

Proposed Improvements for OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION

OAK BROOK PARK DISTRICT
1450 FOREST GATE ROAD
OAK BROOK, ILLINOIS
(630) 990-4233

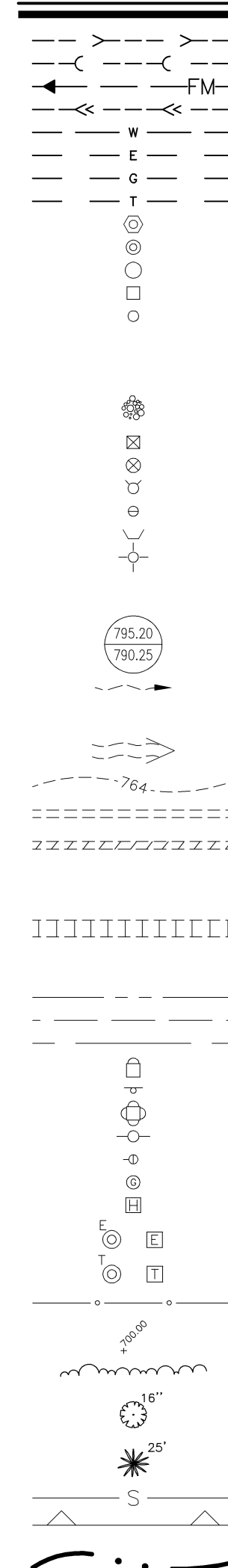
1450 FOREST GATE ROAD
VILLAGE OF OAKBROOK, ILLINOIS

INDEX OF SHEETS

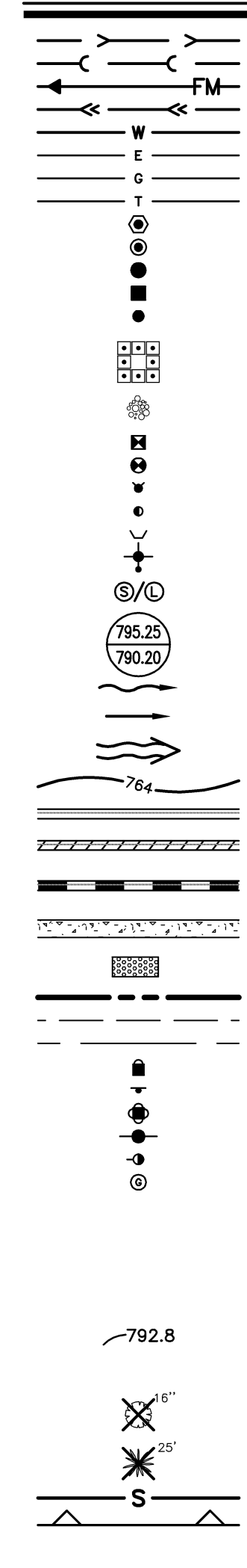
| SHEET NO. | DESCRIPTION |
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STANDARD SYMBOLS

EXISTING

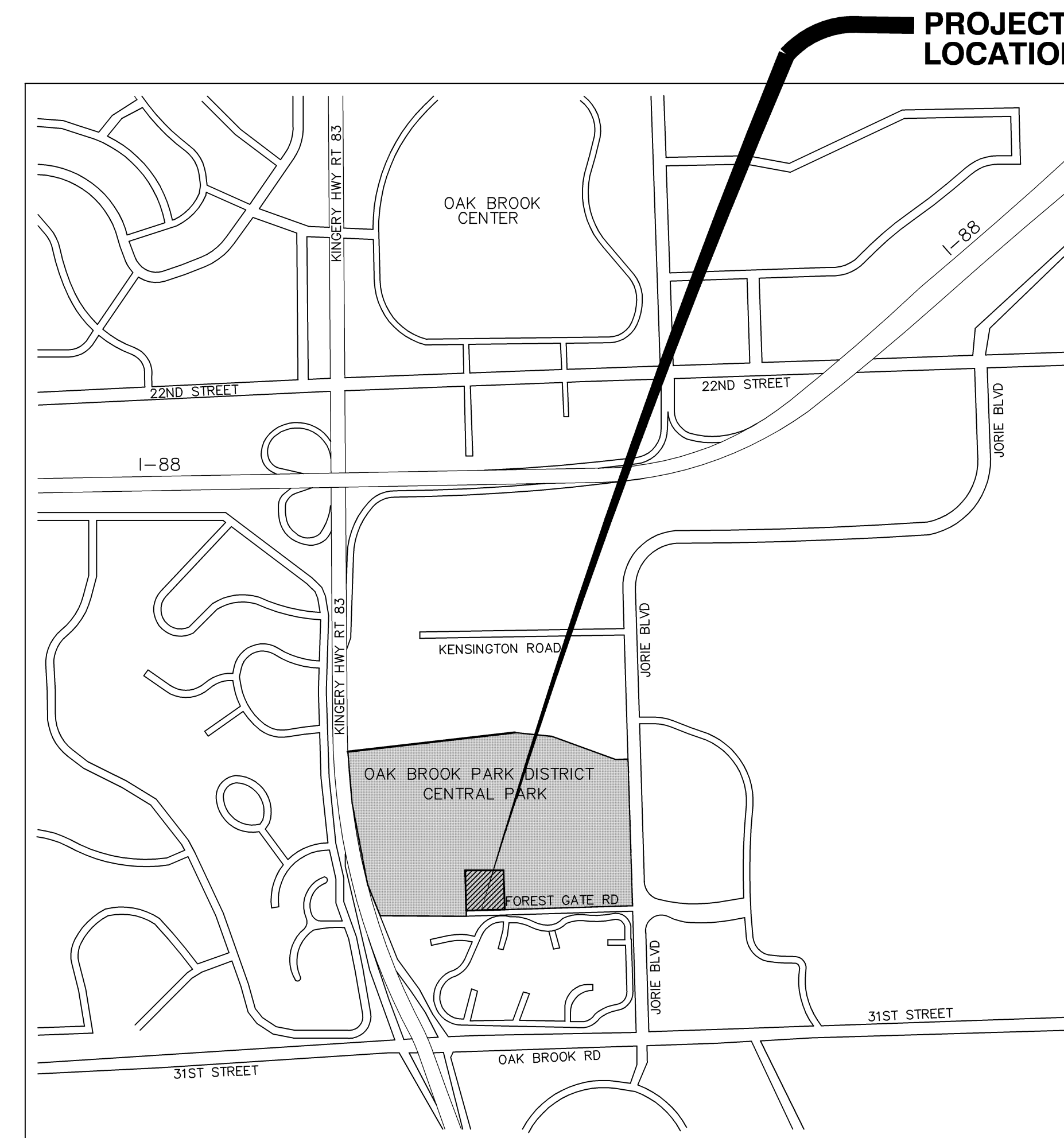


PROPOSED



ABBREVIATIONS

| | | | | | |
|----------|------------------------------|--------|--------------------------------|----------|------------------------------------|
| ADJ | ADJUST | F/L | FLOW LINE | PVT | POINT OF VERTICAL TANGENCY |
| AGG. | AGGREGATE | FM | FORCE MAIN | P | PAVEMENT |
| ARCH | ARCHITECT | G | GROUND | P.U.D.E. | PUBLIC UTILITY & DRAINAGE EASEMENT |
| B.A.M. | BITUMINOUS AGGREGATE MIXTURE | GAS | GAS | R | RADIUS |
| B-B | BACK TO BACK | G/F | GRADE AT FOUNDATION | R.O.W. | RIGHT-OF-WAY |
| B/P | BOTTOM OF PIPE | G/WALL | GRADE AT WALL | RCP | REINFORCED CONCRETE PIPE |
| B/W | BACK OF WALK | GM | GENERAL MERCHANDISE | REM | REMOVAL |
| B-BOX | BUFFALO BOX | GR | GROCERY | REV | REVERSE |
| BIT. | BITUMINOUS | GW | GUY WIRE | RR | RAILROAD |
| BM | BENCHMARK | HDWL | HEADWALL | RT | RIGHT |
| B.O. | BY OTHERS | HH | HANDHOLE | SAN | SANITARY |
| C.E. | COMMERCIAL ENTRANCE | HWL | HIGH WATER LEVEL | SF | SQUARE FOOT |
| CB | CATCH BASIN | HYD. | HYDRANT | SHLD. | SHOULDER |
| CL | CENTERLINE | INL | INLET | SL | STREET LIGHT |
| CLD | CLOSED LID | INV. | INVERT | SMH | SANITARY MANHOLE |
| CMP | CORRUGATED METAL PIPE | IP | IRON PIPE | ST | STORM |
| CNTRL | CONTROL | MAX. | MAXIMUM | STA. | STATION |
| CLEANOUT | CLEANOUT | MB | MAILBOX | STD | STANDARD |
| CONC. | CONCRETE | M/E | MEET EXISTING | SW | SIDEWALK |
| CY | CUBIC YARD | MH | MANHOLE | SY | SQUARE YARDS |
| D. | DIAMETER | MIN. | MINIMUM | TBR | TO BE REMOVED |
| DIA. | DIAMETER | NWL | NORMAL WATER LEVEL | T | TELEPHONE |
| DIP | DUCTILE IRON PIPE | OID | OPEN LID | T-A | TYPE A |
| DIMM | DUCTILE IRON WATER MAIN | P.E. | PRIVATE ENTRANCE | T/C | TOP OF CURB |
| DS | DOWNSPOUT | PC | POINT OF CURVE | T/F | TOP OF FOUNDATION |
| DT | DRAIN TILE | PCC | POINT OF COMPOUND CURVE | T/P | TOP OF PIPE |
| E | ELECTRIC | PGL | PROFILE GRADE LINE | T/W | TOP OF WALK |
| E-E | EDGE TO EDGE | PI | POINT OF INTERSECTION | T/WALL | TOP OF WALL |
| ELEV. | ELEVATION | PL | PROPERTY LINE | TEMP | TEMPORARY |
| E/P | EDGE OF PAVEMENT | PP | POWER POLE | TRANS | TRANSFORMER |
| EX. | EXISTING | PROP. | PROPOSED | V.B. | VALVE BOX |
| F.E. | FIELD ENTRANCE | PT | POINT OF TANGENCY | VCP | VITRIFIED CLAY PIPE |
| F-F | FACE TO FACE | PVC | POLYVINYL CHLORIDE PIPE | V.V. | VALVE VAULT |
| F.F. | FINISHED FLOOR | PVC | POINT OF VERTICAL CURVE | WL | WATER LEVEL |
| FES | FLARED END SECTION | PV | POINT OF VERTICAL INTERSECTION | WM | WATER MAIN |



LOCATION MAP
N.T.S.

BENCHMARK:

SOURCE BENCHMARK:
BRONZE DISK MONUMENT IN CONCRETE BASE STAMPED "DUPAGE COUNTY MAPS AND PLATS" AS DESCRIBED FROM DUPAGE COUNTY BENCHMARK YK35001.
PUBLISHED ELEVATION = 719.5371 (NGVD 29)
OBSERVED ELEVATION = 719.35 (NAVD 88) AS DESCRIBED FROM NGS DATA SHEET DESIGNATED AS YK35001 (DK3131).

SITE BENCHMARK NO. 1:
NORTHWEST BOLT OF THE FIRE HYDRANT LOCATED ON THE NORTH SIDE OF THE NORTHEAST PARKING LOT AT CENTRAL PARK IN OAK BROOK, ILLINOIS.
ELEVATION = 666.64
DATUM: NAVD88

SITE BENCHMARK NO. 2:
CROSS CUT ON BACK OF CURB LOCATED ON THE WEST SIDE OF THE ENTRANCE TO CENTRAL PARK IN OAK BROOK, ILLINOIS APPROXIMATELY 200 FEET NORTH OF FOREST GATE ROAD.
ELEVATION = 689.33
DATUM: NAVD88

SITE BENCHMARK NO. 3:
CROSS CUT ON BACK OF CURB LOCATED ON THE SOUTH SIDE OF THE NORTHEAST PARKING LOT AT CENTRAL PARK IN OAK BROOK, ILLINOIS APPROXIMATELY 600 FEET NORTH OF FOREST GATE ROAD.
ELEVATION = 665.95
DATUM: NAVD88

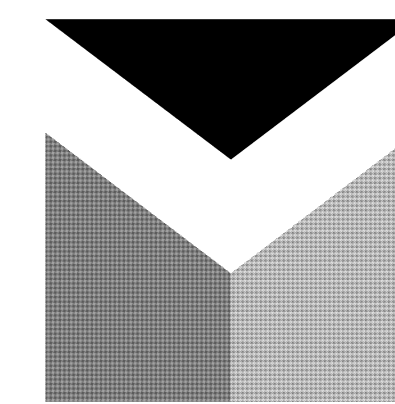
TOPOGRAPHIC FIELD WORK COMPLETED ON SEPTEMBER 8, 2011

NOTES:

1. THE TOPOGRAPHY SURVEY FOR THIS PROJECT IS BASED ON A FIELD SURVEY PREPARED BY COWHEY MANHARD (MANHARD) AND WAS PERFORMED ON SEPTEMBER 8, 2011. 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.

