

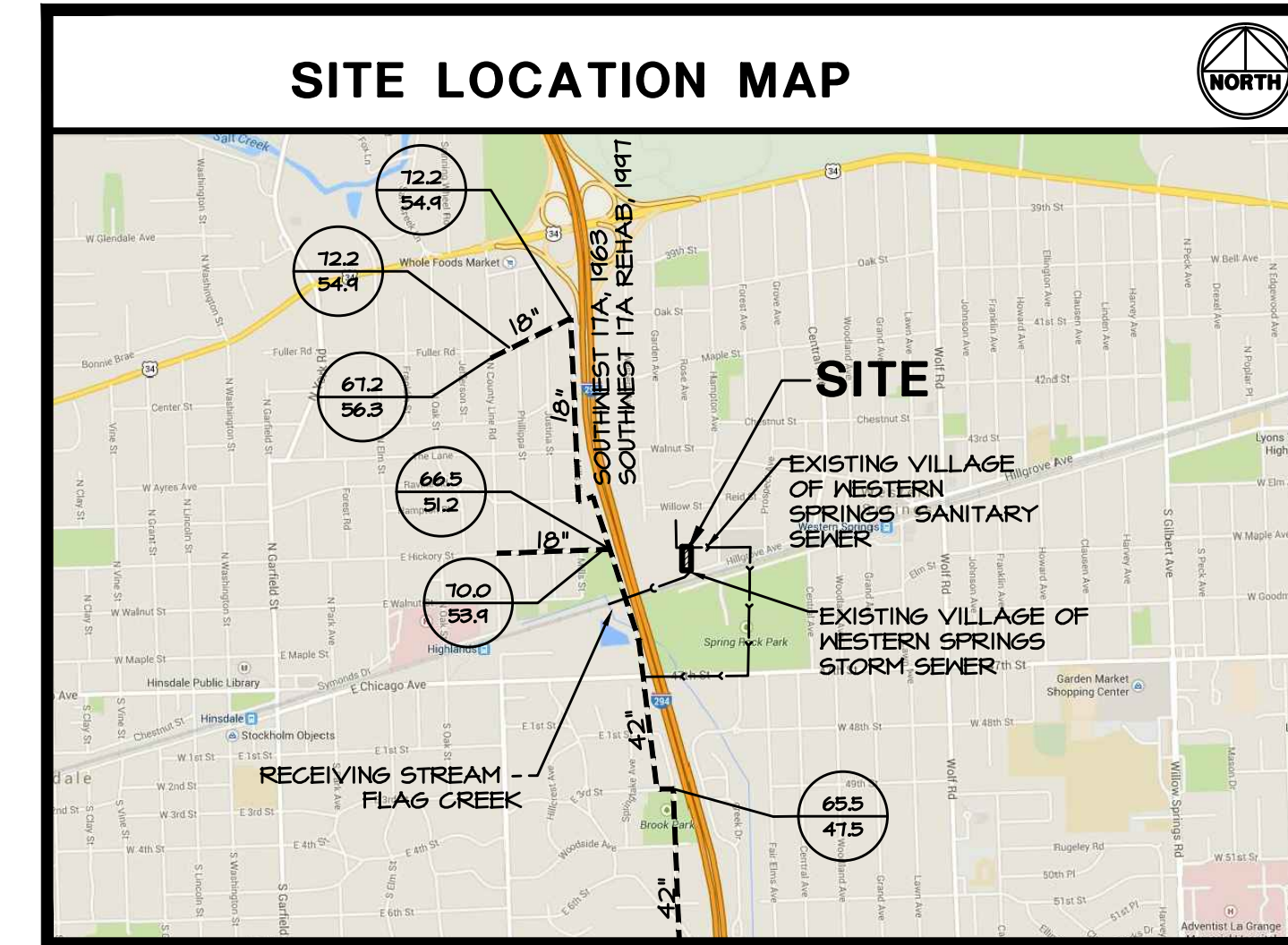
# NEW DRIVEWAY 1428 HILLGROVE ROAD WESTERN SPRINGS, ILLINOIS 60558

DRAWING INDEX		
SHEET	DESCRIPTION	DATE
T-1.0	TITLE SHEET	11-21-16
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C-2.0	SITE DEVELOPMENT PLAN	11-21-16
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C-7.1	MWRD GENERAL NOTES	7-12-16
S-1	BOUNDARY AND TOPOGRAPHIC SURVEY (PREPARED BY W-T LAND SURVEYING, INC.)	12-9-14

**BENCHMARKS:**

ONSITE BENCHMARK - SET CROSS ON AUX. VALVE 13.53 FEET NORTHEAST OF MANHOLE #16.

ELEVATION = 644.35' (NAVD88)



SECTION 6, TOWNSHIP 38 NORTH, RANGE 12 EAST  
SCALE: 1"=2000'

MAP DATA © 2016 GOOGLE

**LEGEND**

- >—>—> EXISTING LOCAL STORM SEWER
- >—>—> EXISTING LOCAL SANITARY SEWER
- — — — — SOUTHWEST SIDE SANITARY DISTRICT SEWER

72.2  
51.2
 GROUND ELEVATION CCD  
 SEWER INVERT ELEVATION CCD

**CIVIL ENGINEERING STATEMENT AND SEAL**

I, JAMES GLASCOTT, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE APPLICABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT (410 ILCS 25) AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).

DATE: \_\_\_\_\_

JAMES GLASCOTT - ILLINOIS P.E. # 062-063362  
DATE OF EXPIRATION - NOVEMBER 30, 2017

CALL JULIE  
SIMPLY 811 OR TOLL FREE (800)842-0123  
OPERATES 24 HOURS A DAY 365 DAYS A YEAR



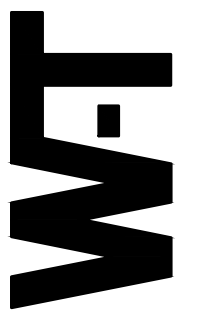
CALL (800)842-0123  
48 HOURS BEFORE YOU DIG

CONTRACTOR MUST LOCATE PRIVATE UTILITIES IN AREA OF CONSTRUCTION PRIOR TO PROCEEDING WITH WORK

BEING THAT THIS PROJECT IS PERMITTED UNDER THE NEW WATERSHED MANAGEMENT ORDINANCE (NMO), THE MWRD REQUIRES 48 HOURS OF ADVANCE NOTIFICATION PRIOR TO ANY GROUND DISTURBANCE. THE MWRD WILL BE INSPECTING FOR APPLICABLE EROSION CONTROL AND SEDIMENT CONTROL MEASURES SUCH AS SILT FENCING, INLET PROTECTION, CONCRETE WASH, ETC., FOLLOWED BY SANITARY SEWER AND VOLUME CONTROL INSTALLATION INSPECTIONS. PLEASE REFER TO THE APPROVED PERMIT/PLANS AND HAVE THESE MEASURES IN PLACE IN ACCORDANCE WITH THE SPECIFICATIONS.

REVISIONS	DATE	BY
PER MWRD COMMENTS	11-9-16	VE
PER MWRD COMMENTS	11-21-16	VE

**W-T CIVIL ENGINEERING, LLC**  
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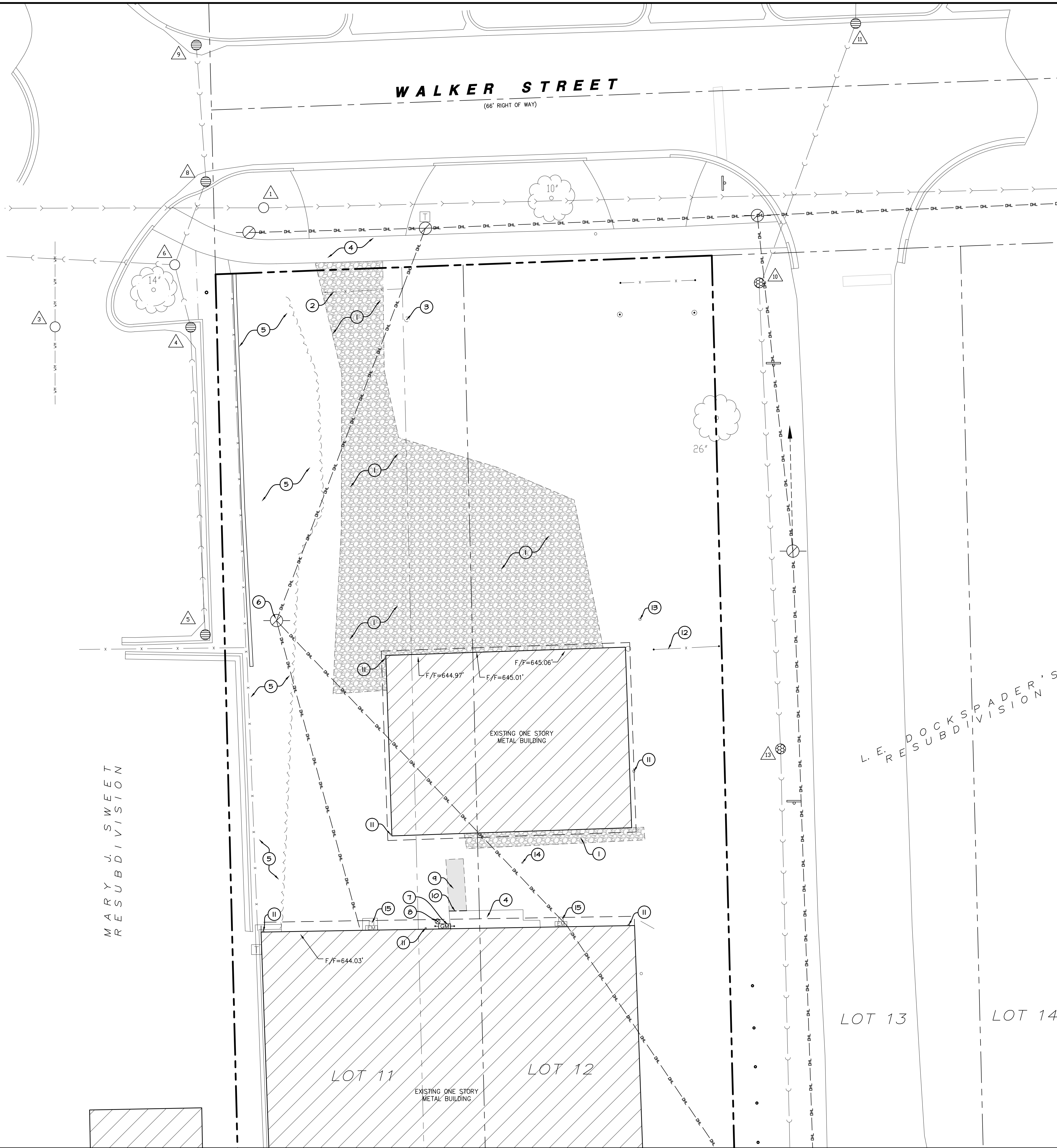


