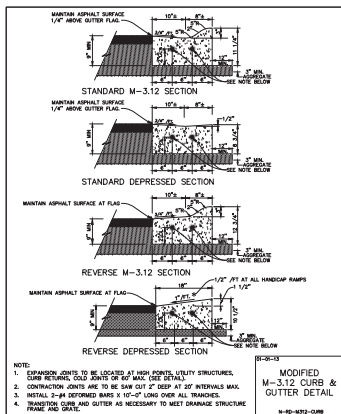
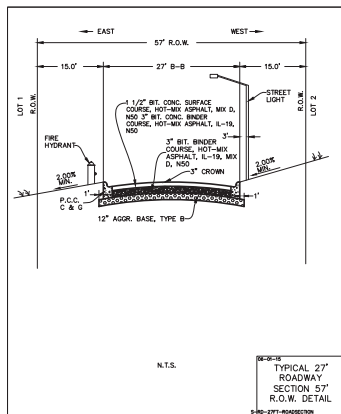
MATERIAL STANDARDS		
ITEM	BRAND	PRODUCT
PIPE (HORIZONTAL) (TRAFFIC SIGNS)	EAST JORDAN	WATER MASTER (SPECIAL)
GATE VALVES (TRAFFIC SIGNS)	EAST JORDAN OR AMERICAN FLOW CONTROL	SEE SPECIFICATIONS
VALVE BOXES (TRAFFIC SIGNS)	EAST JORDAN	SCREW ADJUSTING TUB/CONCRETE TYPE
MANHOLES/CATCHBASINS/INLETS IN OPEN AREAS AND PAVEMENT (SEE SEALING LID WITH PROPER UTILITY MARKINGS)	EAST JORDAN	CLOSED LID
MANHOLES/CATCHBASINS/INLETS IN COMBINATION WITH BOLL/MOUNTABLE CURB (SEE SPECIFICATIONS)	EAST JORDAN	SEE SPECIFICATIONS
WATER SERVICE SADDLES (SEE SERVICE SADDLES)	CASCADE	FOR 3/4"
STORM STRUCTURE	SEE SPECIFICATIONS	SEE SPECIFICATIONS