UTILITY CONTACTS

| | |
|--|---|
| VILLAGE OF OAK BROOK 1200 OAK BROOK ROAD OAK BROOK, IL 60521 | COMMONWEALTH EDISON 1040 JAMES AVENUE BOLINGBROOK, IL 60440 (630) 985-4092 |
| ENGINEERING DEPARTMENT CONTACT: PHIL LAURES (630) 368-5130 | NICOR GAS 90 N. FINLEY ROAD GLEN ELLYN, IL 60137 (630) 629-2500 CONTACT: RYANT BANK |
| BUILDING DEPARTMENT CONTACT: BILL HUDSON (630) 368-5110 | TELEPHONE 6655 SOUTH MAIN STREET DOWNERS GROVE, IL 60516 (630) 241-5151 CONTACT: JEFF DOUGLAS |
| PUBLIC WORKS DEPARTMENT CONTACT: DON LANGE (630) 368-5270 | FLAGG CREEK WATER RECLAMATION DISTRICT 7001 FRONTAGE ROAD BURR RIDGE, IL 60527 (630) 323-3299 CONTACT: THOMAS O'CONNOR |



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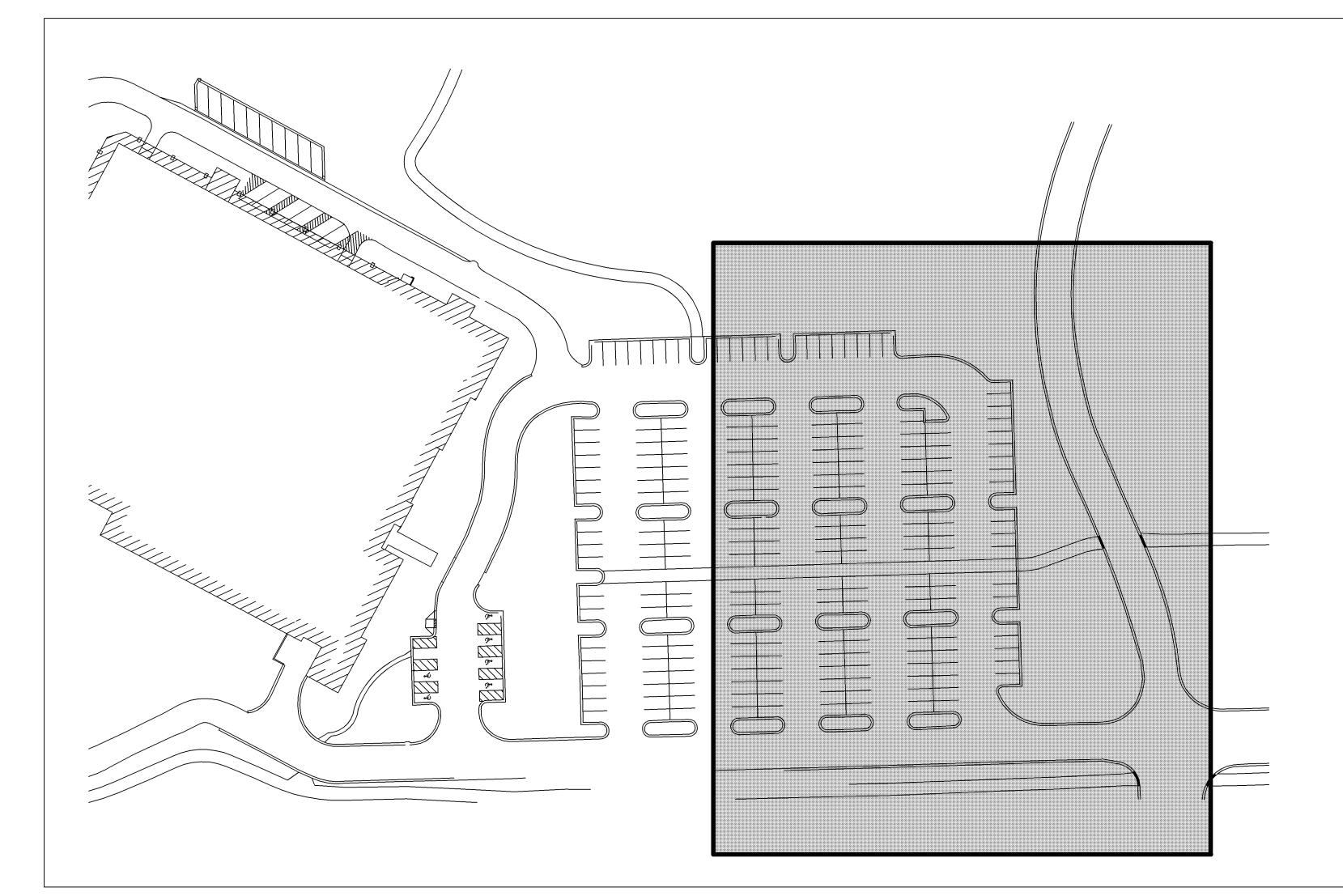
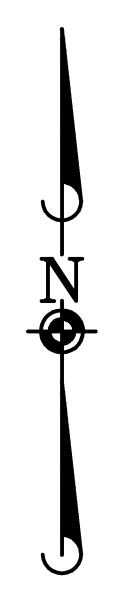
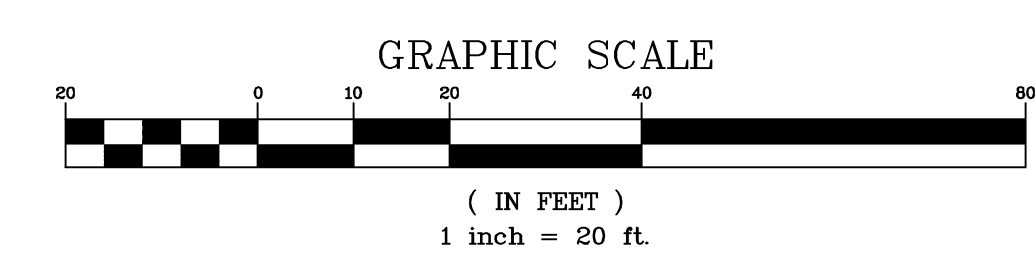
MANHARD CONSULTING, LTD. IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF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

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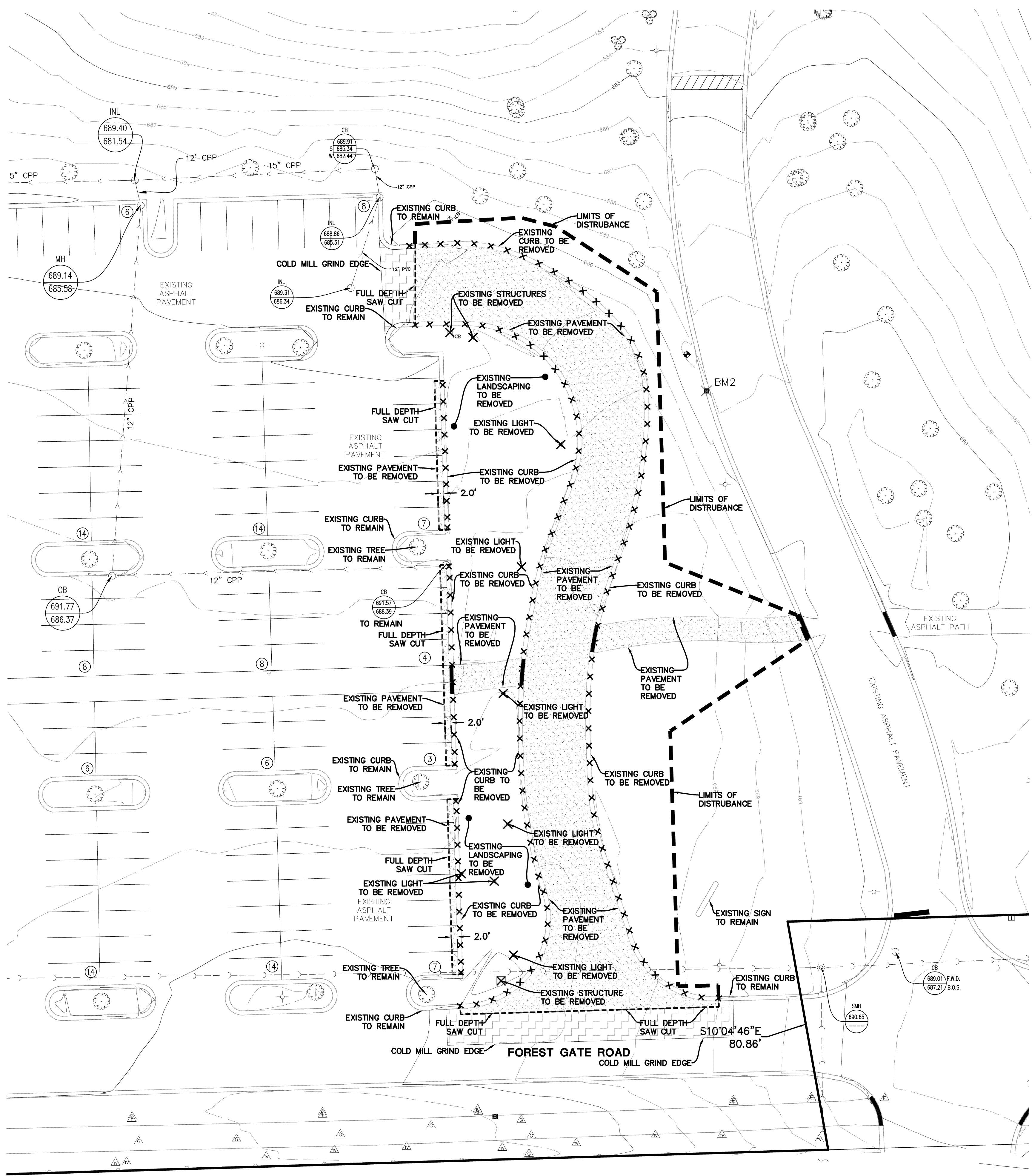
OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION
VILLAGE OF OAKBROOK, ILLINOIS
TITLESHEET

PROJ. MGR.: JPD
PROJ. ASSOC.: JSP
DRAWN BY: JSP
DATE: 04-27-15
SCALE: N.T.S.
SHEET
1 OF **8**
OBPOBIL.01

EXPIRES 11/30/15
SEAL



EX. RECREATIONAL CENTER PARKING LOT



| DEMOLITION LEGEND | |
|-------------------|---|
| | PAVEMENT AND BASE TO BE REMOVED |
| | VARIABLE DEPTH COLD MILL GRIND (0" TO 1-1/2") NOTE: SURFACE SHALL BE MILLED TO ALLOW FOR 1-1/2" MINIMUM SURFACE COURSE |
| | BUILDING TO BE REMOVED |
| | FENCE, RETAINING WALL, RAILROAD TIES, POLES, CURB AND GUTTER, ETC. TO BE REMOVED |
| | UTILITY STRUCTURE TO BE REMOVED |
| | UTILITY LINE REMOVAL |
| | TREE TO BE REMOVED |
| | TO BE REMOVED |
| | SAWCUT EXISTING PAVEMENT |

- EXISTING CONDITIONS NOTES:**
- EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY CONVEY MANHARD (MANHARD CONSULTING, LTD.) ON SEPTEMBER 8, 2011. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
 - EXISTING CONDITIONS AND DEMOLITION PLANS REPRESENT SITE CONDITIONS AS OF NOVEMBER 13, 2014. CONTRACTOR SHALL INSPECT SITE PRIOR TO BIDDING WORK TO VERIFY ACTUAL FIELD CONDITIONS AS PORTIONS OF THE DEMOLITION WORK MAY HAVE SINCE BEEN COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL DEMOLITION WORK AS PER PLANS TO PREPARE THE SITE FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS.
 - REMOVE ALL TREES AND LANDSCAPE WITHIN LIMITS OF DISTURBANCE AND PROPOSED PARKING LOT AREA. SPECIFIC LOCATIONS NOT SHOWN ON PLANS. CONTRACTOR TO FIELD VERIFY LOCATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS.