**NEW DRIVEWAY  
1428 HILLGROVE AVENUE  
WESTERN SPRINGS, IL 60558**

**TITLE SHEET**

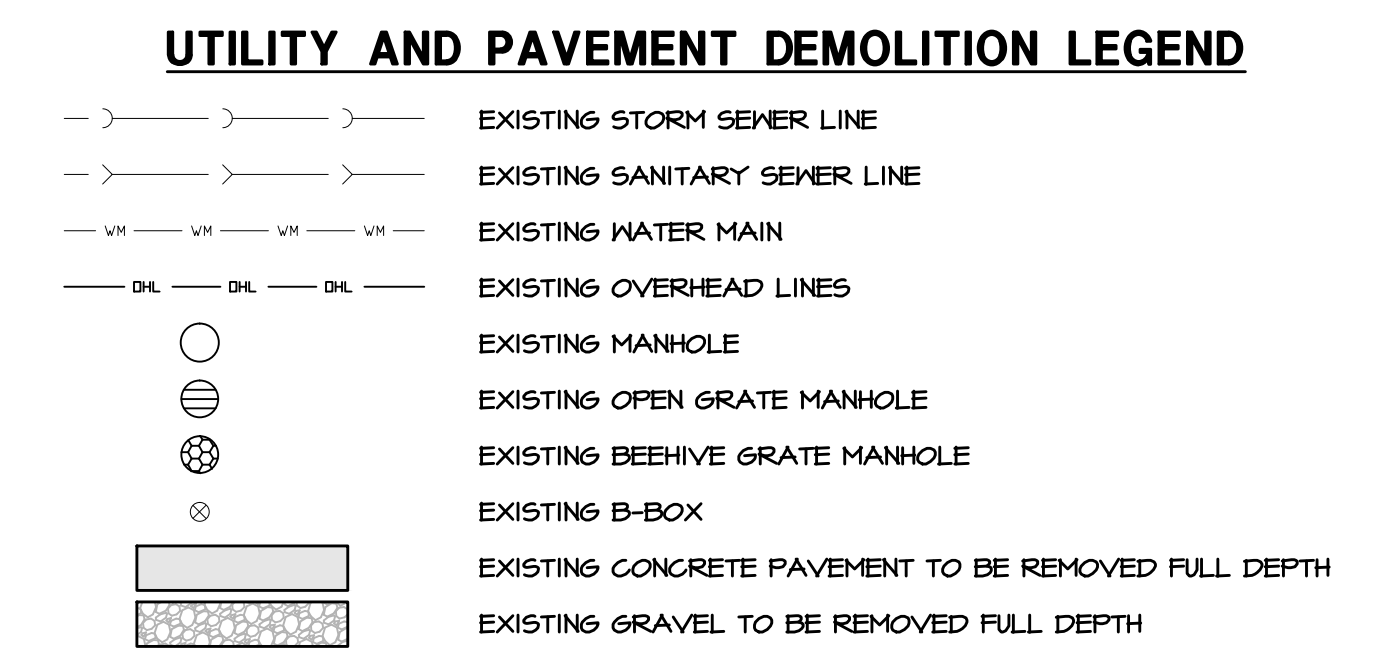
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JOB:	CE16044
SHEET:	T-1.0





- SITE DEMOLITION NOTES:**
- CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
  - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND COORDINATE ALL DEMOLITION WITH THE MUNICIPALITY AND OWNERS REPRESENTATIVE TO ENSURE PROTECTION AND MAINTENANCE OF SANITARY AND WATER UTILITIES AS NECESSARY AND TO PROVIDE STORM WATER CONVEYANCE UNTIL NEW FACILITIES ARE CONSTRUCTED, TESTED, AND PLACED IN OPERATION.
  - CONTRACTOR SHALL DEVELOP AND IMPLEMENT A DAILY PROGRAM OF DUST CONTROL PROCEDURES PRIOR TO DEMOLITION OF ANY STRUCTURES. MODIFICATION OF DUST CONTROL PROCEDURES SHALL BE PERFORMED BY THE CONTRACTOR TO THE SATISFACTION OF THE MUNICIPALITY AND COMPLY WITH THE NEEDS II REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND THE INDIVIDUAL STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT.
  - ALL EXISTING TREES, BRUSH AND MISCELLANEOUS VEGETATION TO BE REMOVED OR DEMOLISHED SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
  - VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24" THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
  - ALL EXISTING BUILDINGS, FOUNDATIONS, CONCRETE OR ASPHALT PAVEMENT OR WALKS, CURB AND GUTTER AND MISCELLANEOUS STRUCTURES (INCLUDING, BUT NOT LIMITED TO FENCES, POLES, YARD LIGHTS, ELECTRICAL PANELS, AND MISCELLANEOUS DEBRIS) INDICATED TO BE DEMOLISHED SHALL BE REMOVED OR DEMOLISHED AND REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR.
  - CONTRACTOR SHALL CONTACT GAS COMPANY PRIOR TO DEMOLITION. LOCATION OF EXISTING GAS SERVICES ARE UNKNOWN.
  - ALL EXISTING TREES SHALL REMAIN UNLESS OTHERWISE NOTED.
  - ALL EXISTING UTILITIES SHALL REMAIN UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
  - CONTRACTOR SHALL PROVIDE REMOVAL AND REPLACEMENT AND SHORING AS NECESSARY TO MEET OSHA AND LOCAL CODE, AS WELL AS MANUFACTURER'S REQUIREMENTS.
  - ALL FOUNDATIONS FOR ALL FENCES, SIGNS, ETC. NOTED FOR REMOVAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFFSITE.
  - PROOF-ROLLING SHALL BE PERFORMED FOR ALL SUBGRADE PRIOR TO CONSTRUCTION OF NEW PAVEMENT. ALL SUBGRADE PROOF-ROLLING SHALL BE WITNESSED AND APPROVED BY A MATERIALS TESTING AGENCY TO BE HIRED BY THE OWNER. CONTRACTOR TO COORDINATE ALL PROOF-ROLLING WITH THE MATERIALS TESTING AGENCY. CONTACT THE ENGINEER AND MATERIAL TESTING AGENCY SO THAT THEY MAY WITNESS THE PROOF ROLL. PROOF ROLL SHALL BE PROVIDED FOR ALL PAVEMENT AREAS SPECIFIED FOR FULL DEPTH REMOVAL AND REPLACEMENT.
  - EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 12-4-2014, PREPARED BY W-T LAND SURVEYING, INC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
  - SEE SHEET 5-1 BOUNDARY AND TOPOGRAPHIC SURVEY FOR ALL EXISTING LOCATED UTILITY DATA.
  - CLEAR SITE AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
  - ALL ITEMS MARK "EXISTING OR EXISTING TO REMAIN" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
  - CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.

- PROJECT NOTES:**
- EXISTING GRAVEL TO BE REMOVED.
  - EXISTING DOUBLE SWING GATE TO BE REMOVED.
  - EXISTING METAL PIPE AND CONCRETE BASE TO BE REMOVED.
  - EXISTING CONCRETE SIDEWALK TO REMAIN.
  - EXISTING TREES/BRUSH TO BE REMOVED.
  - EXISTING UTILITY POLE TO REMAIN.
  - EXISTING GAS METER TO REMAIN.
  - EXISTING B-BOX TO REMAIN.
  - EXISTING CONCRETE SIDEWALK TO BE REMOVED.
  - EXISTING CONCRETE TO BE SAWCUT FULL DEPTH TO PROVIDE A CLEAN CONSTRUCTION BREAK. APPROXIMATE LOCATION SHOWN, PERFORM SAWCUT AT NEAREST JOINT.
  - EXISTING DOWN SPOUT TO REMAIN.
  - EXISTING DOUBLE SWING GATE TO REMAIN.
  - EXISTING CLEANOUT TO REMAIN.
  - EXISTING WOOD POST TO BE REMOVED.
  - EXISTING ELECTRIC METER TO REMAIN.



**EXISTING UTILITY DATA**

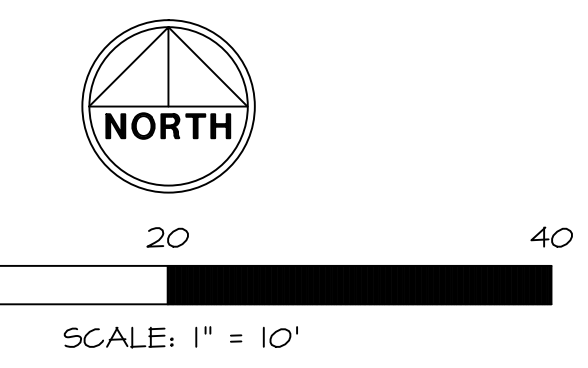
1. RIM=646.04' (SANITARY) 48" CONCRETE STRUCTURE INV=642.58' (8" PVC E) INV=642.70' (8" PVC W)	8. RIM=645.31' (STORM) 24" CONCRETE STRUCTURE INV=643.61' (8" D.I. N) INV=643.81' (8" D.I. SW)	15. RIM=643.10' (STORM) 48" CONCRETE STRUCTURE INV=643.15' (16" PVC NE/SW) INV=640.15' (12" RCP N)
2. RIM=647.22' (SANITARY) 48" CONCRETE STRUCTURE INV=643.50' (8" PVC E) INV=643.50' (8" PVC N)	9. RIM=645.22' (STORM) 24" CONCRETE STRUCTURE INV=643.52' (8" D.I. S)	16. RIM=643.92' (STORM) 48" CONCRETE STRUCTURE INV=640.42' (14" X22" ELLIPTICAL ENE) INV=640.15' (16" PVC NW) INV=640.82' (12" RCP N)
3. RIM=645.86' (WATER) 72" CONCRETE STRUCTURE 640.16' AT TOP OF 12" D.I. WATERMAIN N/S	10. RIM=643.58' (STORM) 24" CONCRETE STRUCTURE INV=641.06' (12" RCP NE) INV=641.07' (12" RCP S)	17. RIM=643.74' (STORM) 24" CONCRETE STRUCTURE INV=641.36' (12" RCP SSE) 18. RIM=643.25' (STORM) 24" CONCRETE STRUCTURE INV=640.40' (10" RCP SSE)
4. RIM=645.22' (STORM) 24" CONCRETE STRUCTURE INV=642.33' (12" RCP NNW) INV=643.26' (8" METAL S)	11. RIM=644.82' (STORM) 48" CONCRETE STRUCTURE INV=642.10' (12" RCP N) INV=641.93' (12" RCP SW)	19. RIM=643.32' (STORM) 24" CONCRETE STRUCTURE INV=641.92' (14" C.P.P. NE) INV=642.07' (10" RCP SSE) INV=640.27' (10" RCP NNW)
5. RIM=645.36' (STORM) 24" CONCRETE STRUCTURE INV=643.36' (8" METAL N)	12. RIM=645.90' (SANITARY) 48" CONCRETE STRUCTURE(S) INV=642.00' (8" PVC W)	20. RIM=645.30' (STORM) 48" CONCRETE STRUCTURE INV=640.20' (10" RCP NNW) INV=640.15' (24" RCP ENE/WSW)
6. RIM=646.08' (STORM) 48" CONCRETE STRUCTURE INV=643.38' (8" D.I. NE) INV=642.38' (12" RCP SSE) INV=642.93' (12" RCP W)	13. RIM=643.23' (STORM) 24" CONCRETE STRUCTURE INV=640.62' (12" RCP N) INV=640.58' (12" RCP S)	21. RIM=644.75' (STORM) 60" CONCRETE STRUCTURE INV=641.10' (12" PVC N) INV=640.90' (12" PVC ENE) INV=640.75' (24" PVC WSW)
7. RIM=646.44' (STORM) 24" CONCRETE STRUCTURE INV=642.59' (12" RCP E) INV=642.49' (12" RCP W)	14. RIM=642.84' (STORM) 24" CONCRETE STRUCTURE INV=640.04' (12" RCP N/S)	