MATERIAL STANDARDS

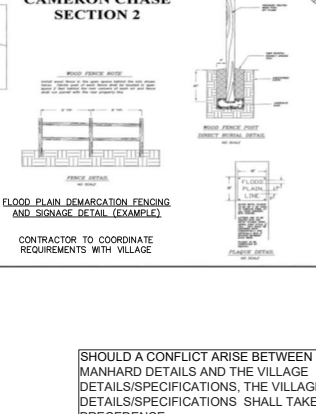
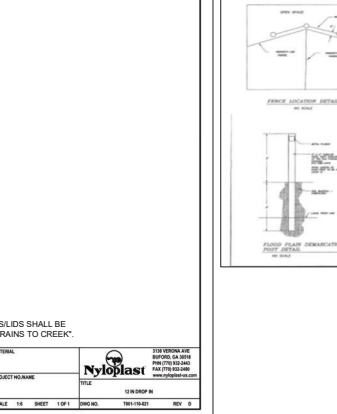
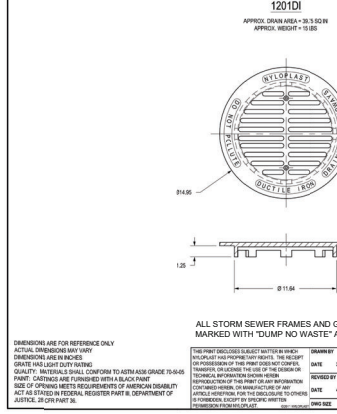
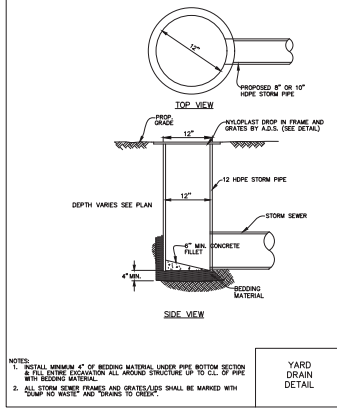
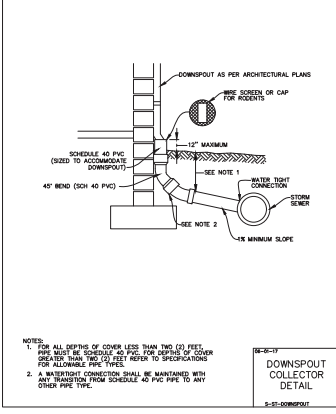
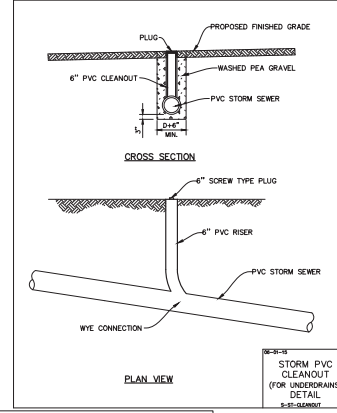
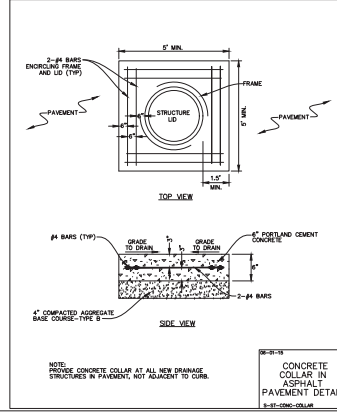
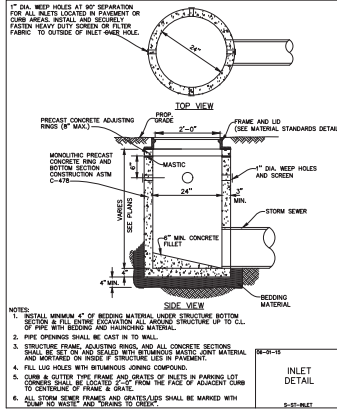
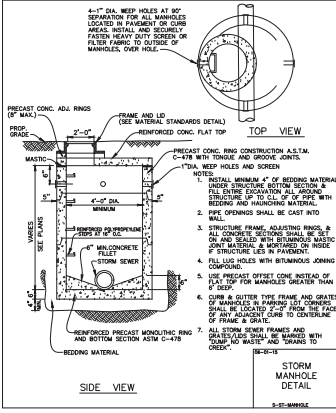
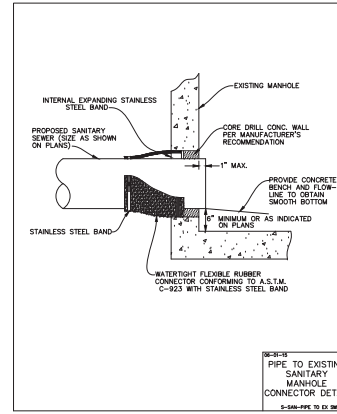
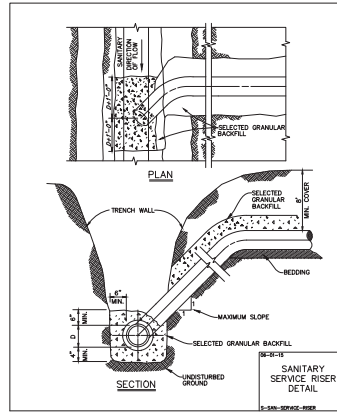
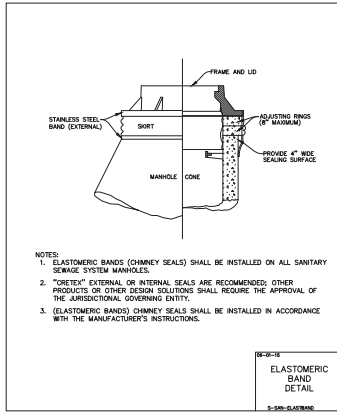
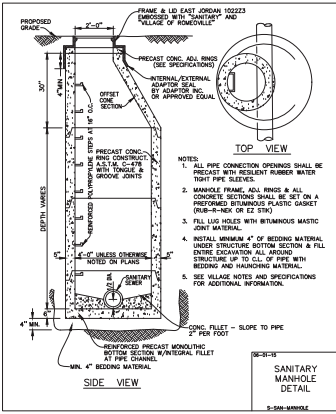
S-90-MATERIAL-STD



SHOULD A CONFLICT ARISE BETWEEN MANHARD DETAILS AND THE VILLAGE DETAILS/SPECIFICATIONS, THE VILLAGE DETAILS/SPECIFICATIONS SHALL TAKE PRECEDENCE.