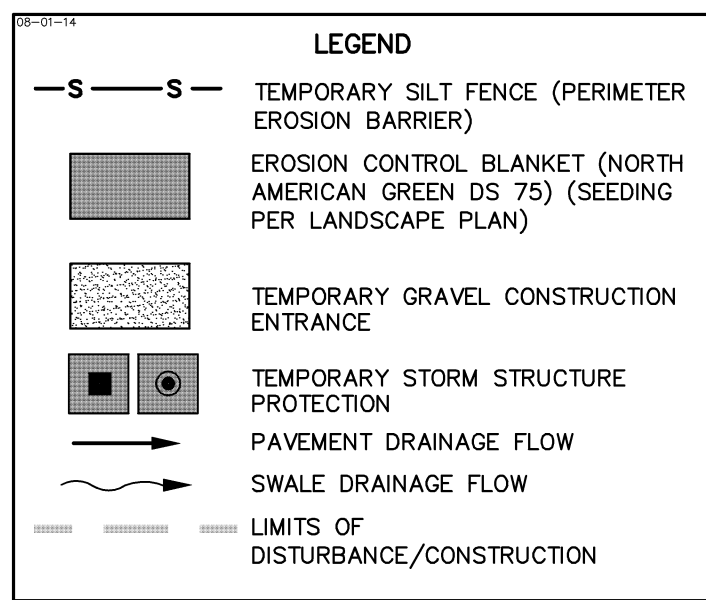
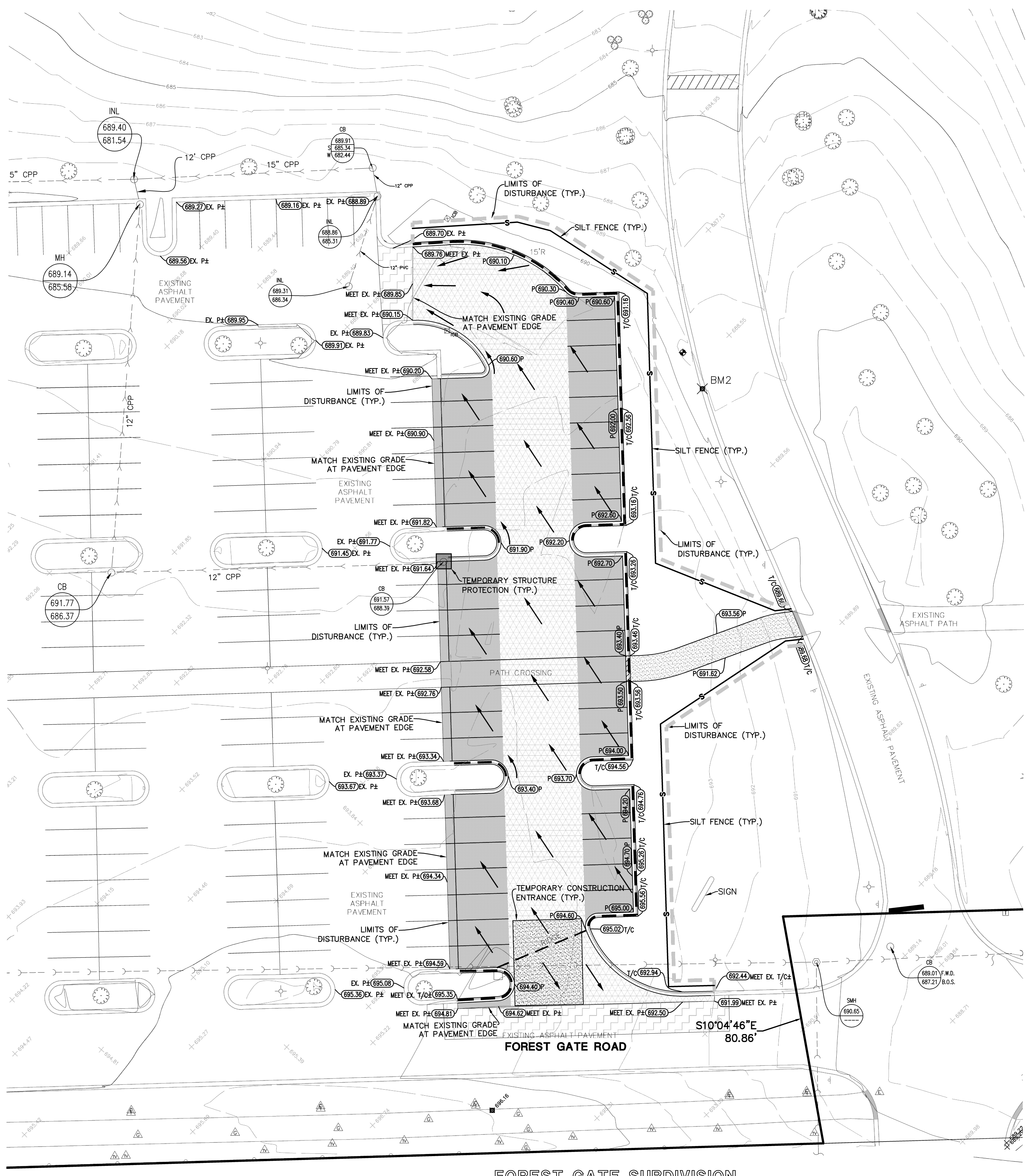
OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION
 VILLAGE OF OAKBROOK, ILLINOIS
 EXISTING CONDITIONS AND DEMOLITION PLAN

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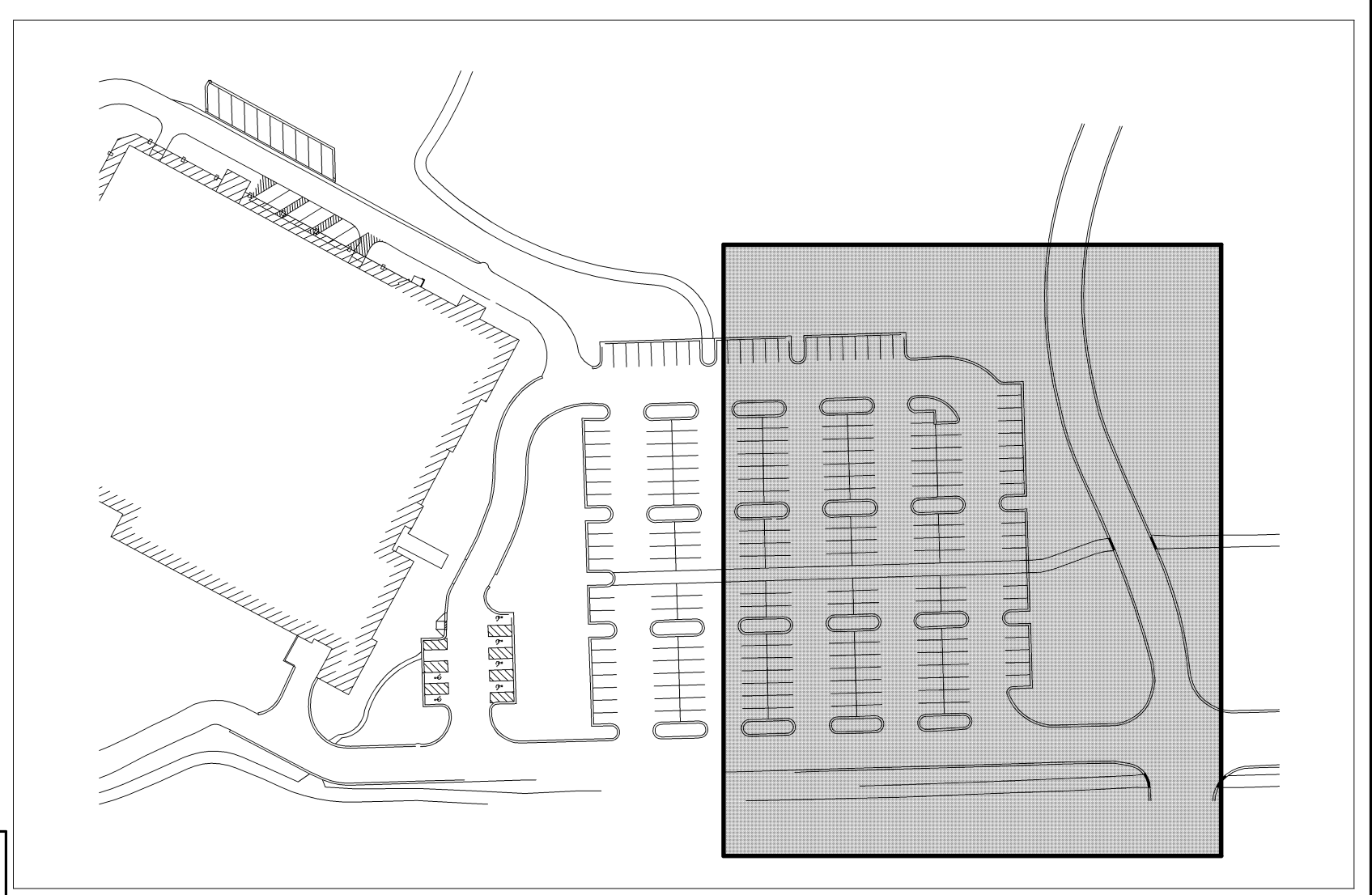
PROJ. MGR.: JPD
 PROJ. ASSOC.: JSP
 DRAWN BY: JSP
 DATE: 04-27-15
 SCALE: 1"=20'

SHEET
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EX. RECREATIONAL CENTER PARKING LOT



- 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 BASIN. PRIOR TO BEGINNING MASS EXCAVATION, THE CONTRACTOR SHALL CONSTRUCT DITCHES, SWALES, SEDIMENTATION TRAPS AND SILTATION CONTROL MEASURES AS REQUIRED TO INTERCEPT SURFACE WATERS BEFORE THEY FLOW ONTO ADJACENT PROPERTY AND CONVEY THEM TO THE DETENTION BASIN.
 - DISTURBED AREA SHALL BE STABILIZED BY SEEDING AT A MINIMUM, WITHIN FIVE (5) DAYS OF COMPLETION OF DISTURBANCE UNLESS THE AREA WILL BE DISTURBED WITHIN FOURTEEN (14) DAYS AND GRASS SOWN AS NECESSARY TO RE-ESTABLISH VEGETATION FOR CONTROL OF SILTATION AND SOIL EROSION.
 - TEMPORARY SEED MIXTURE SHALL BE APPLIED AT 64 LBS./ACRE.
 - INLET PROTECTION SHALL BE INSTALLED UNDER THE GRATING OF EACH DRAINAGE STRUCTURE.
 - TOPSOIL STOCKPILES SHALL BE SEEDED WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETION FOR EROSION CONTROL UNLESS THEY WILL BE DISTURBED WITHIN FOURTEEN (14) CALENDAR DAYS. 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 OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
 - 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.
 - 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 BASIN 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.



GRAPHIC SCALE (IN FEET) 1 inch = 20 ft.

SOIL PROTECTION CHART

| STABILIZATION CHART | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PERMANENT SEEDINGS | | | | | | | | | | | | |
| DORMANT SEEDINGS | | | | | | | | | | | | |
| TEMPORARY SEEDINGS | | | | | | | | | | | | |
| SODDING | | | | | | | | | | | | |
| MULCHING | | | | | | | | | | | | |

NOTE: THIS CHART IS A GUIDE TO ASSIST THE CONTRACTOR IN UNDERSTANDING OPTIONS FOR SOIL STABILIZATION. THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THIS CHART. ANY CONFLICT SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

- CONSTRUCTION SEQUENCE:**
- INSTALL SILT FENCE AT LOCATIONS AS INDICATED ON THE PLANS.
 - PROVIDE STABILIZED CONSTRUCTION ENTRANCE.
 - CONSTRUCT TEMPORARY SEDIMENT TRAPS AND/OR BASINS.
 - CUT AND FILL SITE TO PLAN SUB-GRADE.
 - CONSTRUCT UNDERGROUND IMPROVEMENTS, I.E. SANITARY SEWER WATERMAIN AND STORM SEWER**, ETC.
 - CONSTRUCT PAVEMENT IMPROVEMENTS PER PLAN.
 - COMPLETE CONSTRUCTION OF SITE WITH PERMANENT STABILIZATION.
 - REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
 - ** INSTALL INLET PROTECTION AROUND DRAINAGE STRUCTURES AS CONSTRUCTED.

- GRADING NOTES:**
- PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
 - ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
 - MEET EXISTING GRADE AT LIMITS OF DISTURBANCE UNLESS NOTED OTHERWISE.
 - CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
 - 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 IMPROVEMENTS.
 - THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
 - ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 6 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
 - EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY COWHEY MANHARD (MANHARD CONSULTING, LTD.) ON SEPTEMBER 8, 2011. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.

"THESE EROSION CONTROL PLANS ARE A PORTION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) TOTAL REQUIREMENTS FOR A COMPLETE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY THE GENERAL NPDES PERMIT NO. ILR10. CLIENT AND/OR CONTRACTOR WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL NPDES PERMIT AND COMPILATION OF THE COMPLETE SWPPP."