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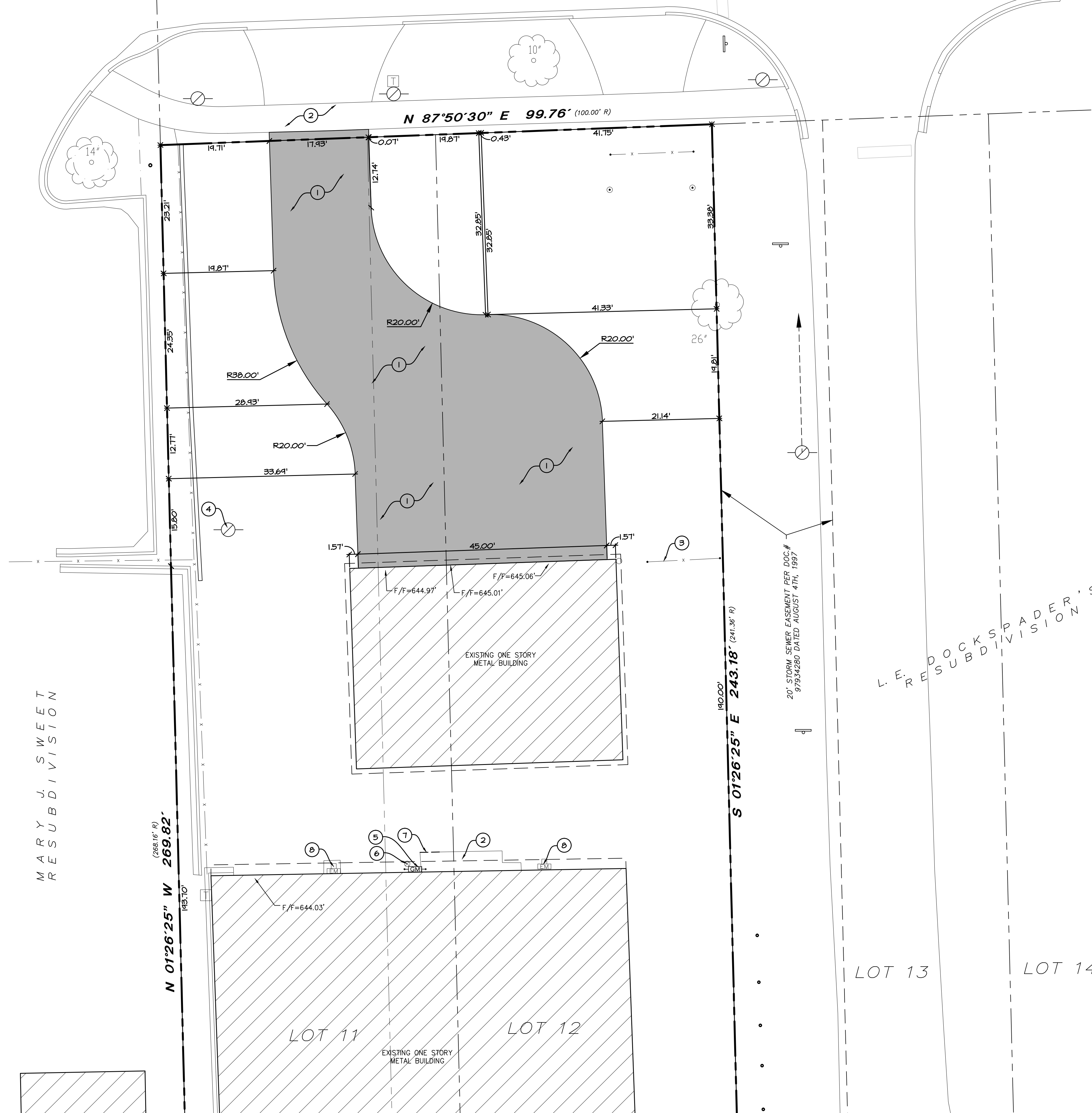
**NEW DRIVEWAY**  
1428 HILLGROVE AVENUE  
WESTERN SPRINGS, IL 60558

**SITE DEMOLITION PLAN**

DATE: 8/12/16  
SCALE: 1" = 10'  
DRAWN: VE  
CHECK: JFG  
JOB: CE16019  
SHEET: C-1.0



**WALKER STREET**  
(66' RIGHT OF WAY)



**SITE GEOMETRIC AND DEVELOPMENT NOTES:**

- EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE BOUNDARY AND TOPOGRAPHIC SURVEY LAST DATED 12-9-2014, PREPARED BY W-T LAND SURVEYING, INC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE PLANS.
- CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
- CONTRACTOR SHALL CONTACT JULLIE (811 OR 1-800-842-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
- ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER. CONTRACTOR SHALL RESTORE ALL DISTURBED GREEN SPACES WITH 6" OF TOPSOIL, SEED, AND EROSION CONTROL BLANKET.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL RE-STRIP ALL STRIPING DISTURBED WITHIN THE EXISTING ROADWAYS/PARKING LOT TO MATCH EXISTING.
- CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
- ALL ITEMS MARKED "EXISTING" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
- ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.

**PROJECT NOTES:**

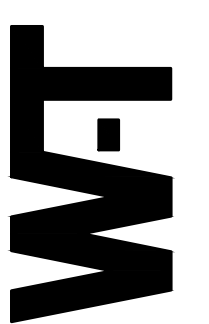
- NEW FULL DEPTH ASPHALT PAVEMENT.
- EXISTING CONCRETE SIDEWALK TO REMAIN.
- EXISTING DOUBLE SWING GATE TO REMAIN.
- EXISTING UTILITY POLE TO REMAIN.
- EXISTING GAS METER TO REMAIN.
- EXISTING B-BOX TO REMAIN.
- EXISTING CONCRETE TO BE SAWCUT FULL DEPTH TO PROVIDE A CLEAN CONSTRUCTION BREAK. APPROXIMATE LOCATION SHOWN, PERFORM SAWCUT AT NEAREST JOINT.
- EXISTING ELECTRIC METER TO REMAIN.

**HATCH LEGEND**

- NEW FULL DEPTH ASPHALT PAVEMENT  
1-3/4" H.M.A. SURFACE COURSE  
2-1/4" H.M.A. BINDER COURSE  
8" CA-6 BASE COURSE

REVISIONS	DATE	BY
PER MWD COMMENTS	11-9-16	VE
PER MWD COMMENTS	11-21-16	VE

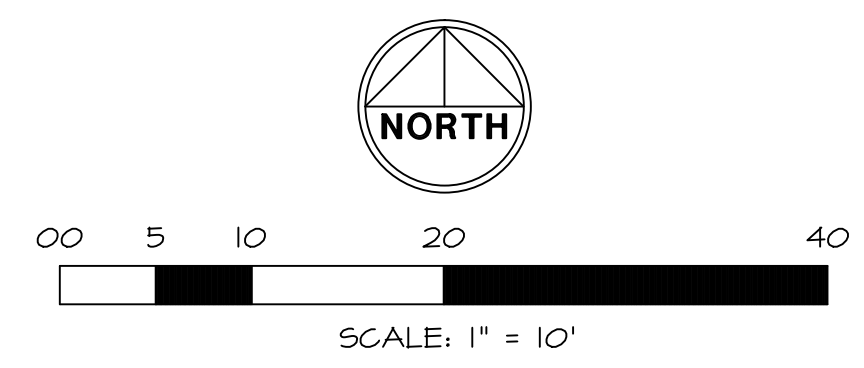
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1428 HILLCROVE AVENUE  
WESTERN SPRINGS, IL 60558

**SITE DEVELOPMENT PLAN**

DATE:	8/12/16
SCALE:	1" = 10'
DRAWN:	VE
CHECK:	JPG
JOB:	CE16049
SHEET:	C-2.0





PROPOSED DETENTION POND STORAGE VOLUME				
ELEVATION	AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	DISCHARGE
643.50	900 SQ. FT.	348 CU. FT.	396 CU. FT. OR	1.3927 CFS
643.00	490 SQ. FT.	49 CU. FT.	49 CU. FT. OR	1.2600 CFS
642.70	0 SQ. FT.	49 CU. FT.	49 CU. FT. OR	1.1742 CFS
TOTAL POND V <sub>643.50</sub>			396 CU. FT.	
			OR 0.0091 AC-FT	

**SITE GRADING NOTES:**

- EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE SURVEY AND TOPOGRAPHIC SURVEY LAST DATED 12-04-14, PREPARED BY W-T LAND SURVEYING, INC. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- ALL PROPOSED GRADES ARE GIVEN TO FINISHED GRADE, I.E. TOP OF PROPOSED ASPHALT, CONCRETE, TOP OF PROPOSED CURB, ETC. SEE DETAILS FOR PAVEMENT THICKNESS.
- CONTRACTOR SHALL CONTACT J.U.L.I.E. (811 OR 1-800-842-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
- CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT TO BE REMOVED SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
- ALL HANDICAP ACCESSIBLE ROUTES (SIDEWALKS, WALKWAYS, PAVEMENTS, ETC.) SHALL MAINTAIN A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%.
- VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24" THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
- ALL FIRE ACCESS LINES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.
- CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
- ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- ALL EXCESS SOILS THAT CANNOT BE USED AS SUITABLE FILL SHALL BE HAULED FROM THE SITE AND LEGALLY DISPOSED OF.
- CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.

**GRADING LEGEND**

- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- INTERPOLATED SPOT GRADE
- PROPOSED RIM ELEVATION
- PROPOSED INVERT ELEVATION
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- TP
- TW
- G
- EXISTING MANHOLE
- EXISTING OPEN GRATE MANHOLE
- EXISTING BEEHIVE MANHOLE
- EXISTING B-BOX
- PROPOSED TYPE "C" CATCH BASIN / INLET
- PROPOSED OPEN LID MANHOLE / CATCH BASIN
- PROPOSED MONITORING WELL / CLEANOUT
- PROPOSED NYLOPLAST STRUCTURE