SHOULD A CONFLICT ARISE BETWEEN MANHARD DETAILS AND THE VILLAGE DETAILS/SPECIFICATIONS, THE VILLAGE DETAILS/SPECIFICATIONS SHALL TAKE PRECEDENCE.



Technical drawing of a RAP (Rainfall Absorption Panel) showing top and side views.

Top View:

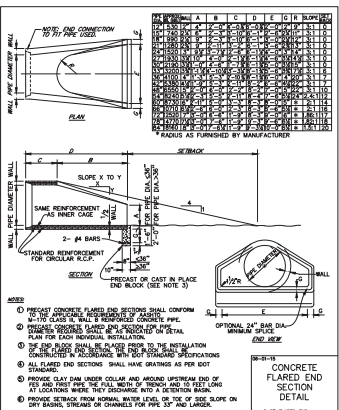
- Overall shape: A trapezoidal panel with a central rectangular section and a flared end section.
- Dimensions:
 - Central section width: 4 D
 - Flared end section width: 3 D
 - Total height: 4 D
- Labels:
 - Top center: RAP IN ACCORDANCE WITH DOT STANDARD SPECIFICATIONS
 - Left side: FLARED END SECTION
 - Bottom left: STORM SEWER
 - Bottom center: TOP VIEW

Side View:

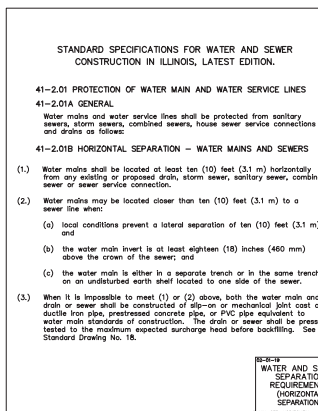
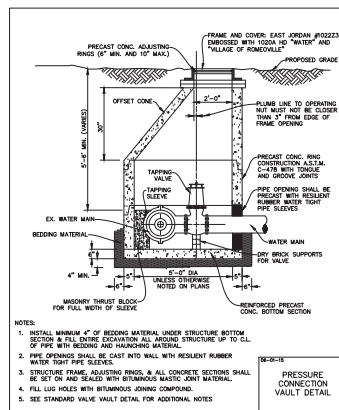
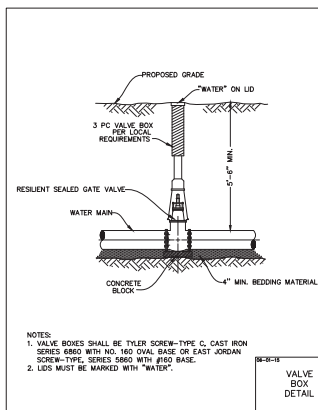
- Overall shape: A cross-section of the panel showing a 45-degree flared end section and a filter fabric layer.
- Dimensions:
 - Flared end section angle: 45°
 - Filter fabric layer thickness: 1/4"
- Labels:
 - Top left: STORM SEWER
 - Top center: FLARED END SECTION
 - Center: RAP RAP APRON
 - Bottom left: END BLOCK
 - Bottom center: FILTER FABRIC FOR USE WITH RAP IN ACCORDANCE WITH DOT STANDARD SPECIFICATIONS
 - Bottom right: SIDE VIEW

Legend:

- RAP RAP DETAIL (DISCHARGE TO DITCH)



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**STANDARD SPECIFICATIONS FOR WATER AND SEWER
CONSTRUCTION IN ILLINOIS, LATEST EDITION.**

41-2.02C VERTICAL SEPARATION – WATER MAINS AND SEWERS

(1.) A water main shall be separated from a sewer so that its invert is a minimum of eighteen (18) inches above the sewer. The separation shall be by a trench or sewer whenever the water mains cross storm sewers, sanitary sewers, or sewer service connections. The vertical separation shall be sufficient to allow for that portion of the water main located within ten (10') feet (3.1m) horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equipped from the sewer or drain.