MANHARD CONSULTING LTD. CONSULTING ENGINEERS & ARCHITECTS

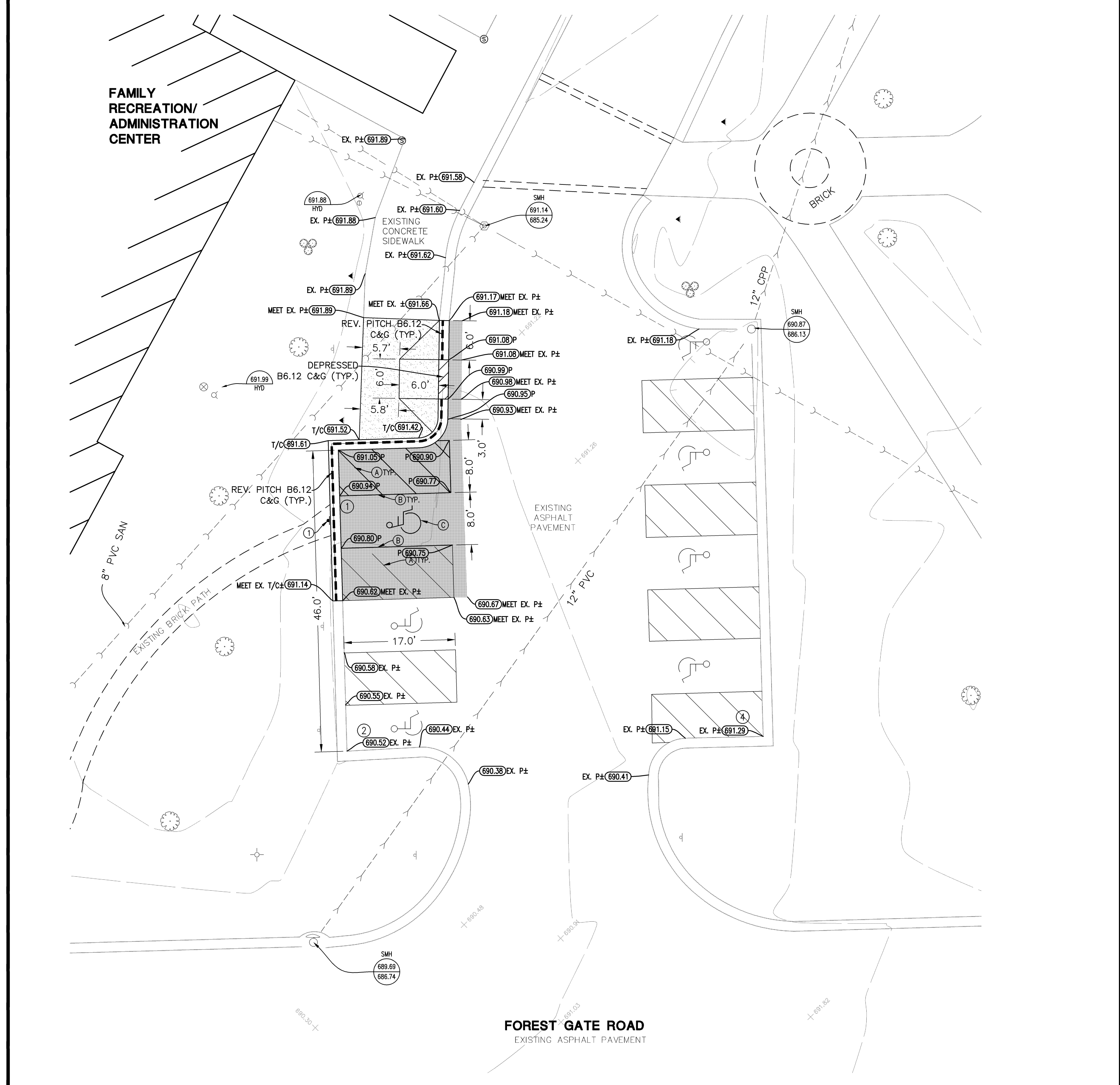
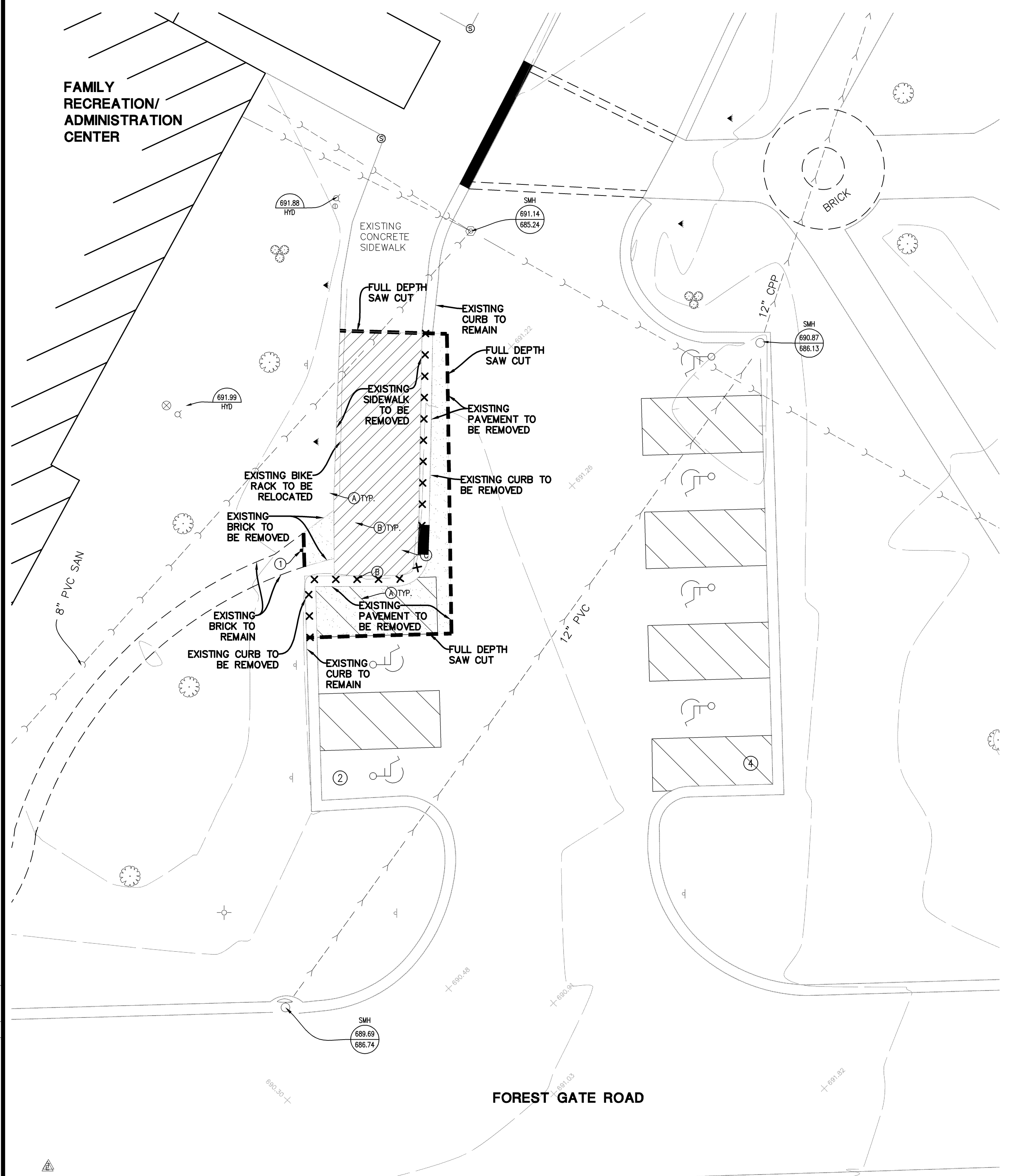
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GRADING AND EROSION CONTROL PLAN

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SHEET 4 OF 8
OBPOBIL.01



EXISTING CONDITIONS & DEMOLITION PLAN

SITE DIMENSIONAL, PAVING & GRADING PLAN

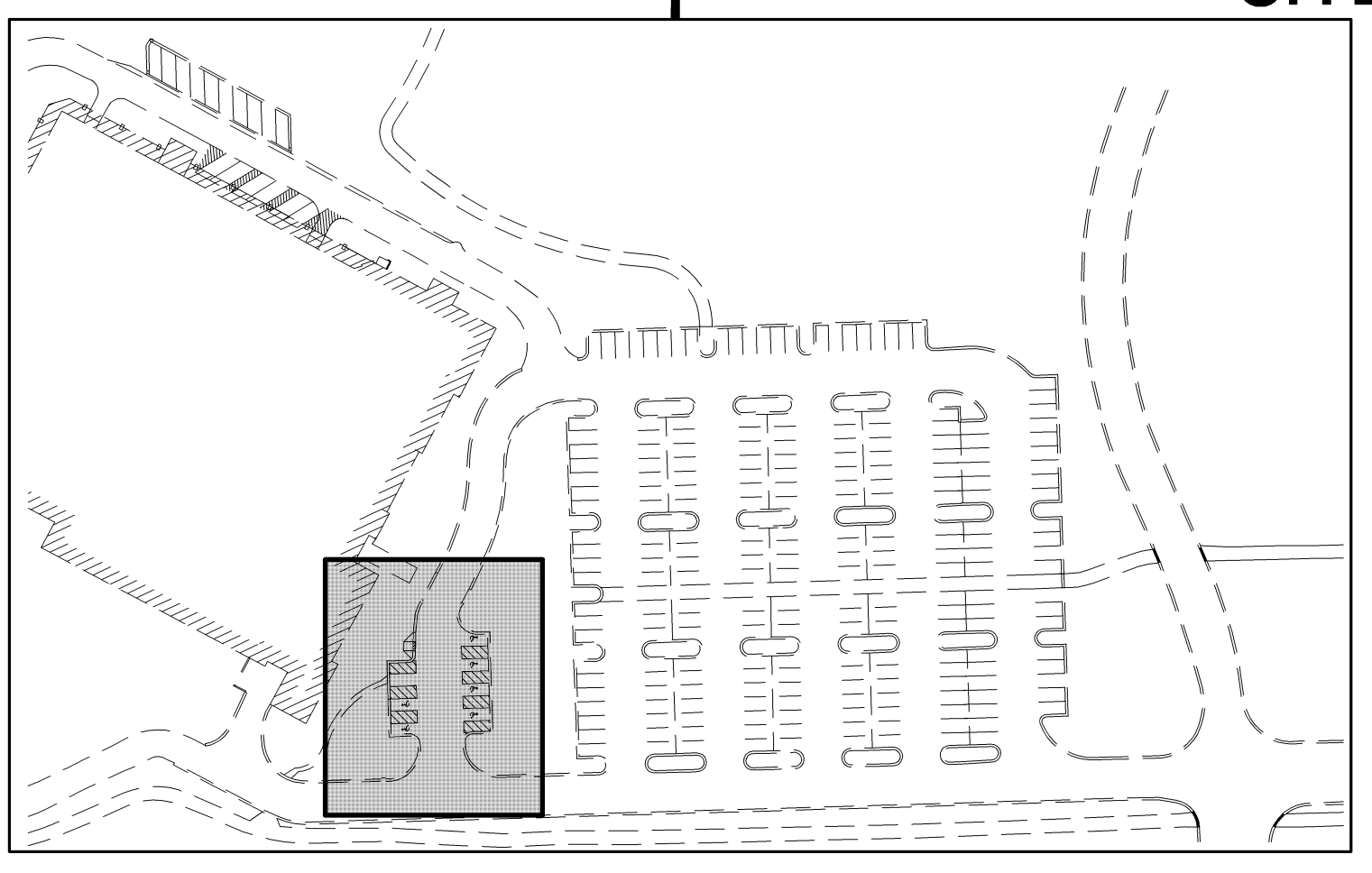
DEMOLITION LEGEND

| | |
|--|--|
| | PAVEMENT AND BASE TO BE REMOVED |
| | SIDEWALK PAVEMENT AND BASE TO BE REMOVED |
| | FENCE, RETAINING WALL, RAILROAD TIES, POLES, CURB AND GUTTER, ETC. TO BE REMOVED |
| | UTILITY STRUCTURE TO BE REMOVED |
| | UTILITY LINE REMOVAL |
| | TREE TO BE REMOVED |
| | TO BE REMOVED |
| | SAWCUT EXISTING PAVEMENT |

EXISTING CONDITIONS NOTES:

- EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY COWHEY MANHARD (MANHARD CONSULTING, LTD.) ON SEPTEMBER 8, 2011. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
- EXISTING CONDITIONS AND DEMOLITION PLANS REPRESENT SITE CONDITIONS AS OF NOVEMBER 13, 2014. CONTRACTOR SHALL INSPECT SITE PRIOR TO BIDDING WORK TO VERIFY ACTUAL FIELD CONDITIONS AS PORTIONS OF THE DEMOLITION WORK MAY HAVE SINCE BEEN COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE ALL DEMOLITION WORK AS PER PLANS TO PREPARE THE SITE FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS.

GRAPHIC SCALE
(IN FEET)
SCALE: 1"=10'



PAVEMENT LEGEND

| | |
|--|---|
| | STANDARD DUTY PAVEMENT 1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50 2 1/4" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50 8" COMPACTED AGGREGATE BASE COURSE, TYPE B |
| | STANDARD P.C.C. SIDEWALK SECTION 4" PORTLAND CEMENT CONCRETE SECTION WITH SUBBASE |

PAVEMENT MARKING LEGEND

| | |
|--|--|
| | 4" YELLOW DIAGONAL AT 45° SPACED 2' O.C. |
| | 4" YELLOW LINE (HANDICAP STALLS) |
| | HANDICAP SYMBOL |

SIGN LEGEND

| | |
|--|--------------------|
| | R7-8 HANDICAP SIGN |
|--|--------------------|

SITE DATA

| | |
|----------------------------|------------|
| EXISTING PARKING PROVIDED | 190 SPACES |
| EXISTING HANDICAP PROVIDED | 8 SPACES |
| TOTAL PARKING PROVIDED | 196 SPACES |
| PROPOSED PARKING PROVIDED | 41 SPACES |
| EMPLOYEE PARKING PROVIDED | 16 SPACES |
| PROPOSED HANDICAP PROVIDED | 1 SPACES |
| TOTAL PARKING PROVIDED | 254 SPACES |

PARKING IMPROVEMENT AREA PAVEMENT DATA

| | |
|--------------------------|--------|
| FULL DEPTH PAVEMENT AREA | 869 SY |
| TX5 GRID PAVEMENT AREA | 835 SY |
| ASPHALT PATH AREA | 61 SY |

THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON 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 TO.