**HATCH LEGEND**

- NEW FULL DEPTH ASPHALT PAVEMENT
- 1-3/4" H.M.A. SURFACE COURSE
- 2-1/4" H.M.A. BINDER COURSE
- 8" GA-6 BASE COURSE

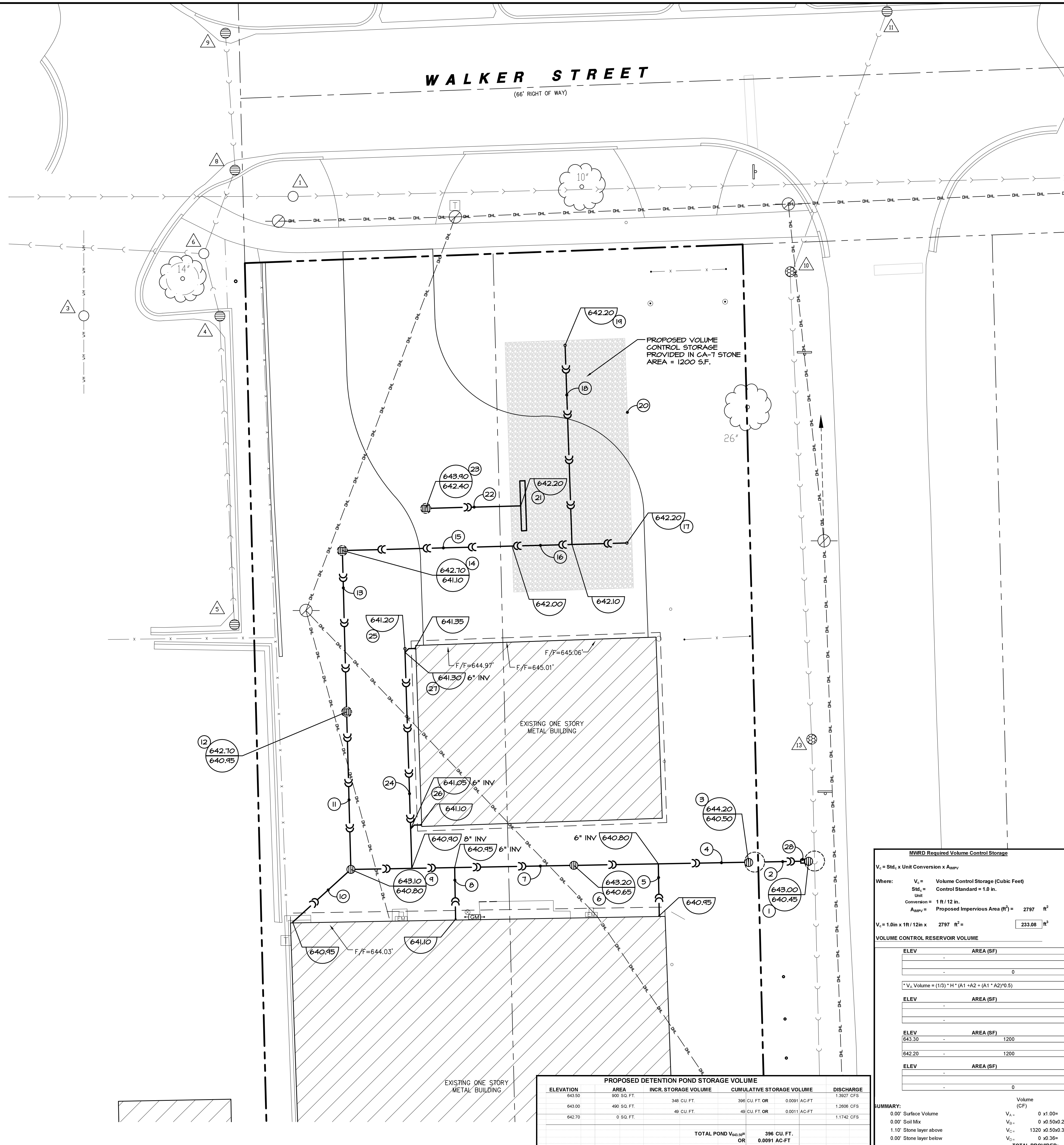
**EXISTING UTILITY DATA**

- |   |   |  |   |  |  |  |   |   |  |  |   |   |  |   |   |  |  |   |   |  |
|---|---|--|---|--|--|--|---|---|--|--|---|---|--|---|---|--|--|---|---|--|
| 1. RIM=646.04' (SANITARY)<br>48" CONCRETE STRUCTURE<br>INV=642.68' (8" PVC E)<br>INV=642.70' (8" PVC W) | 2. RIM=647.22' (SANITARY)<br>48" CONCRETE STRUCTURE<br>INV=643.50' (8" PVC E)<br>INV=643.50' (8" PVC N) | 3. RIM=645.86' (WATER)<br>72" CONCRETE STRUCTURE<br>640.16' AT TOP OF 12" D.I. WATERMAIN N/S | 4. RIM=645.22' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=642.93' (12" RCP NNW)<br>INV=643.26' (8" METAL S) | 5. RIM=645.36' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=643.36' (8" METAL N) | 6. RIM=646.08' (STORM)<br>48" CONCRETE STRUCTURE<br>INV=643.38' (8" D.I. NE)<br>INV=642.98' (12" RCP SSE)<br>INV=642.93' (12" RCP W) | 7. RIM=646.44' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=642.50' (12" RCP S)<br>INV=642.49' (12" RCP W) | 8. RIM=645.31' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=643.66' (8" D.I. N)<br>INV=643.61' (8" D.I. SW) | 9. RIM=645.22' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=643.50' (8" D.I. S) | 10. RIM=643.58' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=641.06' (12" RCP NE)<br>INV=641.07' (12" RCP S) | 11. RIM=644.82' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=642.10' (12" RCP N)<br>INV=641.93' (12" RCP SW) | 12. RIM=645.90' (SANITARY)<br>48" CONCRETE STRUCTURE<br>INV=642.00' (8" CLAY E/S)<br>INV=642.00' (8" PVC W) | 13. RIM=643.23' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=640.62' (12" RCP N)<br>INV=640.58' (12" RCP S) | 14. RIM=646.84' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=640.04' (12" RCP N/S) | 15. RIM=643.10' (STORM)<br>48" CONCRETE STRUCTURE<br>INV=640.15' (15" PVC NE/SW)<br>INV=640.15' (12" RCP N) | 16. RIM=643.92' (STORM)<br>48" CONCRETE STRUCTURE<br>INV=640.42' (14"X22" ELLIPTICAL ENE)<br>INV=640.42' (15" PVC WSW)<br>INV=640.82' (12" RCP N) | 17. RIM=643.74' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=641.35' (12" RCP SSE) | 18. RIM=643.25' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=640.40' (10" RCP SSE) | 19. RIM=643.32' (STORM)<br>24" CONCRETE STRUCTURE<br>INV=641.92' (4" C.P.P. NE)<br>INV=640.27' (10" RCP SSE)<br>INV=640.27' (10" RCP NNW) | 20. RIM=645.30' (STORM)<br>48" CONCRETE STRUCTURE<br>INV=640.20' (10" RCP NNW)<br>INV=640.15' (24" RCP ENE/WSW) | 21. RIM=644.75' (STORM)<br>60" CONCRETE STRUCTURE<br>INV=641.10' (12" PVC N)<br>INV=640.90' (12" PVC ENE)<br>INV=640.75' (24" PVC WSW) |
|---|---|--|---|--|--|--|---|---|--|--|---|---|--|---|---|--|--|---|---|--|



<b>W-T CIVIL ENGINEERING, LLC</b> CIVIL AND STRUCTURAL ENGINEERS	DATE	BY	VE	VE			
	11-9-16		11-9-16	11-21-16			
	REVISIONS	PER	NUMBER	COMMENTS	PER	NUMBER	COMMENTS
<b>NEW DRIVEWAY</b> <b>1428 HILLGROVE AVENUE</b> <b>WESTERN SPRINGS, IL 60558</b>							
<b>SITE GRADING PLAN</b>							
DATE:		8/12/16					
SCALE:		1" = 10'					
DRAWN:		VE					
CHECK:		JPG					
JOB:		CE16049					
SHEET:		C-3.0					



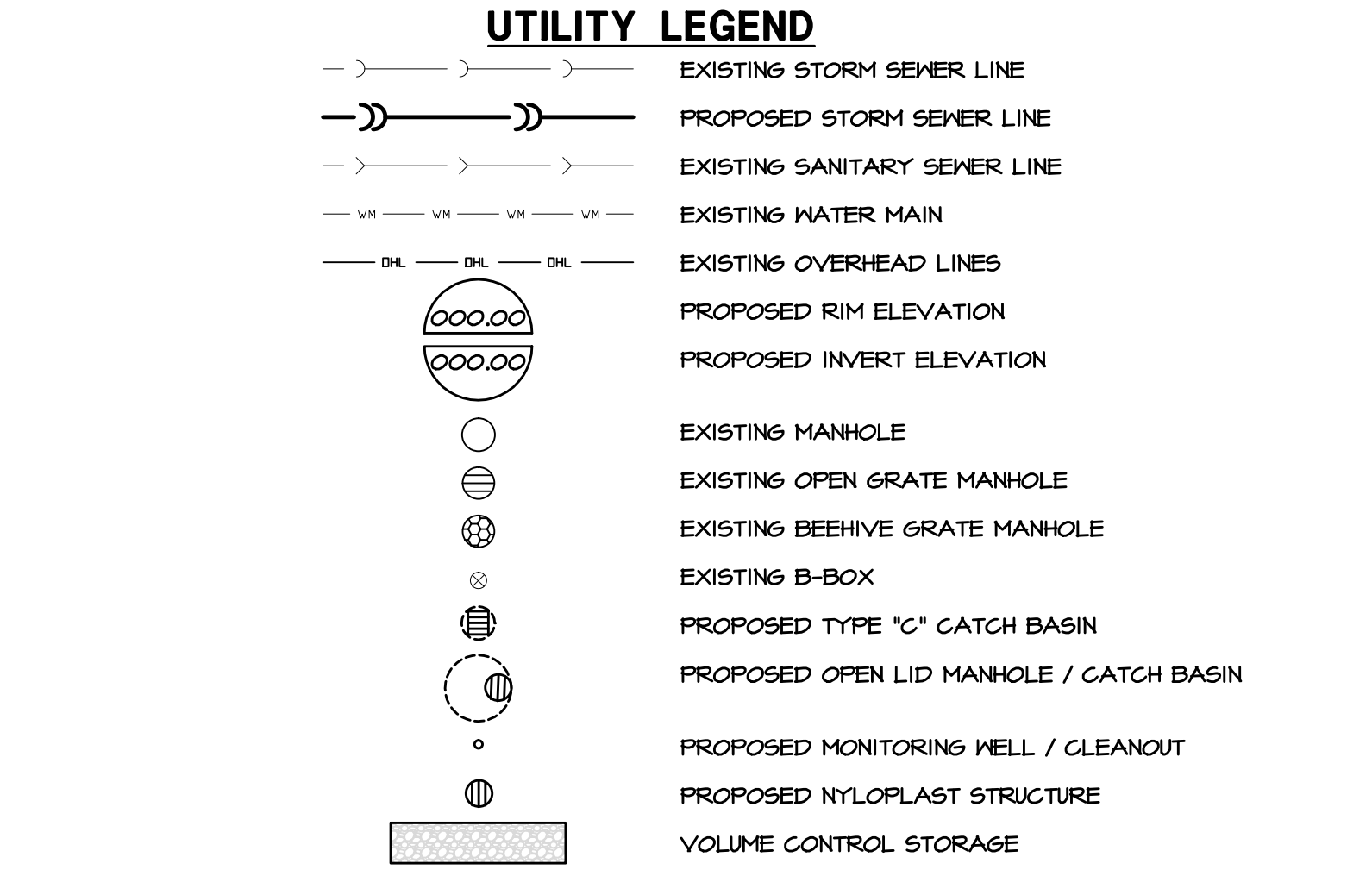


**SITE UTILITY NOTES:**

- CONTRACTOR SHALL CONTACT JULLIE (811 OR 1-800-842-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
- CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REPAIRED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL EXCAVATE AND VERIFY IN FIELD ALL EXISTING UTILITY LOCATIONS, SIZES, CONDITIONS AND ELEVATIONS AT PROPOSED POINTS OF CONNECTION PRIOR TO ANY UNDERGROUND CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- REFER TO THE GENERAL NOTES AND SPECIFICATION SHEETS FOR ALL PIPE MATERIAL AND JOINT SPECIFICATIONS.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- CONTRACTOR SHALL VERIFY IN FIELD EXACT SIZE, MATERIAL, INVERT, PIPE ROUTING, AND SLOPE OF ALL EXISTING UTILITIES AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF UTILITY TRENCHES DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING AND BRACING AS NECESSARY TO MAINTAIN STABILITY UNTIL CONSTRUCTION OF THE UTILITY IS COMPLETE IN ORDER TO MEET OSHA AND LOCAL CODES, AS WELL AS MANUFACTURER'S REQUIREMENTS.
- ALL RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RING) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS".
- TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) OVER ALL UNDERGROUND UTILITIES WHICH ARE CONSTRUCTED UNDER OR WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT OR SIDEWALKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- ADJUST RIM ELEVATIONS OF EXISTING STRUCTURES IN PAVEMENT AS NECESSARY TO MEET PROPOSED FINISHED GRADE.
- CONTRACTOR TO COORDINATE ALL CONNECTIONS TO CITY UTILITIES AND STORM SEWERS WITH THE PUBLIC WORKS DEPARTMENT.
- CONTRACTOR TO USE CAUTION WHEN EXCAVATING AT EXISTING UTILITY LINES.
- ALL STORM MANHOLES SHALL HAVE OPEN LIDS UNLESS OTHERWISE SPECIFIED.