(2.) Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, prestressed concrete pipe, or PVC pipe equivalent to water main standards of construction when:

(a) It is impossible to obtain the proper vertical separation as described in (1) above; or

(b) the water main passes under a sewer or drain.

(3.) A vertical separation of eighteen (18) inches (460 mm) between the invert of the sewer or drain and the crown of the water main shall be maintained to prevent surcharging of the sewer under a water main. The sewer drain lines to be served by settling and storage tanks shall be separated from the storm sewer by a vertical separation of at least 18 inches (460 mm). Floor or grade shall be maintained at the bottom of the trench.

(4.) Construction of water main quality pipe shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer or drain is at least ten (10') feet (3.1 m). See Standard Drawings No. 19-23.

NEW-EN-
**WATER AND SEWER
CONSTRUCTION
REQUIREMENTS
VERTICAL SEPARATION**

[illegible]

MEGA-BONDI® Remote Coating System
Coating for remote-diversion shell areas of the following:

All engine components and related parts will be processed through a phosphate wash, rinse and drying assembly prior to bonding application. The coating shall consist of a minimum of five coats of liquid formulative epoxy coating with heat cure to follow each coat.

All coating bowls shall be either primed with a phosphate wash, rinse and cooler before drying. The coating shall be electrochemically applied and heat cured. The coating shall be a polyurethane based product to provide corrosion, impact and UV resistance.

The coating system shall be MEGA-BONDI® by EBA Inc. Inc. or approved equal. Requests for approved equal must submit coating material and process details for review prior to bid.

For more information regarding MEGA-BONDI, refer to the MEGA-BONDI brochure or visit www.ebausa.com

VERTICAL FITTING

PIPE SIZE	12"	18"	24"
W	12	18	24
H	12	18	24
D	12	18	24

HORIZONTAL FITTING

PIPE SIZE	12"	18"	24"
W	12	18	24
H	12	18	24
D	12	18	24

TEE FITTING

PIPE SIZE	12"	18"	24"
W	12	18	24
H	12	18	24
D	12	18	24

NOTE: SEE LIST IN THE FITTING SCHEDULE FOR WEIGHTS. DIMENSIONS SHOWN ARE IN ACCORDANCE WITH THE LATEST REQUIREMENTS. DIMENSIONS ARE APPROXIMATE.

MERCEDES BENZ CAR DEALERSHIP RESTRAINED JOINT LENGTH CALCULATIONS														
Site Name	Fitting Type	Pipe Material	Soil Type	Safety Factor	Trench Type	Depth of Bury	Test Pressure	Nominal Size	Bend Angle	Branch Size	Length Along Run	Lowside Depth	Restraint Length	Restraint Length 2
12" to 12" Tee	Tee	Poly Wrapped Ductile	CL	1.5	5	5.5	150	12		12	13		1 ft.	
12" to 8" Tee	Tee	Poly Wrapped Ductile	CL	1.5	5	5.5	150	12		8	20		1 ft.	
8" to 8" Tee	Tee	Poly Wrapped Ductile	CL	1.5	5	5.5	150	8		8	20		1 ft.	
8"-45 Bend	Horizontal Bend	Poly Wrapped Ductile	CL	1.5	5	5.5	150	8	45				7 ft.	
8"-22.5 Bend	Horizontal Bend	Poly Wrapped Ductile	CL	1.5	5	5.5	150	8	22.5				4 ft.	
8"-11.25 Bend	Horizontal Bend	Poly Wrapped Ductile	CL	1.5	5	5.5	150	8	11.25				2 ft.	
8"-45 Lowering	Vertical Offset	Poly Wrapped Ductile	CL	1.5	5	5.5	150	8	45			10	28 ft.	5 ft.

SHOULD A CONFLICT ARISE BETWEEN
MANHARD DETAILS AND THE VILLAGE
DETAILS/SPECIFICATIONS, THE VILLAGE
DETAILS/SPECIFICATIONS SHALL TAKE
PRECEDENCE.