SEE SHEETS 03, 04 & 06 FOR ADDITIONAL NOTES & DETAILS

Manhard CONSULTING LTD.
700 Springier Drive, Lombard, IL 60148
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION
VILLAGE OF OAKBROOK, ILLINOIS
HANDICAP PARKING AREA IMPROVEMENTS

DATE: _____
REVISIONS: _____

PROJ. MGR.: JPD
PROJ. ASSOC.: JSP
DRAWN BY: JSP
DATE: 04-27-15
SCALE: 1"=10'

SHEET 5 OF 8
OBPOBIL.01

NOTE: ALL DIMENSIONS SHOWN ARE TO FACE OF CURB AND ARE AT 90 DEGREE ANGLES.

PAVEMENT LEGEND

- STANDARD DUTY PAVEMENT**
1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
2 1/4" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50
8" COMPACTED AGGREGATE BASE COURSE, TYPE B
- HEAVY DUTY PAVEMENT**
1 1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
2 1/4" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50
10" COMPACTED AGGREGATE BASE COURSE, TYPE B
- STANDARD PERMEABLE PAVER**
SEE SHEET 7 FOR DETAILS
- ASPHALT OVERLAY**
1.5" (MIN.) BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
0.30 GAL/SY BITUMINOUS TACK COAT (MC-30)
VARIABLE DEPTH LEVELING BINDER AS REQUIRED FOR ACHIEVING DESIGN GRADES
SURFACE SHALL BE CLEANED AND ALL CRACKS 1/4" OR LARGER SHALL BE CLEANED OF ALL WEEDS, DEBRIS, ETC. AND SEALED WITH A RUBBERIZED HOT APPLIED CRACK SEALANT

NOTE: CONTRACTOR SHALL COMPLY WITH GEOTEXTILE FABRIC MANUFACTURER'S RECOMMENDATIONS FOR OVERLAY INSTALLATION.

SITE DATA

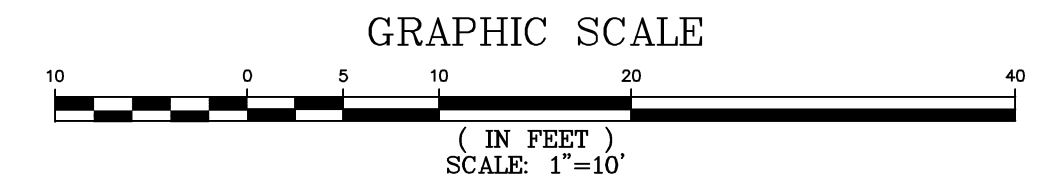
| | |
|----------------------------|------------|
| EXISTING PARKING PROVIDED | 190 SPACES |
| EXISTING HANDICAP PROVIDED | 6 SPACES |
| TOTAL PARKING PROVIDED | 196 SPACES |
| PROPOSED PARKING PROVIDED | 41 SPACES |
| EMPLOYEE PARKING PROVIDED | 16 SPACES |
| PROPOSED HANDICAP PROVIDED | 1 SPACES |
| TOTAL PARKING PROVIDED | 254 SPACES |

EMPLOYEE PARKING AREA PAVEMENT DATA

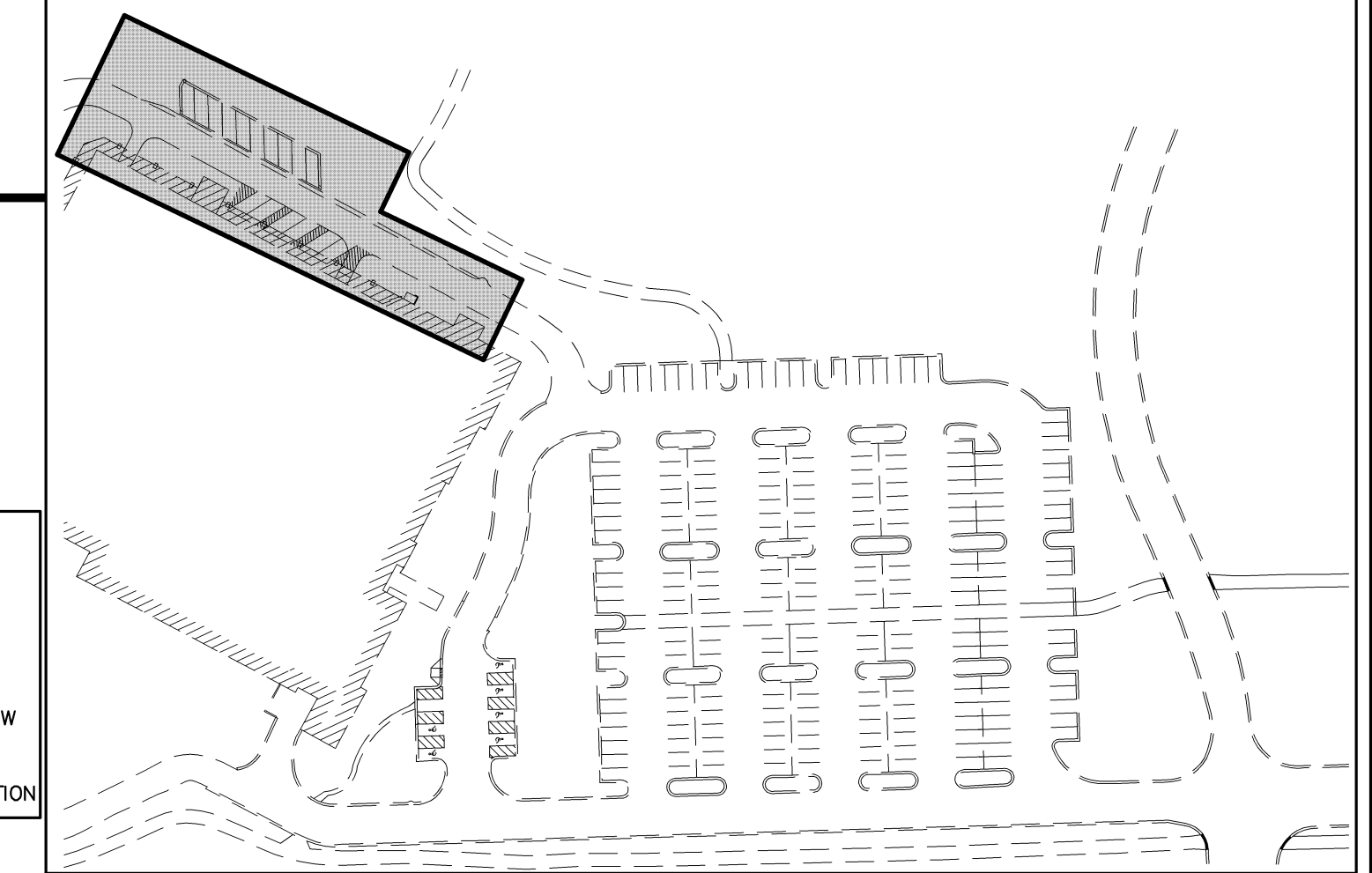
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|-----------------------------|--------|
| STANDARD DUTY PAVEMENT AREA | 180 SY |
| HEAVY DUTY PAVEMENT AREA | 68 SY |
| PERMEABLE PAVEMENT AREA | 216 SY |
| ASPHALT OVERLAY AREA | 115 SY |

PAVEMENT MARKING LEGEND

- (A) 4" YELLOW DIAGONAL AT 45° SPACED 2' O.C.
- (B) 6" SOLID WHITE (STANDARD STALLS)



SITE DIMENSIONAL AND PAVING PLAN



LEGEND

- S — S — TEMPORARY SILT FENCE (PERMIER EROSION BARRIER)
- ■ ■ ■ TEMPORARY STORM STRUCTURE PROTECTION
- PAVEMENT DRAINAGE FLOW
- - - - LIMITS OF DISTURBANCE/CONSTRUCTION

THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON 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 TO.