**PROJECT NOTES:**  
**STORM SEWER**

- NEW 48" DIA. PRECAST CONCRETE MANHOLE. CONSTRUCT OVER EXISTING 12" STORM SEWER.
- NEW 12" HDPE, 12 L.F. @ 0.42% SLOPE.
- NEW 48" DIA. PRECAST CONCRETE CATCH BASIN WITH 5.60' RESTRICTOR.
- NEW 12" HDPE, 36 L.F. @ 0.42% SLOPE.
- NEW 6" HDPE, 11 L.F. @ 1.36% MIN. SLOPE TO BE CONNECTED TO EXISTING DOWN SPOUT WITH CAST IRON DOWN SPOUT BOOT AND BLIND CONNECTED TO PROPOSED 12" HDPE.
- NEW 24" DIA. NYLOPLAST DRAIN BASIN WITH STANDARD GRATE AND ALL NECESSARY FITTINGS.
- NEW 12" HDPE, 46 L.F. @ 0.33% SLOPE.
- NEW 6" HDPE, 11 L.F. @ 1.36% SLOPE TO BE CONNECTED TO EXISTING DOWN SPOUT WITH CAST IRON DOWN SPOUT BOOT AND BLIND CONNECTED TO PROPOSED 12" HDPE.
- NEW 24" DIA. NYLOPLAST DRAIN BASIN WITH STANDARD GRATE AND ALL NECESSARY FITTINGS.
- NEW 6" HDPE, 11 L.F. @ 1.36% SLOPE TO BE CONNECTED TO EXISTING DOWN SPOUT WITH CAST IRON DOWN SPOUT BOOT.
- NEW 6" HDPE, 32 L.F. @ 0.50% SLOPE.
- NEW 24" DIA. TYPE "C" CATCH BASIN WITH NEENAH R-2502-D GRATE AND FRAME.
- NEW 8" HDPE, 32 L.F. @ 0.41% SLOPE.
- NEW 24" DIA. TYPE "C" CATCH BASIN WITH NEENAH R-2502-D GRATE AND FRAME.
- NEW 6" HDPE, 34 L.F. @ 2.65% SLOPE.
- NEW 6" PERFORATED HDPE, 23 L.F. @ 0.81% SLOPE.
- NEW MONITORING WELL.
- NEW 6" PERFORATED HDPE, 40 L.F. @ 0.25% SLOPE.
- NEW MONITORING WELL.
- NEW 11' DEEP VOLUME CONTROL STORAGE TO BE PROVIDED IN CA-7 STONE WITH INVERT ELEVATION = 642.20
- NEW 6" PERFORATED PVC WITH END CAPS, 10 L.F. @ 0.00%.
- NEW 6" HDPE, 14 L.F. @ 1.05% SLOPE.
- NEW 24" DIA. PRECAST CONCRETE INLET.
- NEW 6" HDPE, 44 L.F. @ 0.68% SLOPE.
- NEW CLEANOUT.
- NEW 6" HDPE, 2 L.F. @ 2.50% SLOPE TO BE CONNECTED TO EXISTING DOWN SPOUT WITH CAST IRON DOWN SPOUT BOOT.
- NEW 6" HDPE, 2 L.F. @ 2.50% SLOPE TO BE CONNECTED TO EXISTING DOWN SPOUT WITH CAST IRON DOWN SPOUT BOOT.
- NEW TIDEFLUX CHECK MATE INLINE CHECK VALVE INSTALLED ON UPSTREAM 12" HDPE PIPE.



**EXISTING UTILITY DATA**

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	RIM=646.04' (SANITARY) 48" CONCRETE STRUCTURE INV=642.68' (8" PVC E) INV=642.70' (8" PVC W)	8	RIM=645.31' (STORM) 24" CONCRETE STRUCTURE INV=643.66' (8" D.I. N) INV=643.61' (8" D.I. SW)	15	RIM=643.10' (STORM) 48" CONCRETE STRUCTURE INV=640.15' (15" PVC NE/WSW) INV=640.15' (12" RCP N)
2	RIM=647.22' (SANITARY) 48" CONCRETE STRUCTURE INV=643.50' (8" PVC E) INV=643.50' (8" PVC N)	9	RIM=645.22' (STORM) 24" CONCRETE STRUCTURE INV=643.52' (8" D.I. S)	16	RIM=643.92' (STORM) 48" CONCRETE STRUCTURE INV=640.42' (14"x22" ELLIPTICAL ENE) INV=640.42' (15" PVC WSW) INV=640.82' (12" RCP S)
3	RIM=645.86' (WATER) 72" CONCRETE STRUCTURE 640.16' AT TOP OF 12" D.I. WATERMAIN N/S	10	RIM=643.58' (STORM) 24" CONCRETE STRUCTURE INV=641.06' (12" RCP NE) INV=641.07' (12" RCP S)	17	RIM=643.74' (STORM) 24" CONCRETE STRUCTURE INV=641.36' (12" RCP SSE)
4	RIM=645.22' (STORM) 48" CONCRETE STRUCTURE INV=643.38' (12" RCP NNW) INV=643.26' (8" METAL S)	11	RIM=644.82' (STORM) 24" CONCRETE STRUCTURE INV=642.10' (12" RCP N) INV=641.93' (12" RCP SW)	18	RIM=643.25' (STORM) 24" CONCRETE STRUCTURE INV=640.40' (10" RCP SSE)
5	RIM=645.36' (STORM) 24" CONCRETE STRUCTURE INV=643.36' (8" METAL N)	12	RIM=645.90' (SANITARY) 48" CONCRETE STRUCTURE INV=642.00' (8" PVC W)	19	RIM=643.32' (STORM) 24" CONCRETE STRUCTURE INV=641.92' (4" C.P.P. NE) INV=640.27' (10" RCP SSE) INV=640.27' (10" RCP NNW)
6	RIM=646.08' (STORM) 48" CONCRETE STRUCTURE INV=643.38' (8" D.I. NE) INV=642.98' (12" RCP SSE) INV=642.93' (12" RCP W)	13	RIM=643.23' (STORM) 24" CONCRETE STRUCTURE INV=640.62' (12" RCP N) INV=642.98' (12" RCP S)	20	RIM=645.30' (STORM) 48" CONCRETE STRUCTURE INV=640.20' (10" RCP NNW) INV=640.15' (24" PVC ENE/WSW)
7	RIM=646.44' (STORM) 24" CONCRETE STRUCTURE INV=642.59' (12" RCP E) INV=642.49' (12" RCP W)	14	RIM=646.84' (STORM) 24" CONCRETE STRUCTURE INV=640.04' (12" RCP N/S)	21	RIM=644.75' (STORM) 60" CONCRETE STRUCTURE INV=641.10' (12" PVC N) INV=640.90' (12" PVC ENE) INV=640.75' (24" PVC WSW)

**MWRD Required Volume Control Storage**

$V_c = Std. \times Unit\ Conversion \times A_{Imp}$

Where:  $V_c$  = Volume Control Storage (Cubic Feet)  
 $Std.$  = Control Standard = 1.0 in.  
 $Unit$  = Conversion = 1 ft / 12 in.  
 $A_{Imp}$  = Proposed Impervious Area ( $ft^2$ ) = 2797  $ft^2$

$V_c = 1.0in \times 1ft / 12in \times 2797 \text{ ft}^2 = 233.08 \text{ ft}^3$

**VOLUME CONTROL RESERVOIR VOLUME**

ELEV	AREA (SF)	Volume (CF)
643.30	1200	0 $V_1$
642.20	1200	1320 $V_2$
		0 $V_3$

**PROPOSED DETENTION POND STORAGE VOLUME**

ELEVATION	AREA	INCR. STORAGE VOLUME	CUMULATIVE STORAGE VOLUME	DISCHARGE
643.50	900 SQ. FT.	348 CU. FT.	396 CU. FT. OR 0.0091 AC-FT	1.3927 CFS
643.00	480 SQ. FT.	48 CU. FT.	444 CU. FT. OR 0.0111 AC-FT	1.2608 CFS
642.70	0 SQ. FT.	0 CU. FT.	444 CU. FT. OR 0.0111 AC-FT	1.1742 CFS
<b>TOTAL POND <math>V_{48"}</math> OR</b>				
				396 CU. FT. OR 0.0091 AC-FT

**SUMMARY:**

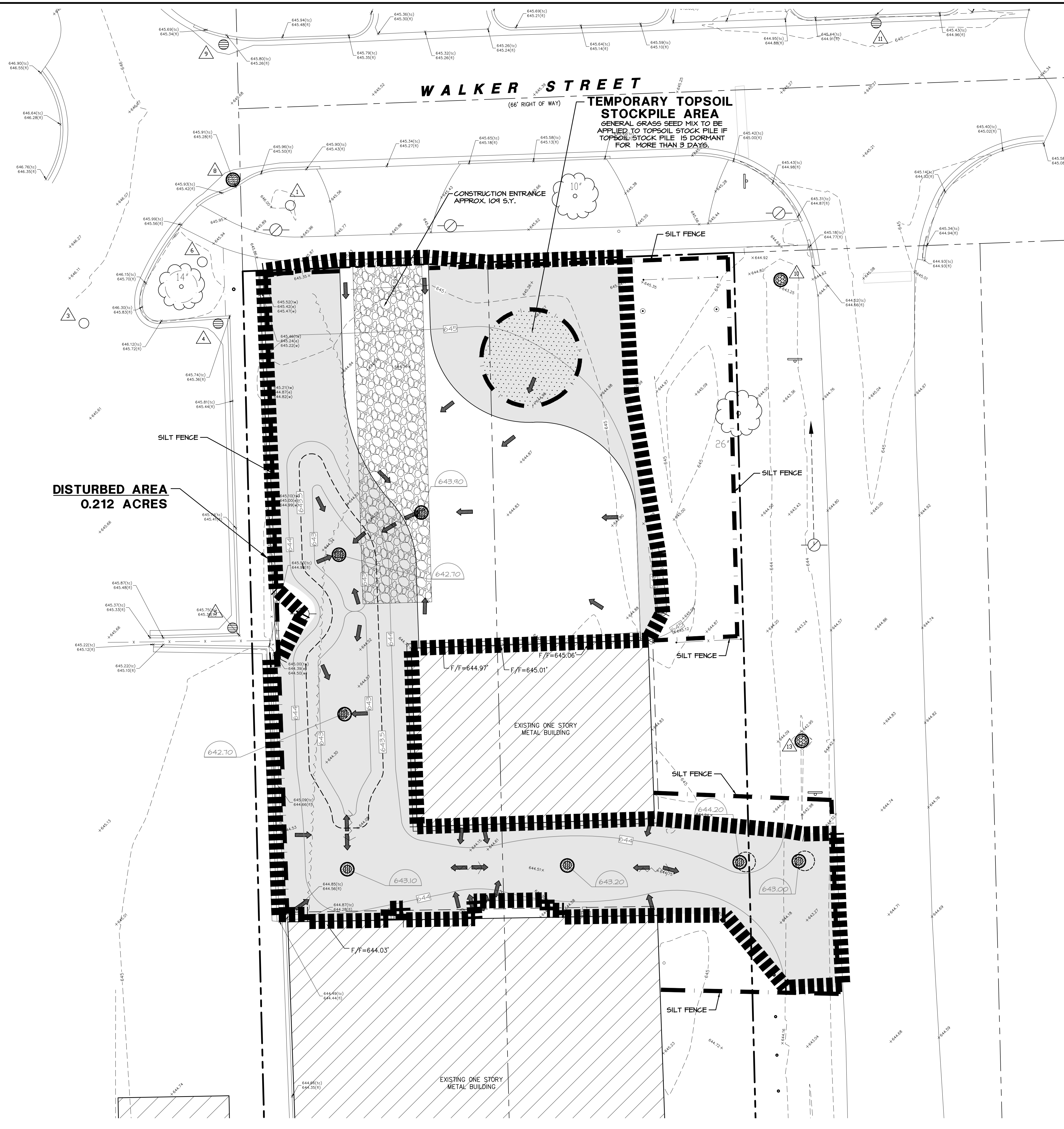
Volume (CF)	Volume (CF)
0.00' Surface Volume $V_{s-}$ 0 x 0.00 = 0 CF	
0.00' Soil Mix $V_{s-}$ 0 x 0.500 = 0 CF	
1.10' Stone layer above $V_{s-}$ 1320 x 0.500 = 660 CF	235 CF
0.00' Stone layer below $V_{s-}$ 0 x 0.36 = 0 CF	
<b>TOTAL PROVIDED:</b>	<b>235 CF</b>

**W-T CIVIL ENGINEERING, LLC**  
 CIVIL AND STRUCTURAL ENGINEERS  
 2675 Pratum Avenue  
 Hoffman Estates, Illinois 60135  
 PH: (224) www.wtengineering.com  
 IL License No.: 184-003492 Exp: 04/30/17

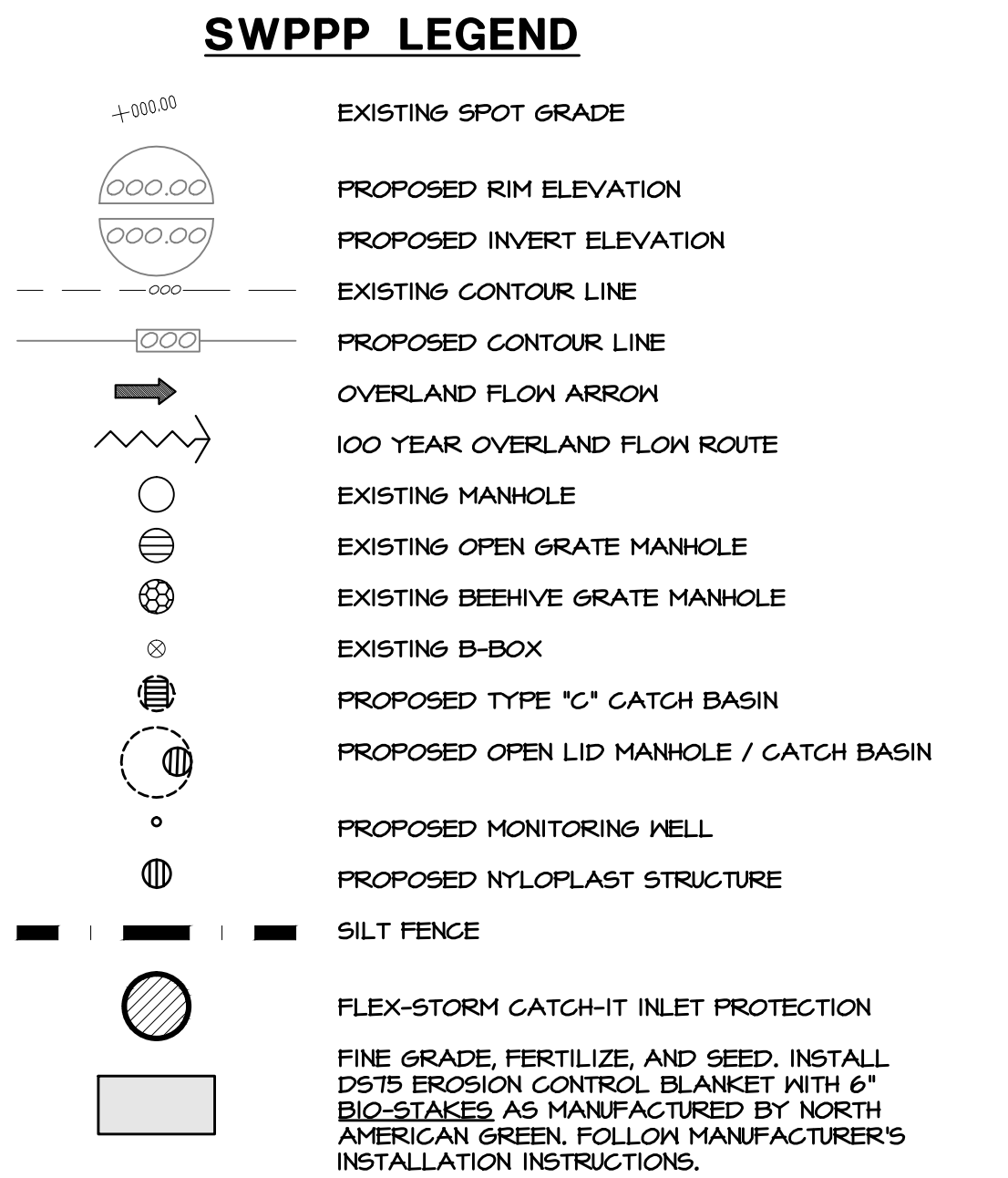
**NEW DRIVEWAY**  
 1428 HILLGROVE AVENUE  
 WESTERN SPRINGS, IL 60558

**SITE UTILITY PLAN**

DATE: 8/12/16  
 SCALE: 1" = 10'  
 DRAWN: VE  
 CHECK: JFG  
 JOB: CE16044  
 SHEET: C-4.0

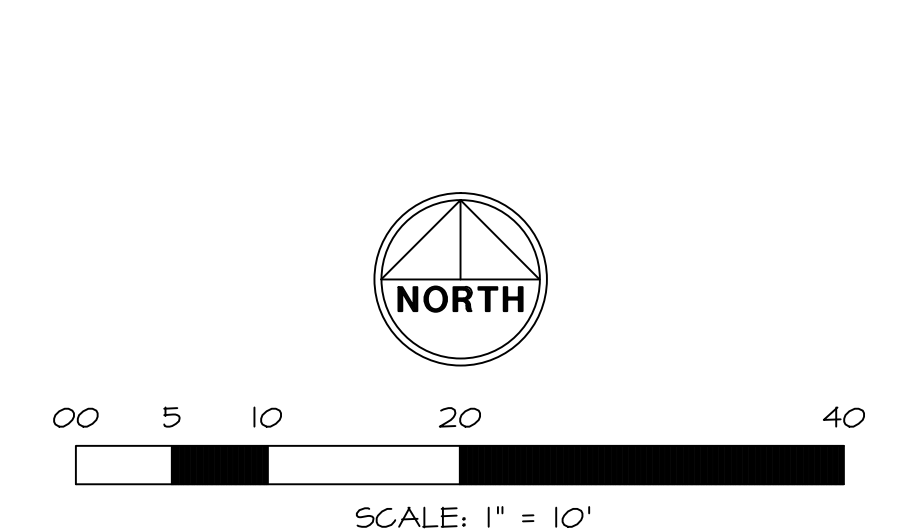


- SWPPP NOTES:**
- ALL DISTURBED GREEN SPACES ON THE SITE SHALL BE RESTORED ACCORDING TO THE SEED BED PREPARATION SPECIFICATIONS BELOW AND BLANKETED OR MATTED AS SHOWN ON THE PLANS.
  - TEMPORARY OR PERMANENT STABILIZATION SHALL OCCUR IMMEDIATELY WHENEVER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL CONSIST OF THE INSTALLATION OF TEMPORARY SEEDING.
  - CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION ENTRANCES AS NECESSARY TO EXCAVATE AREAS AND HAUL SOILS ON-SITE. TRACKING OF DEBRIS ON SITE WILL NOT BE TOLERATED. ANY DEBRIS LEFT OUTSIDE OF THE PROJECT LIMITS MUST BE CLEANED IMMEDIATELY.
  - EROSION CONTROL BLANKETS AND TURF REINFORCEMENT MATS SHALL BE INSTALLED USING 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. METAL STAKES AND STAPLES ARE PROHIBITED.
  - CONTRACTOR SHALL PROVIDE ALL NECESSARY MAINTENANCE FOR THE SEDIMENT AND EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
  - CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO M-T CIVIL ENGINEERING ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
  - AFTER REMOVAL OF SILT FENCE CONTRACTOR SHALL RESTORE TRENCH WITH TOPSOIL AND SEEDING BLANKET.



**EXISTING UTILITY DATA**

1	RIM=646.04' (SANITARY) 48" CONCRETE STRUCTURE INV=642.68' (8" PVC E) INV=642.70' (8" PVC W)	8	RIM=645.31' (STORM) 24" CONCRETE STRUCTURE INV=643.66' (8" D.I. N) INV=643.61' (8" D.I. SW)	15	RIM=643.10' (STORM) 24" CONCRETE STRUCTURE INV=640.15' (15" PVC NE/SW) INV=640.15' (12" RCP N)
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DATE	BY	REVISIONS
11-9-16	VE	PER MWD COMMENTS
11-2-16	VE	PER MWD COMMENTS

**W-T CIVIL ENGINEERING, LLC**  
CIVIL AND STRUCTURAL ENGINEERS

2675 Pratum Avenue  
Hoffman Estates, Illinois 60135  
PH: (224) 226-6444  
www.wtengineering.com

IL License No.: 184-003492 Exp: 04/30/17

**NEW DRIVEWAY**  
1428 HILLGROVE AVENUE  
WESTERN SPRINGS, IL 60558

**STORMWATER POLLUTION PREVENTION PLAN**

DATE: 8/12/16  
SCALE: 1" = 10'  
DRAWN: VE  
CHECK: JFG  
JOB: CE16049  
SHEET: C-5.0

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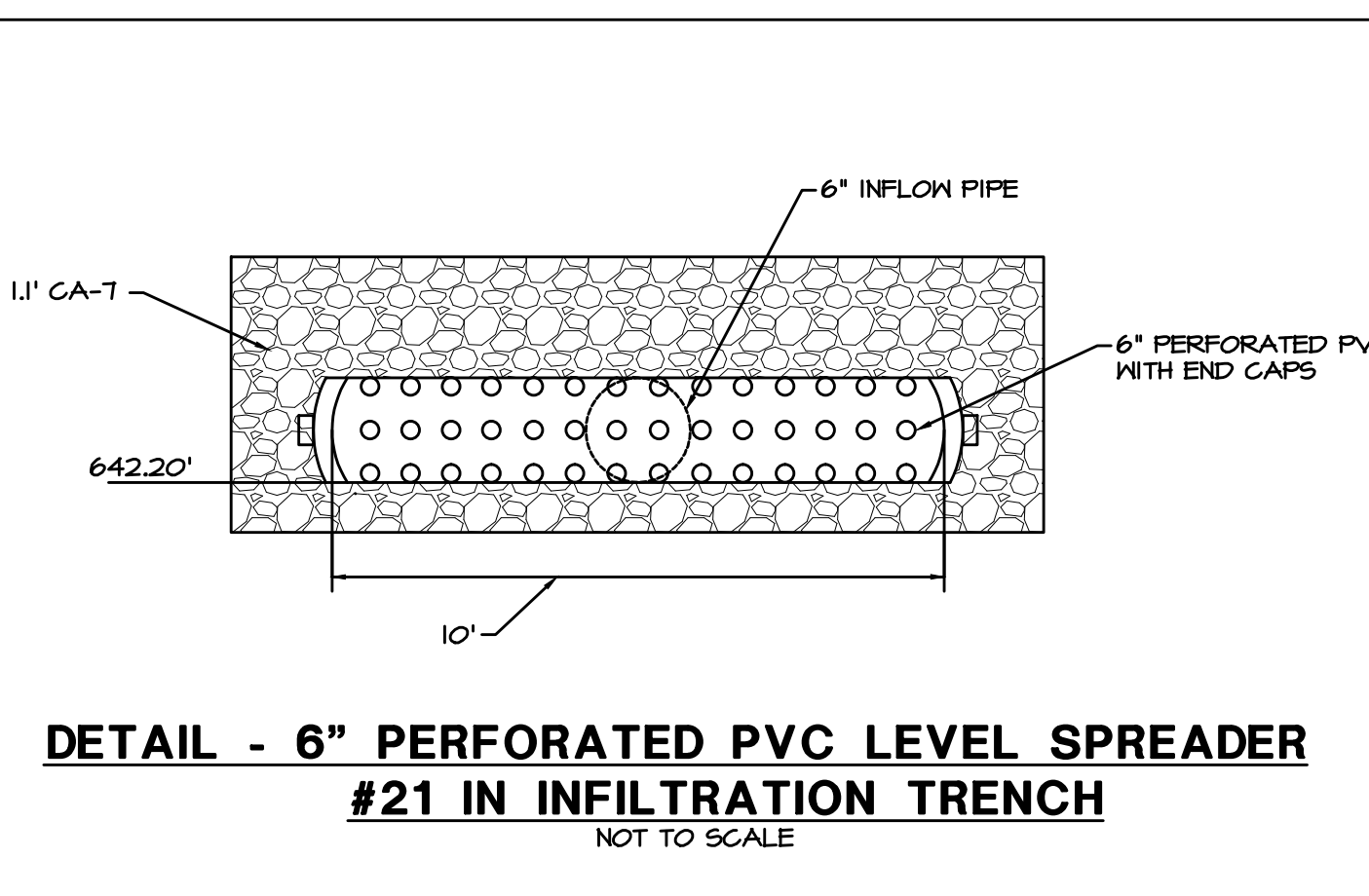