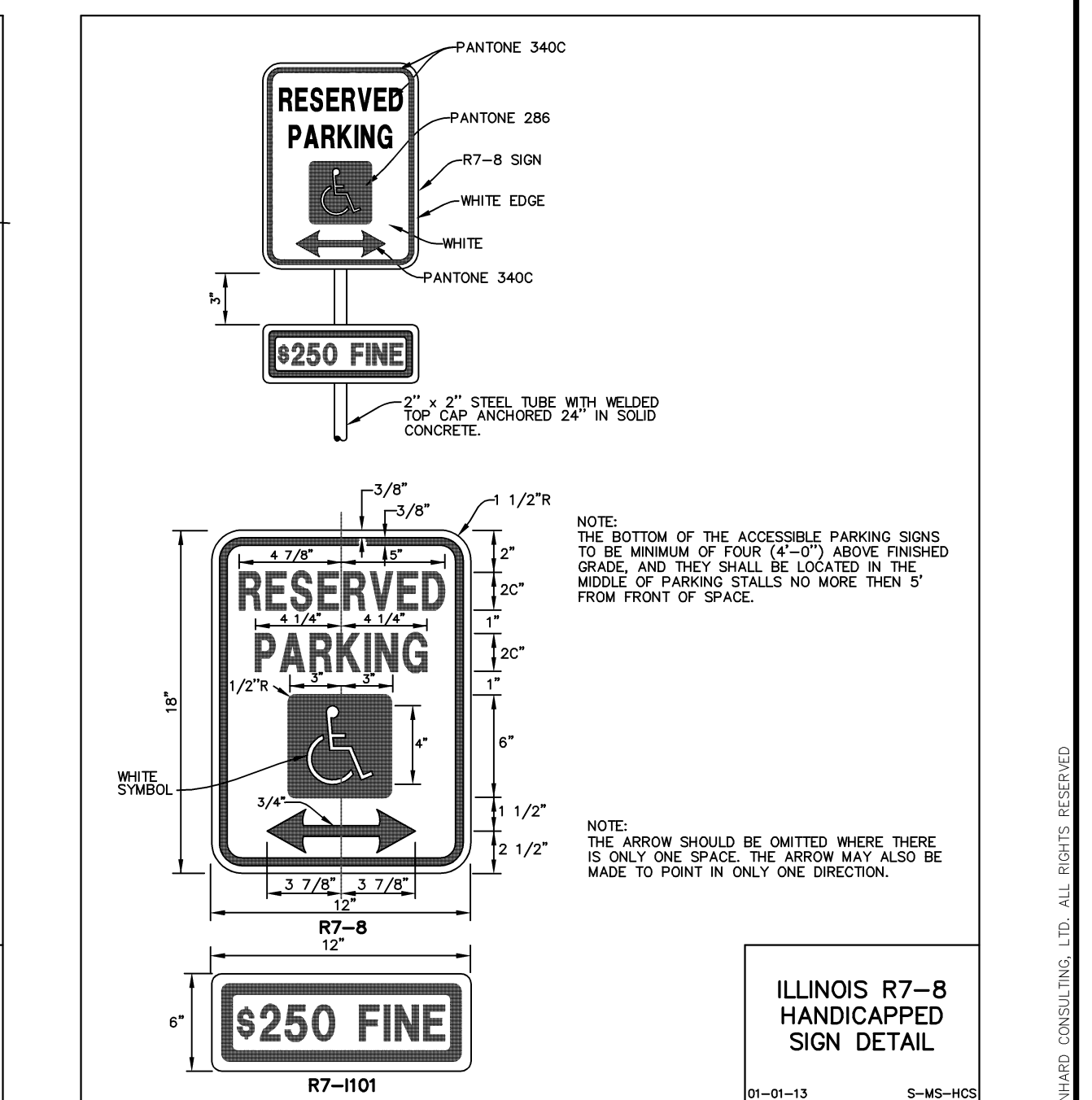
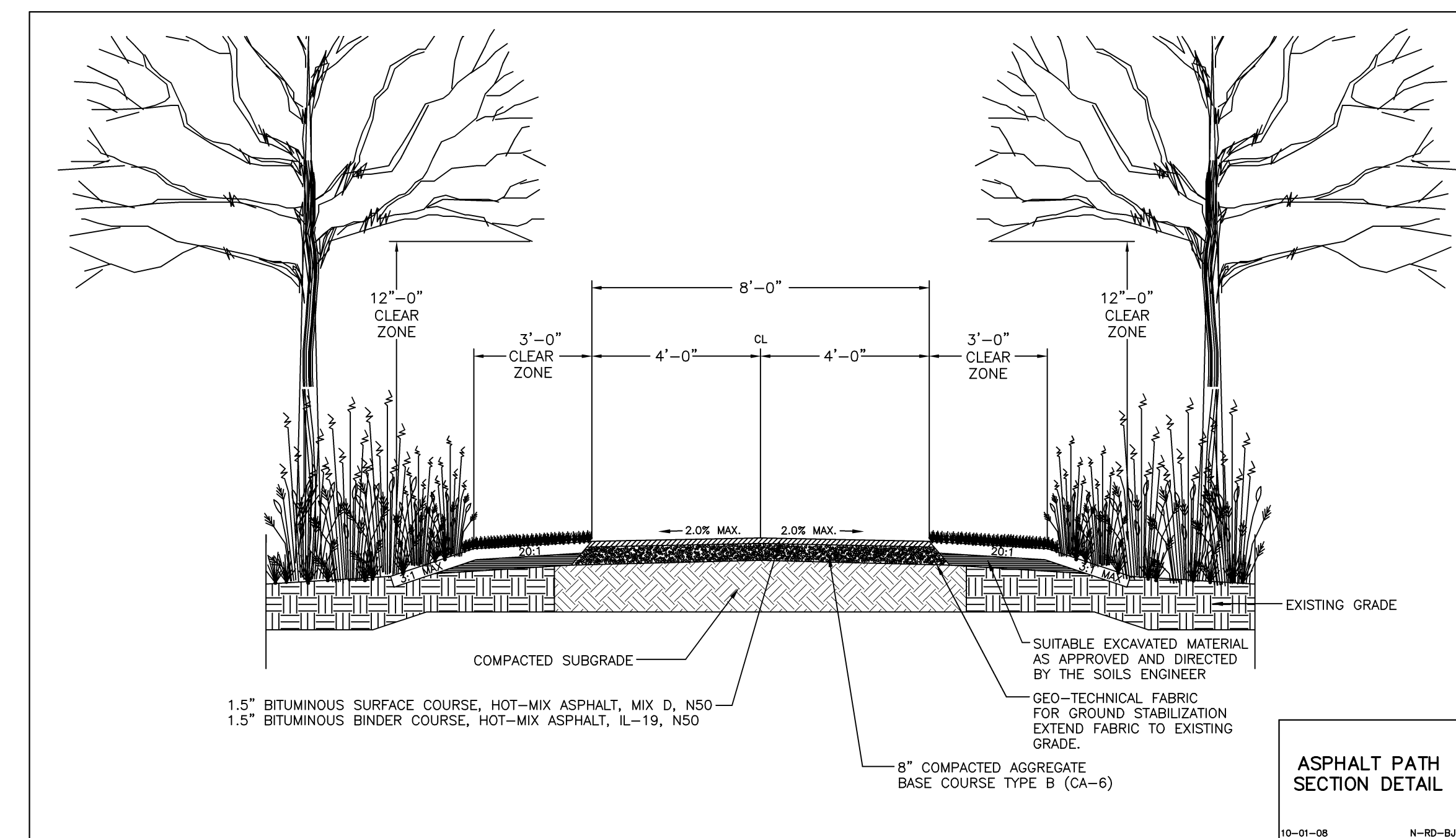
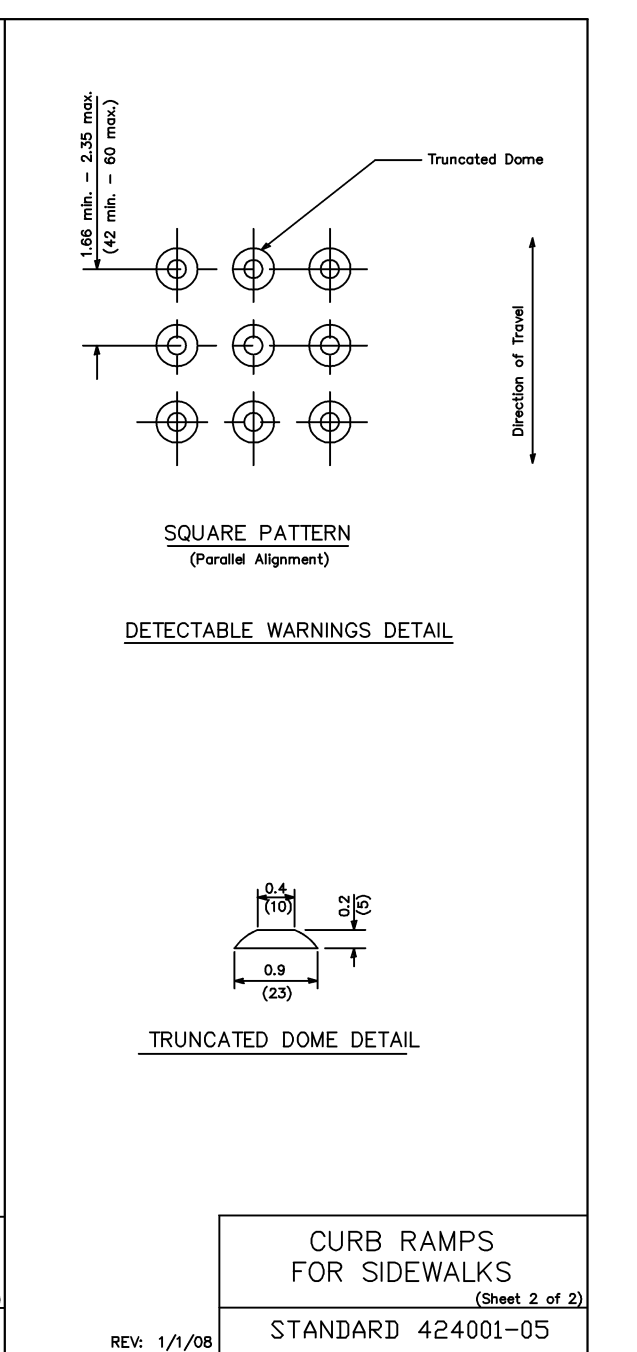
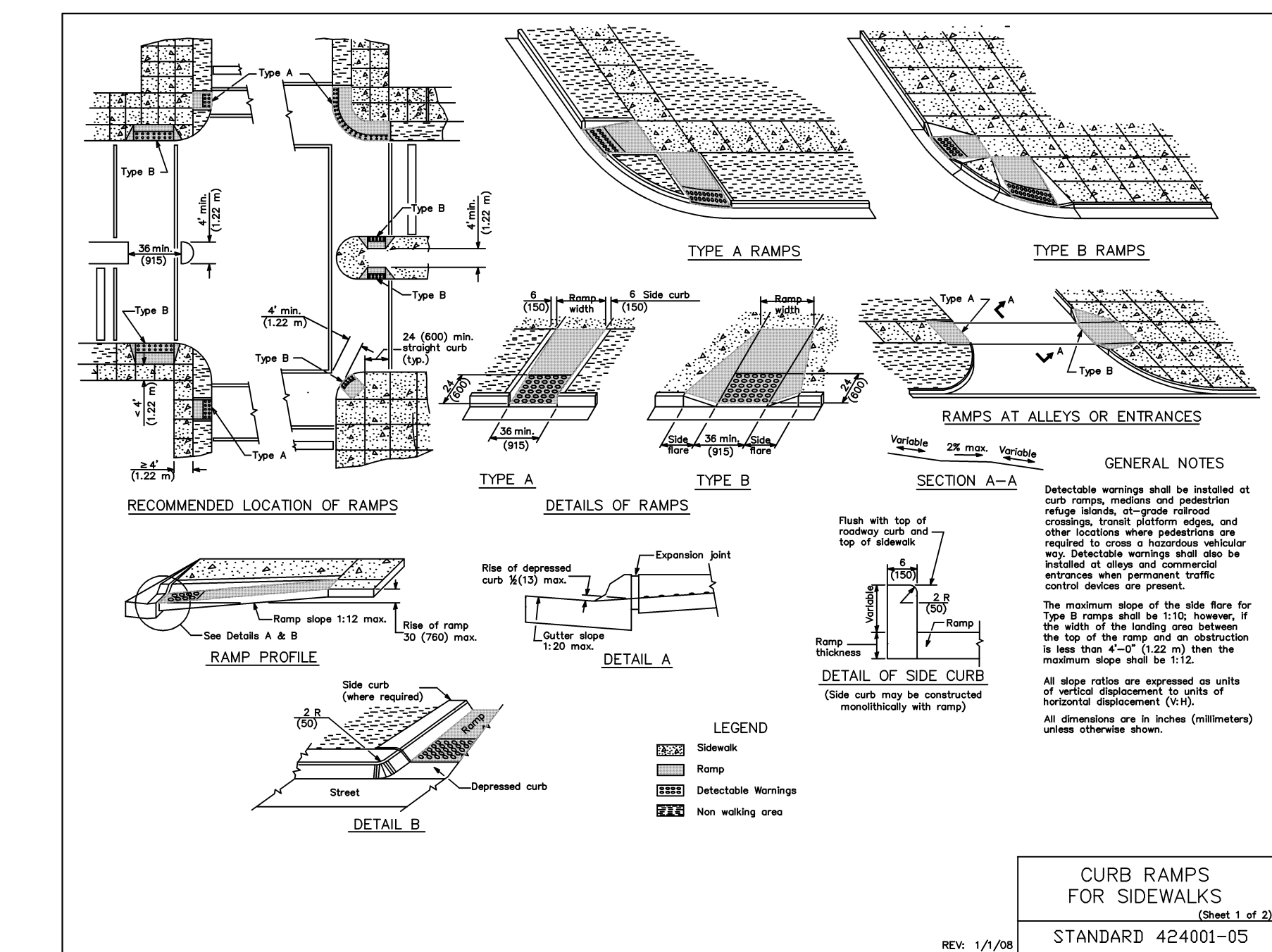
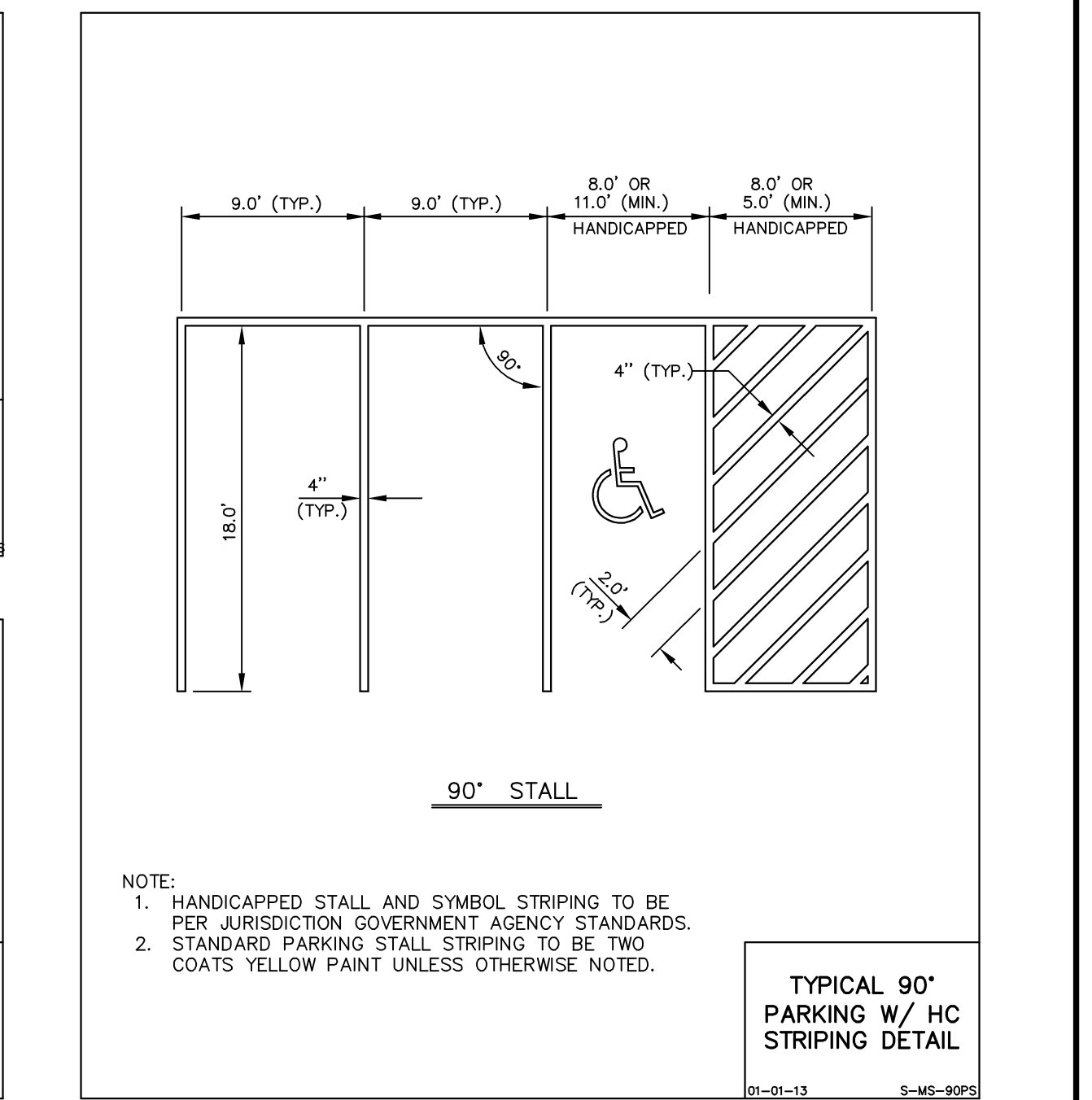
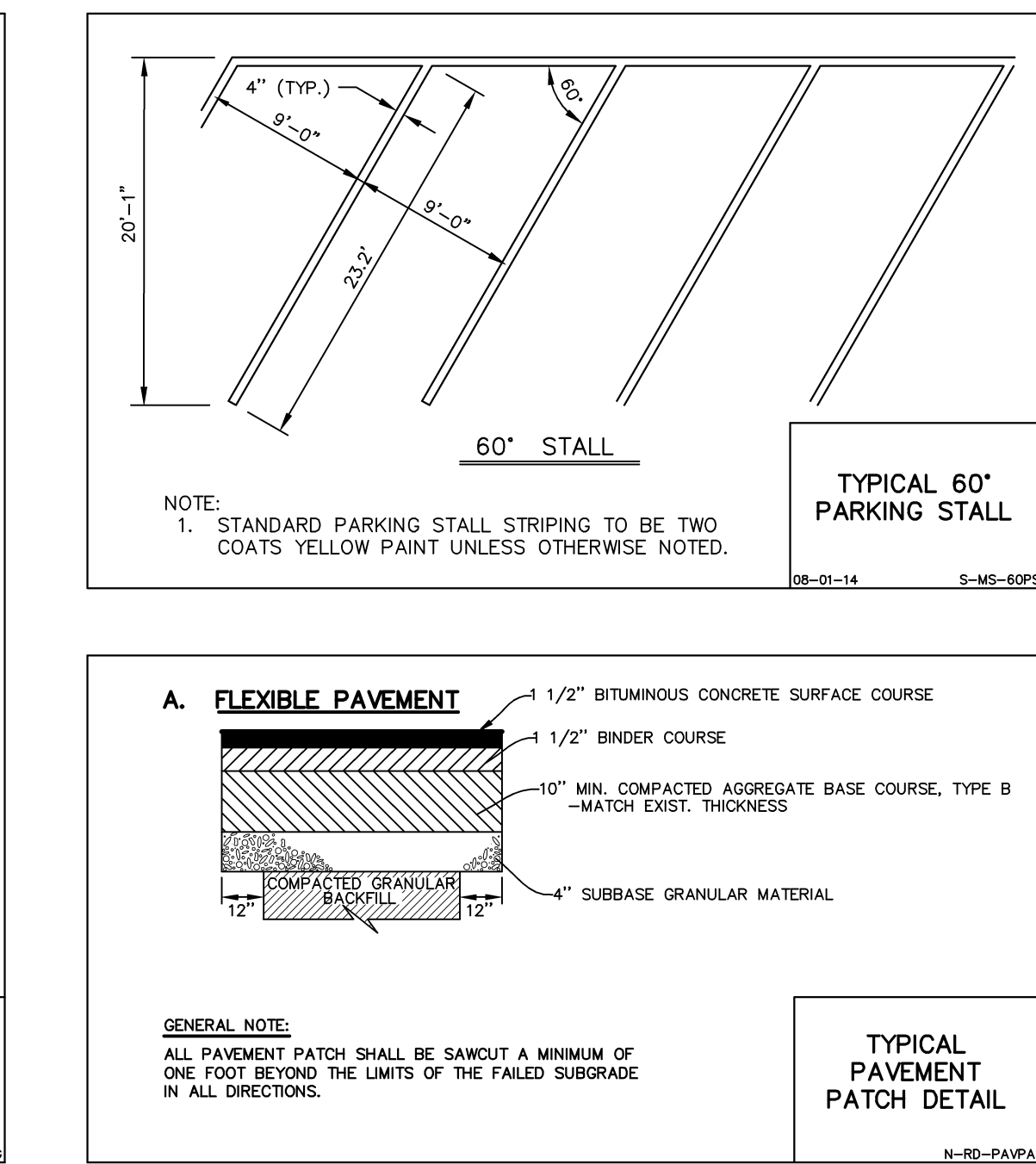
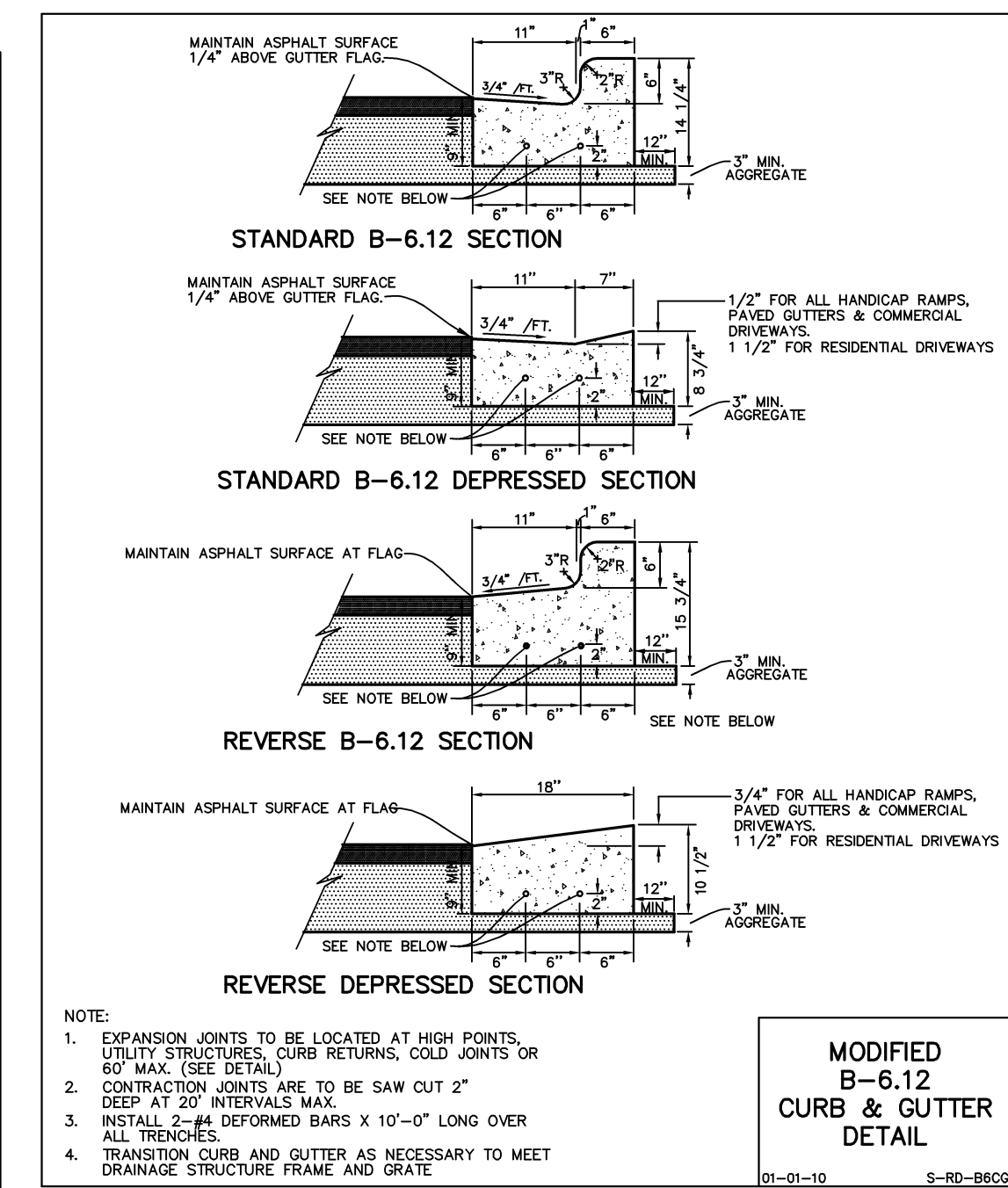
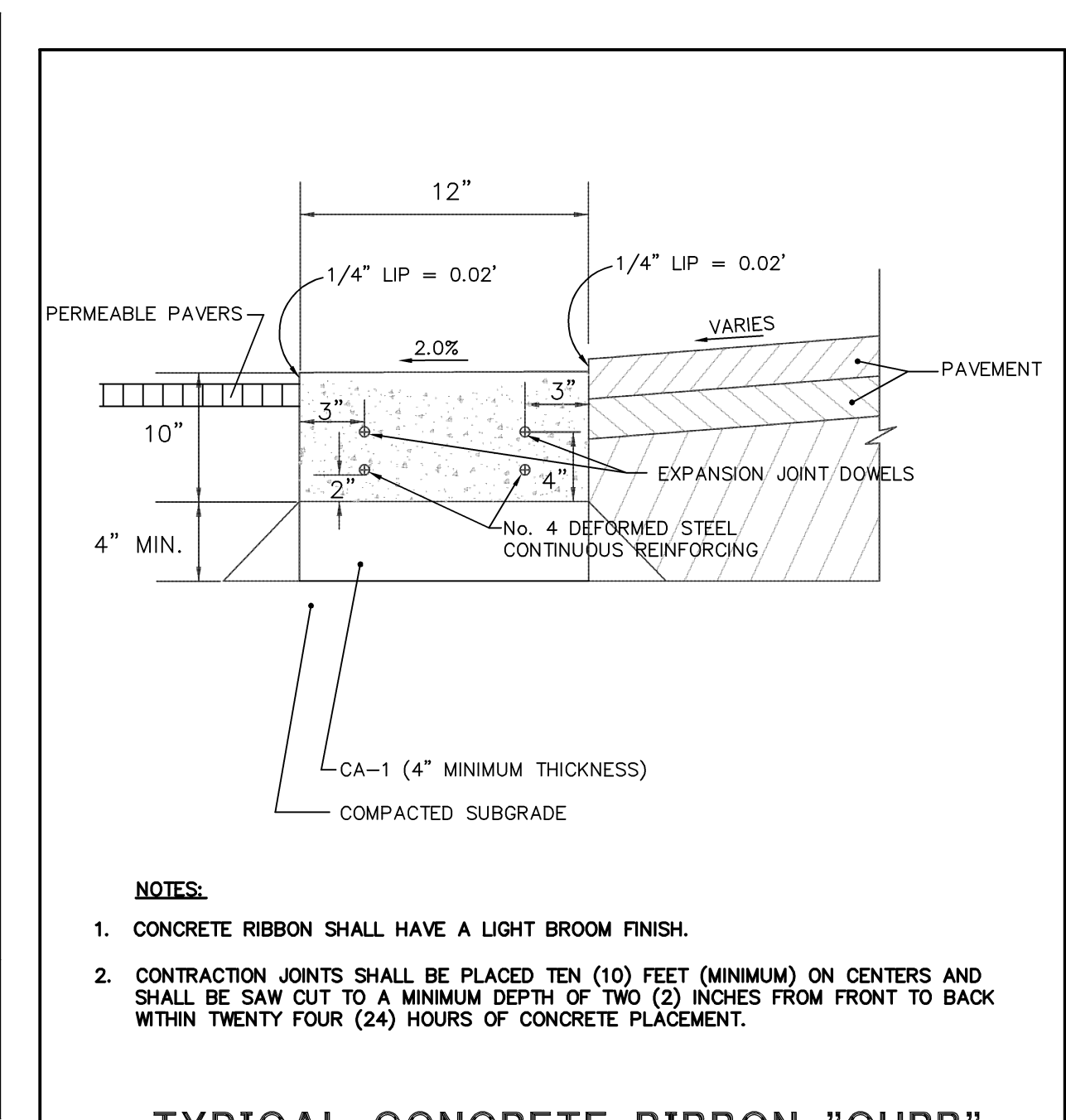