**GENERAL NOTES**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:
  - ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
  - "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" LATEST EDITION.
  - "ILLINOIS URBAN MANUAL," LATEST EDITION.
  - BUILDING CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES.
  - UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, 29 CFR PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."
  - ILLINOIS DRAINAGE LAW.
  - ILLINOIS ENVIRONMENTAL BARRIERS ACT.
  - ILLINOIS ACCESSIBILITY CODE.
  - ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.
  - TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE.
- ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNING AGENCY(S) SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE ALL NECESSARY REPAIRS AT HIS EXPENSE AND TO THE SATISFACTION OF THE GOVERNING AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNAGE AND TRAFFIC CONTROL DEVICES TO INFORM AND PROTECT THE PUBLIC.
- CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING OR PUBLIC WORKS DEPARTMENT AND/OR OTHER GOVERNING AUTHORITY(S) 48 HOURS PRIOR TO COMMENCING CONSTRUCTION OF EACH MAJOR CATEGORY OF WORK, INCLUDING BUT NOT LIMITED TO, ANY PUBLIC IMPROVEMENTS, ROADWAY CLOSURES OR UTILITY INSTALLATIONS. TWO HOUR NOTICE SHALL BE GIVEN FOR ANY WORK ITEM THAT REQUIRES INSPECTION AND TESTING SUCH AS SANITARY SEWER OR WATER MAIN INSTALLATION.
- BEING THAT THIS PROJECT IS PERMITTED UNDER THE NEW WATERSHED MANAGEMENT ORDINANCE (NMO), THE MWRD REQUIRES 48 HOURS OF ADVANCE NOTIFICATION PRIOR TO ANY GROUND DISTURBANCE. THE MWRD WILL BE INSPECTING FOR APPLICABLE EROSION CONTROL AND SEDIMENT CONTROL MEASURES SUCH AS SILT FENCING, INLET PROTECTION, CONCRETE WASH, ETC., FOLLOWED BY SANITARY SEWER AND VOLUME CONTROL INSTALLATION INSPECTIONS. PLEASE REFER TO THE APPROVED PERMIT PLANS AND HAVE THESE MEASURES IN PLACE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. CONTRACTOR SHALL CALL THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) AT 1-800-842-0123 OR BY DIALING 811. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES STAKED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER.
- ALL EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS PREPARED BY THE ENGINEER. ACCORDING TO INFORMATION AVAILABLE FROM PUBLIC RECORDS OR VISIBLE FIELD MARKINGS, THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED.
- ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS AND TO THE SATISFACTION OF THE APPLICABLE UTILITY OWNERS.
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.
- ALL PROPERTY MARKERS AND REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.
- THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE CONSTRUCTION OPERATIONS ABUT PUBLIC THROUGH-FARES AND ADJACENT PROPERTY.
- ALL AREAS DISTURBED BY THE GENERAL CONTRACTOR OR SUB-CONTRACTORS SHALL BE RETURNED TO THE ORIGINAL CONDITIONS OR BETTER, EXCEPT WHERE PROPOSED CONSTRUCTION IS INDICATED ON THE PLANS.
- NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
- PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY ENGINEER OR HIS REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF 18 (EIGHTEEN) MONTHS FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL KEEP THE PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS AT THE END OF EACH WORKING DAY.
- ALL CONSTRUCTION STAKING, SCHEDULING AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THREE (3) ORIGINAL COPIES OF ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:
  - ASPHALT PAVEMENT MIX DESIGN
  - CONCRETE MIX DESIGN
  - GRANULAR MATERIAL GRADATION
  - PRECAST CONCRETE STRUCTURES (MANHOLES, INLETS, CATCH BASINS, VAULTS, ETC.)
  - WATER MAIN MATERIALS (VALVES, FIRE HYDRANTS, ETC.)
- AFTER COMPLETION OF THE PROPOSED IMPROVEMENTS AND WHEN REQUIRED BY THE GOVERNING AUTHORITY(S), CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS-BUILT AND/OR RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONALLY LICENSED ENGINEER OR SURVEYOR AND SHALL INCLUDE AT A MINIMUM (WHERE APPLICABLE TO THE SCOPE OF WORK) THE FOLLOWING ITEMS:
  - TOPOGRAPHY AND SPOT GRADE ELEVATIONS OF ALL PROPOSED PERMANENT SITE FEATURES INCLUDING ANY STORM WATER FACILITIES OR MODIFICATIONS TO EXISTING STORM WATER FACILITIES.
  - HORIZONTAL AND VERTICAL LOCATION AND ALIGNMENT OF ALL PROPOSED ROADWAYS, PARKING LOTS, UTILITIES, BUILDINGS OR OTHER PERMANENT SITE FEATURES.
  - RIM AND INVERT AND/OR TOP OF PIPE ELEVATIONS FOR ALL PROPOSED UTILITIES.
  - AS-BUILT AND/OR RECORD DRAWING INFORMATION SHALL BE SHOWN ON THE APPROVED ENGINEERING PLANS ISSUED FOR CONSTRUCTION. ANY AND ALL DEVIATIONS FROM THESE APPROVED PLANS SHALL BE SHOWN BY MEANS OF STRIKING THROUGH THE PROPOSED INFORMATION AND CLEARLY INDICATING THE AS-BUILT LOCATIONS AND ELEVATIONS ON THE APPLICABLE PLAN SHEET.

**SITE GRADING AND PAVING**

- ALL SITE WORK, GRADING, AND PAVING OPERATIONS WITHIN THE LIMITS OF THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES IN THE PLANS AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
- EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 200 OF THE "STANDARD SPECIFICATIONS." ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR AS DIRECTED BY THE PROJECT REPRESENTATIVE IN THE FIELD.
- EXCAVATED TOPSOIL SHALL BE STOCKPILED ON THE SITE IN AREAS DESIGNATED BY THE PROJECT ENGINEER UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING. UNLESS OTHERWISE NOTED ON THE PLANS, A MINIMUM OF 6" TOPSOIL RE-SPREAD AND SEEDING FOR ALL DISTURBED AREAS IS REQUIRED.
- THE SOILS INVESTIGATION REPORT FOR THE SITE AND ALL APPENDIX THERE TO ARE SUPPORTING DOCUMENTS FOR THIS PROJECT. THE RECOMMENDATIONS AS STATED IN SAID REPORT ARE HEREBY INCORPORATED INTO THESE CONSTRUCTION NOTES BY REFERENCE AND SHALL BE FOLLOWED BY ALL CONTRACTORS. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY A SOILS ENGINEER OR HIS REPRESENTATIVE. FURTHER CONSTRUCTION OPERATIONS WILL NOT BE PERMITTED UNTIL THE SOILS ENGINEER ISSUES A WRITTEN STATEMENT THAT THE AREA IN QUESTION HAS BEEN SATISFACTORILY PREPARED AND IS READY FOR CONSTRUCTION.
- ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE SOIL REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL USE CARE IN GRADING NEAR TREES, SHRUBS, AND BUSHES WHICH ARE NOT NOTED TO BE REMOVED SO AS NOT TO CAUSE INJURY TO ROOTS OR TRUNKS.
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS OWN EXPENSE.
- REMOVED DRIVEWAY PAVEMENT, SIDEWALK, CURBS, TREES AND STUMPS SHALL BE DISPOSED OF LEGALLY OFF-SITE AT LOCATIONS DETERMINED BY THE CONTRACTOR.
- ON AND OFF SITE PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET STATE AND LOCAL STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
- PROPOSED ELEVATIONS INDICATE FINISHED GRADE CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THE THICKNESS OF THE PROPOSED PAVING (ROADS, WALKS, DRIVE, ETC.) SECTION OR TOPSOIL AS INDICATED ON THE PLANS.
- CONTRACTOR SHALL PROVIDE SMOOTH VERTICAL CURVES THROUGH THE HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS ON THE PLANS. CONTRACTOR SHALL PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND AVOID ANY RIDGES AND/OR DEPRESSIONS.
- ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
- ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
- ALL CONCRETE POURED SHALL BE:
  - MINIMUM COMPRESSIVE STRENGTH:
    - 3500 P.S.I. AT 14 DAYS (PER I.D.O.)
    - 4500 P.S.I. AT 28 DAYS (PER A.C.I.)
  - MAX WATER-CEMENTITIOUS MATERIALS RATIO: 0.44 (AIR-ENTRAINED)
  - AIR CONTENT: 6% +/- 1.5% AT POINT OF DELIVERY FOR EXPOSED CONCRETE
- WHEN FIBER MESH REINFORCEMENT IS SPECIFIED, IT SHALL CONSIST OF FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE PAVEMENT, COMPLYING WITH ASTM C 1116, TYPE III, 1/4" TO 3/8" INCHES LONG. FIBERS SHALL BE UNIFORMLY DISPERSED IN THE CONCRETE MIXTURE AT THE MANUFACTURER'S RECOMMENDED RATE, BUT NOT LESS THAN 1.5 LBS / CU. YD.
- THE GRADING AND CONSTRUCTION OF THE PROPOSED PAVEMENT IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND MATCH EXISTING GRADES FLUSH.
- CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
- DRIVENWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE THE SURFACE DRAINAGE SYSTEM.
- TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS AND SHALL BE INSTALLED AND PROVIDED WHENEVER CONSTRUCTION FOR UTILITIES ARE WITHIN STREET AREAS, APPLICABLE ORDINANCES OF THE MUNICIPALITY, COUNTY OR STATE SHALL ALSO GOVERN THE TRAFFIC CONTROL REQUIREMENTS.



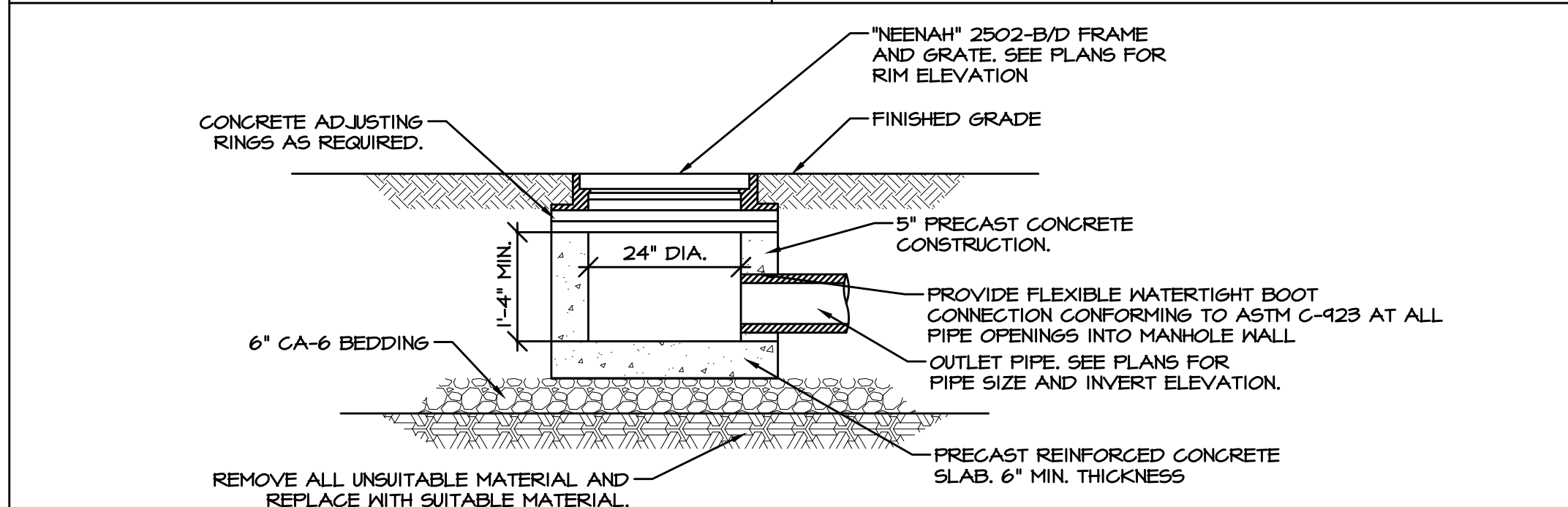
**DETAIL - 6" PERFORATED PVC LEVEL SPREADER #21 IN INFILTRATION TRENCH**  
NOT TO SCALE

**STORMWATER POLLUTION PREVENTION NOTES**

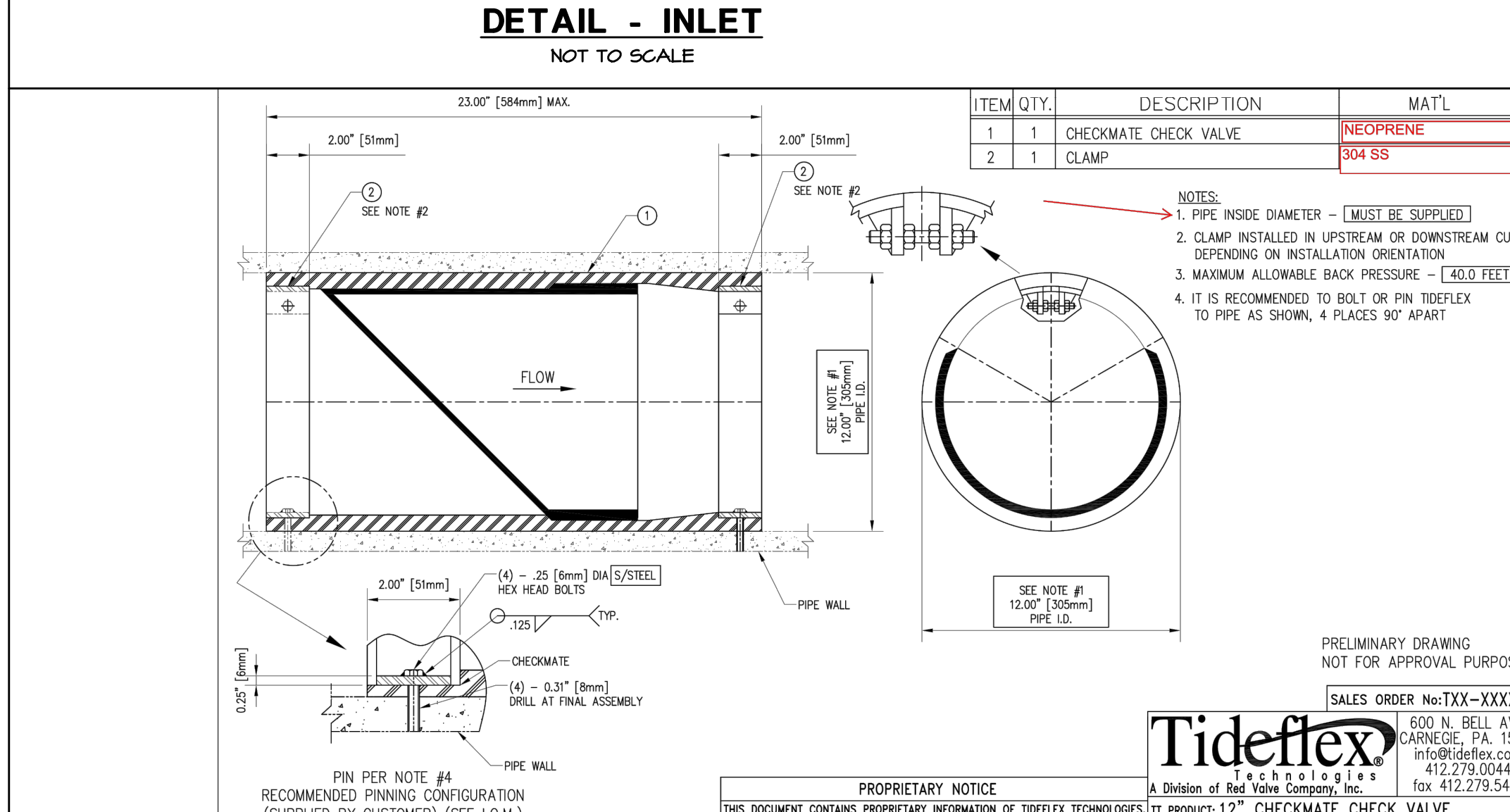
- COPIES OF THE APPROVED STORM WATER POLLUTION PREVENTION PLANS SHALL BE MAINTAINED ON THE SITE AT ALL TIMES ALONG WITH THE PERMIT, INCIDENT OF NON-COMPLIANCE (I.O.N.) FORM AND INSPECTION FORMS.
- CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO W-T CIVIL ENGINEERING. THE CONTRACTOR SHALL HAVE BEEN STABILIZED, THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION MEASURES, INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
- ILLINOIS QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE CONSTRUCTION SHALL BE KEPT OFF-SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.5 INCH OR GREATER (OR EQUIVALENT SNOWFALL). REQUIRED REPAIRS SHOULD BE COMPLETED WITHIN FORTY-EIGHT (48) HOURS OF THE PERTINENT INSPECTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM ANY SUBCONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTION PREVENTION ACT (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THE SITES SHALL BE KEPT COVERED AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED.
- PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED FOR REVIEW.
- THE GOVERNING AUTHORITIES HAVING JURISDICTION OVER THE PROJECT SITE MUST BE NOTIFIED ONE (1) WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE (1) WEEK PRIOR TO THE FINAL INSPECTION.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE GOVERNING AUTHORITY.
- IF AFTER REPEATED FAILURE ON THE PART OF THE CONTRACTOR TO PROPERLY CONTROL EROSION, POLLUTION, AND/OR SILTATION, THE GOVERNING AUTHORITIES RESERVE THE RIGHT TO INITIATE ANY NECESSARY CORRECTIVE MEASURES AND CHARGE ANY COSTS TO THE CONTRACTOR.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL LATEST EDITION.
- INLET PROTECTION SHALL BE INSTALLED AROUND EACH INLET OR CATCH BASIN. THESE SHALL BE MAINTAINED UNTIL THE TRIBUTARY DRAINAGE AREAS HAVE ADEQUATE VEGETATIVE COVER OR APPROPRIATE GROUND STABILIZATION.
- ALL STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
- CONTRACTORS SHALL MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
- ALL DISTURBED AREAS SHOULD BE SEEDED OR SODDED WITHIN THREE (3) DAYS OF FINAL DISTURBANCE.
- WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS ARE DEPOSITED IN THE LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
- ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF INLET PROTECTION OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- CONSTRUCTION ACCESS POINTS SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE FROM THE PROPOSED CONSTRUCTION ENTRANCE. THE USE OF ANY OTHER ACCESSIBLE IS PROHIBITED.
- DURING DENATURING OPERATIONS, WATER SHALL BE PUMPED OR OTHERWISE DISCHARGED FROM THE SITE INTO SEDIMENT BASINS, SILT TRAPS, DENATURING BAGS OR POLYMER MIXING SHALE. DENATURING DIRECTLY INTO FIELD TILES, WETLANDS, ADJACENT PROPERTIES, PUBLIC RIGHTS-OF-WAY, STREAMS, LAKES, PONDS, RIVERS, OR STORMWATER SYSTEMS IS PROHIBITED.
- ALL STOCKPILES SHOULD BE STABILIZED WITHIN THREE (3) DAYS OF FORMING THE STOCKPILE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED AS FOLLOWS:
  - WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
  - WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED (I.E. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES.
- EROSION CONTROL BLANKETS SHALL BE USED IN AREAS OF 6:1 SLOPE OR STEEPER AND AS SHOWN ON THE PLANS.
- ALL DISTURBED GREEN SPACES WITHIN THE R.O.W. SHALL BE RESTORED WITH 6" OF TOPSOIL AND RESEEDING.
- THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT THE SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY, AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.
- ONCE ALL UPSTREAM AREAS ARE STABILIZED WITH SEED AND BLANKET OR SOD AS SHOWN IN THE PLANS, SILT FENCING SHALL BE REMOVED AND THE TRENCH SHALL BE RESTORED WITH TOPSOIL, SEED, FERTILIZER AND BLANKETING. RESTORATION SHALL OCCUR IMMEDIATELY FOLLOWING THE REMOVAL OF THE SILT FENCE. RESTORATION SHALL BE COMPLETED THE SAME WORKING DAY AS ANY SILT FENCING REMOVAL AND AT LEAST 2 HOURS BEFORE ANY FORECASTED PRECIPITATION.
- ALL TEMPORARY EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS SOON AS PERMANENT SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PROPERLY STABILIZED OR DISPOSED OFF BY THE CONTRACTOR.

**STORM SEWERS**

- ALL STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION ("STANDARD SPECIFICATIONS"), THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("DOT STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
- ALL STORM SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION V OF THE "STANDARD SPECIFICATIONS" AND DIVISIONS 500 AND 600 OF THE "DOT STANDARD SPECIFICATIONS."
- ALL RCP STORM SEWER PIPE 12" IN DIAMETER AND LARGER SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RINGS) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS." ALL 10" DIAMETER RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS V.
- ALL HDPE STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE PER ASTM F-2306 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212.
- ALL PVC STORM SEWER PIPE SHALL BE POLYVINYL CHLORIDE SDR 26 PIPE PER ASTM D-3034 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212, UNLESS OTHERWISE NOTED.
- ALL STORM SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS."
  - ALL STORM SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D-2821. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-7, CA-II OR CA-13.
  - TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL STORM SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS.
- ALL REQUIRED STORM STRUCTURE RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLOPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR EXTENDED TO OUTLET INTO A PROPOSED DRAINAGE WAY. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER AND/OR ENGINEER UPON COMPLETION OF THE PROJECT AND ACCURATELY SHOWN ON THE RECORD DRAWINGS.



**DETAIL - INLET**  
NOT TO SCALE



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**A. REFERENCED SPECIFICATIONS**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:  
 \* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;  
 \* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;  
 \* VILLAGE OF WESTERN SPRINGS MUNICIPAL CODE;  
 \* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;  
 \* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

**B. NOTIFICATIONS**

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- THE VILLAGE OF WESTERN SPRINGS ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

**C. GENERAL NOTES**

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS \_\_\_\_\_ FT.
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

**D. SANITARY SEWER**

- THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)		
WATER MAIN QUALITY PVC	ASTM D-3350	ASTM D-3261, F-2620 (HEAT FUSION)
4-INCH TO 36-INCH	ASTM D-3035	ASTM D-3212, F-477 (GASKETED)
4-INCH TO 12-INCH	ASTM D-2241	ASTM D-3139
14-INCH TO 48-INCH	AWWA C900	ASTM D-3139
	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 1/4" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:  
 a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE 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 BRANCH SECTION.  
 c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMANS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

**E. EROSION AND SEDIMENT CONTROL**

- THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:  
 a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.  
 b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
- MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
- VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
- EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
- STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMANS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.



TECHNICAL GUIDANCE MANUAL  
MWRD GENERAL NOTES

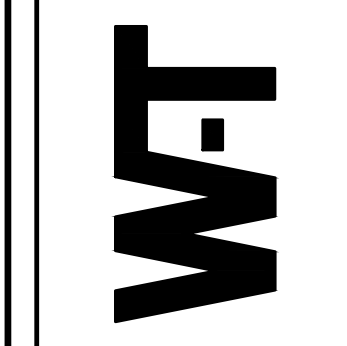
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**W-T CIVIL ENGINEERING, LLC**  
 CIVIL AND STRUCTURAL ENGINEERS  
 2675 Pratum Avenue  
 Hoffman Estates, Illinois 60132  
 PH: (224) 255-6444  
 www.wtengineering.com  
 IL License No.: 184-003492 Exp: 04/30/17



**NEW DRIVEWAY**  
 1428 HILLGROVE AVENUE  
 WESTERN SPRINGS, IL 60558

**MWRD GENERAL NOTES**

DATE:	8/12/16
SCALE:	N.T.S.
DRAWN:	VE
CHECK:	JPG
JOB:	CE16049
SHEET:	<b>C-7.1</b>