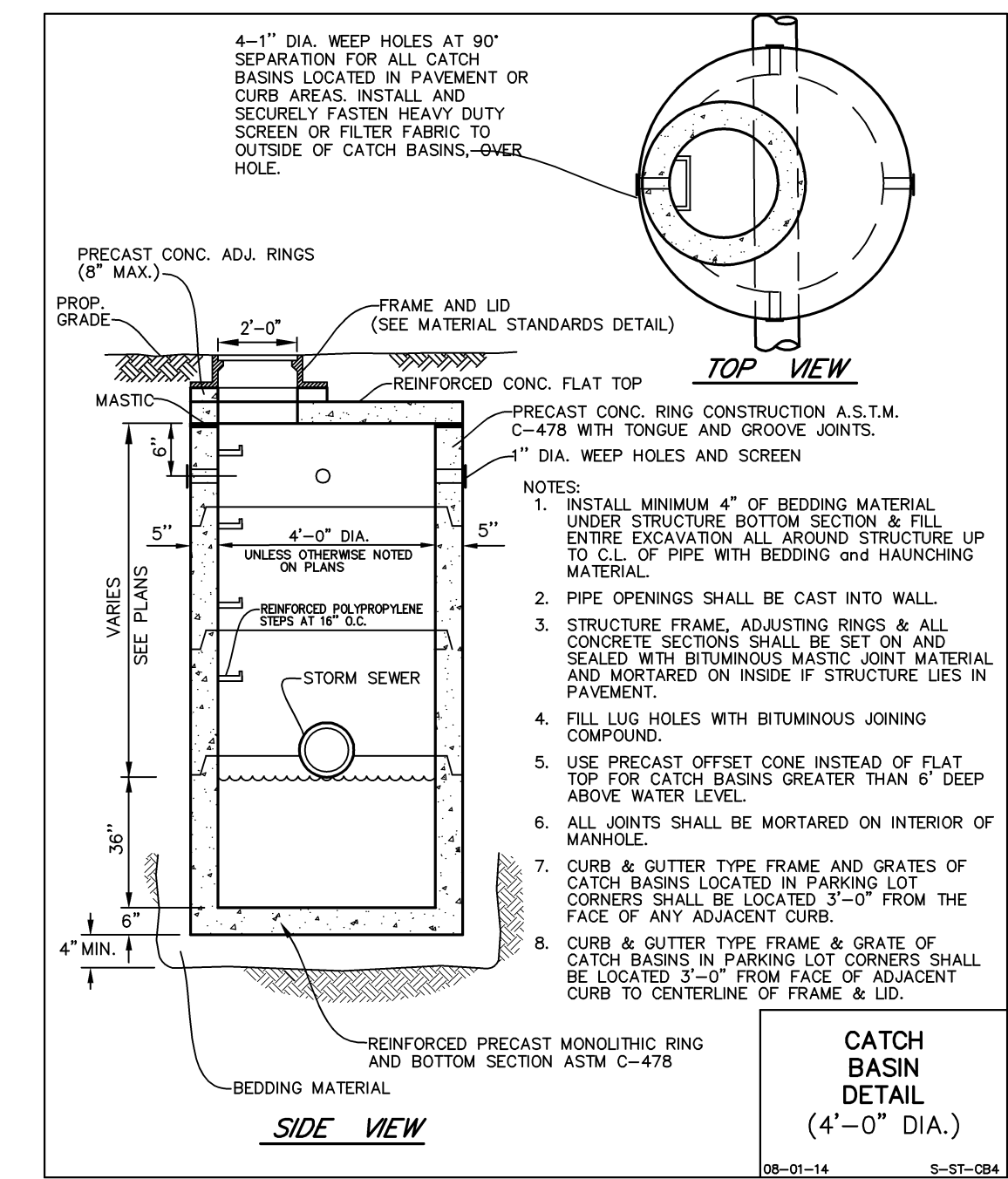
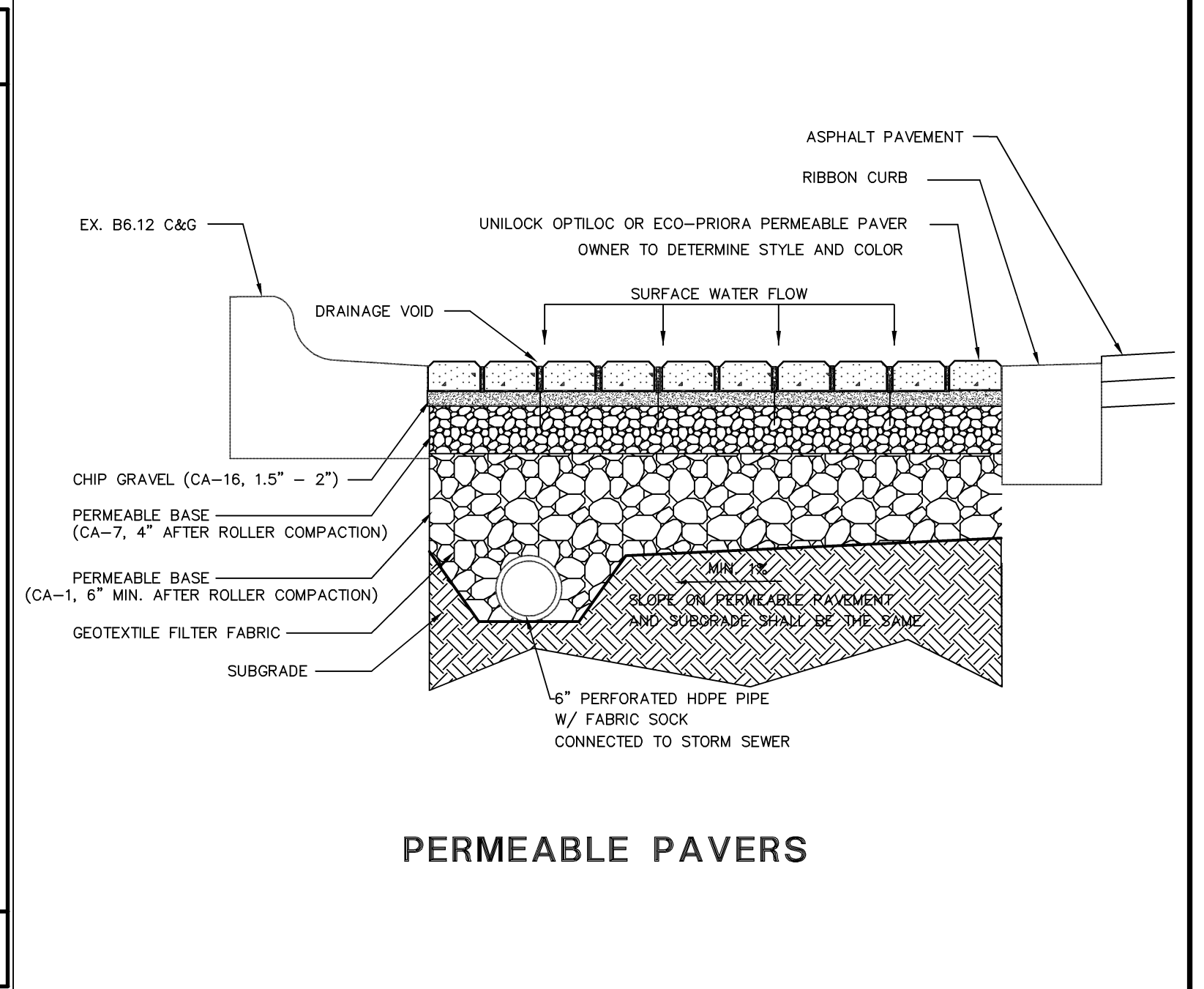
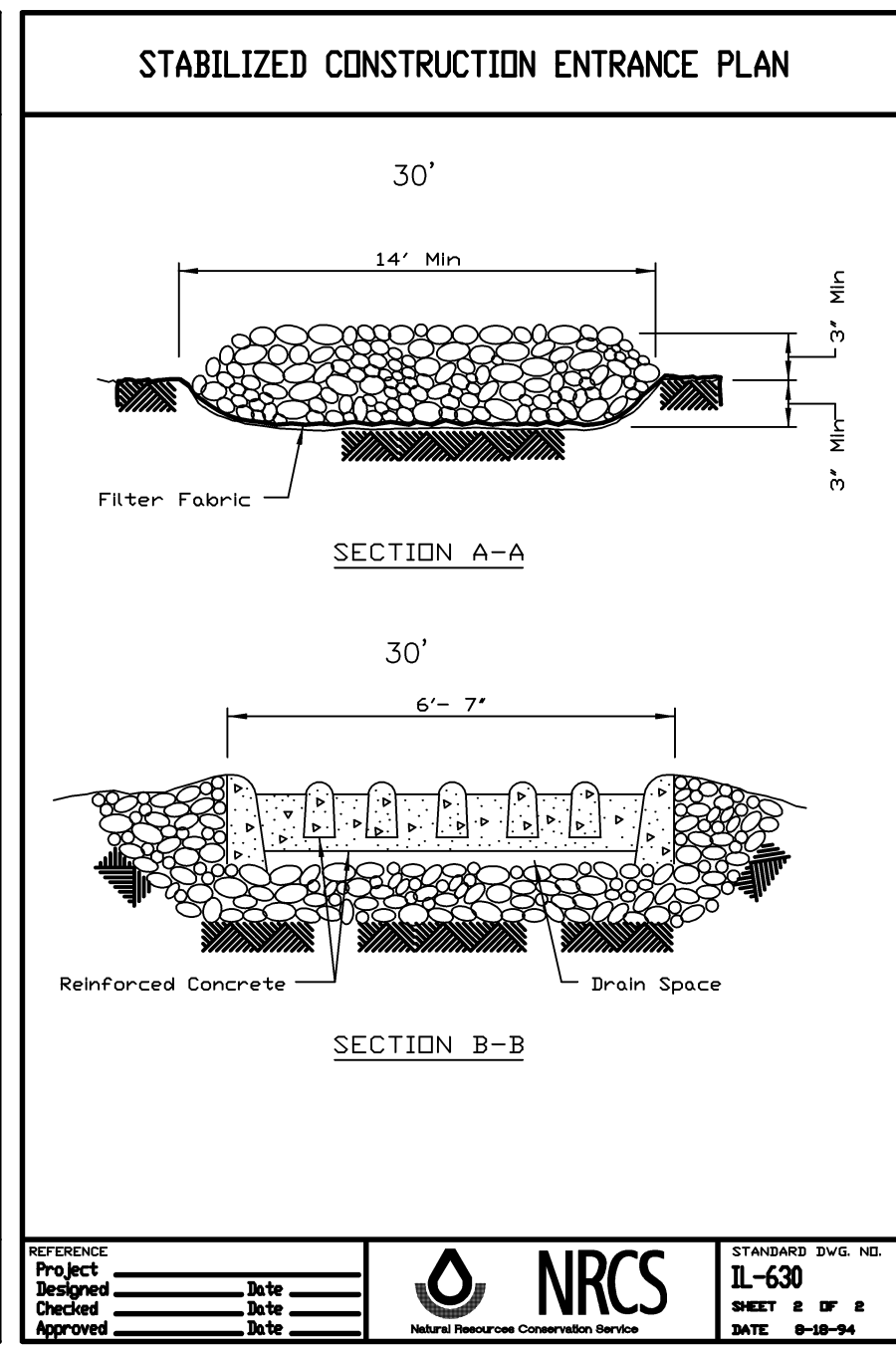
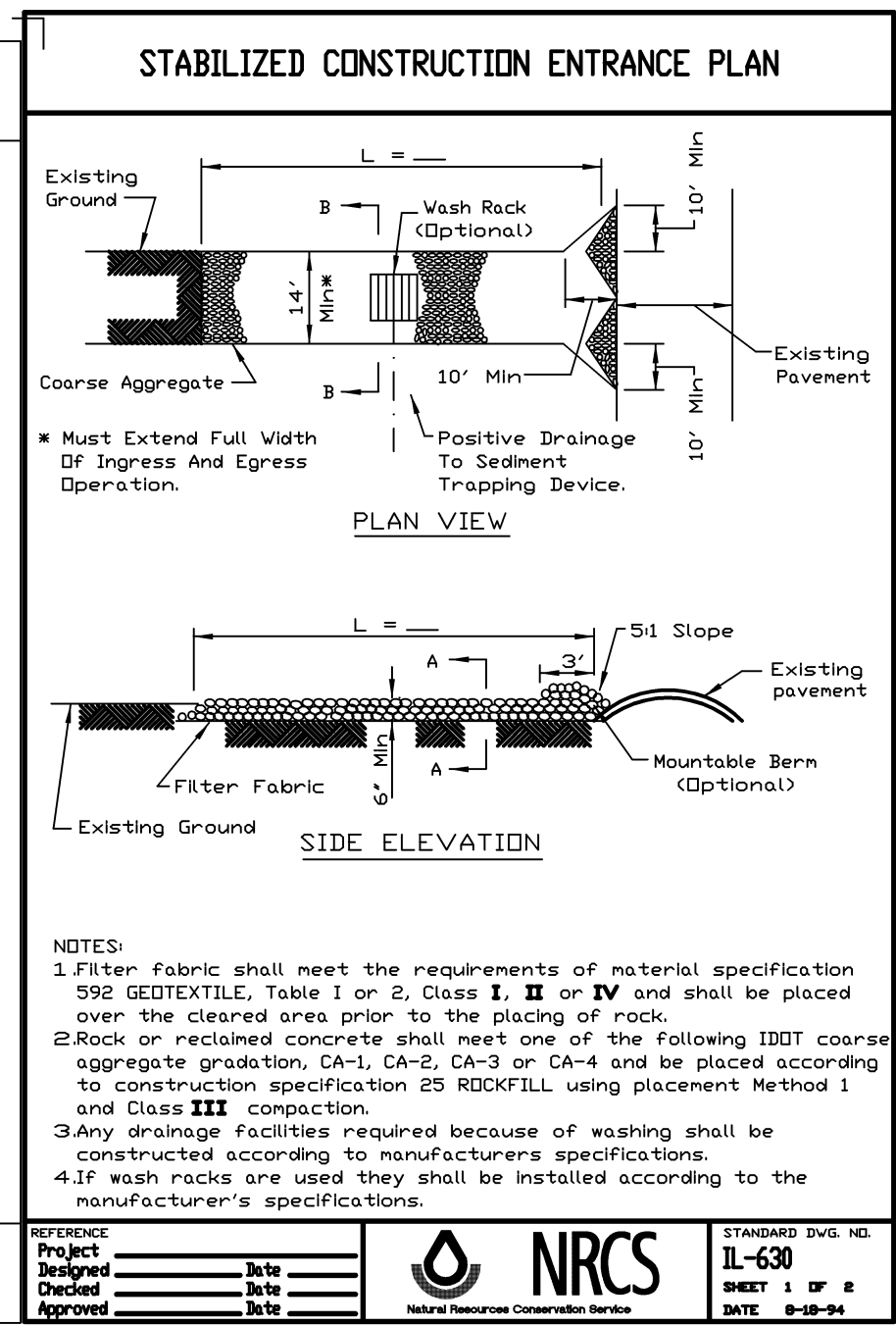
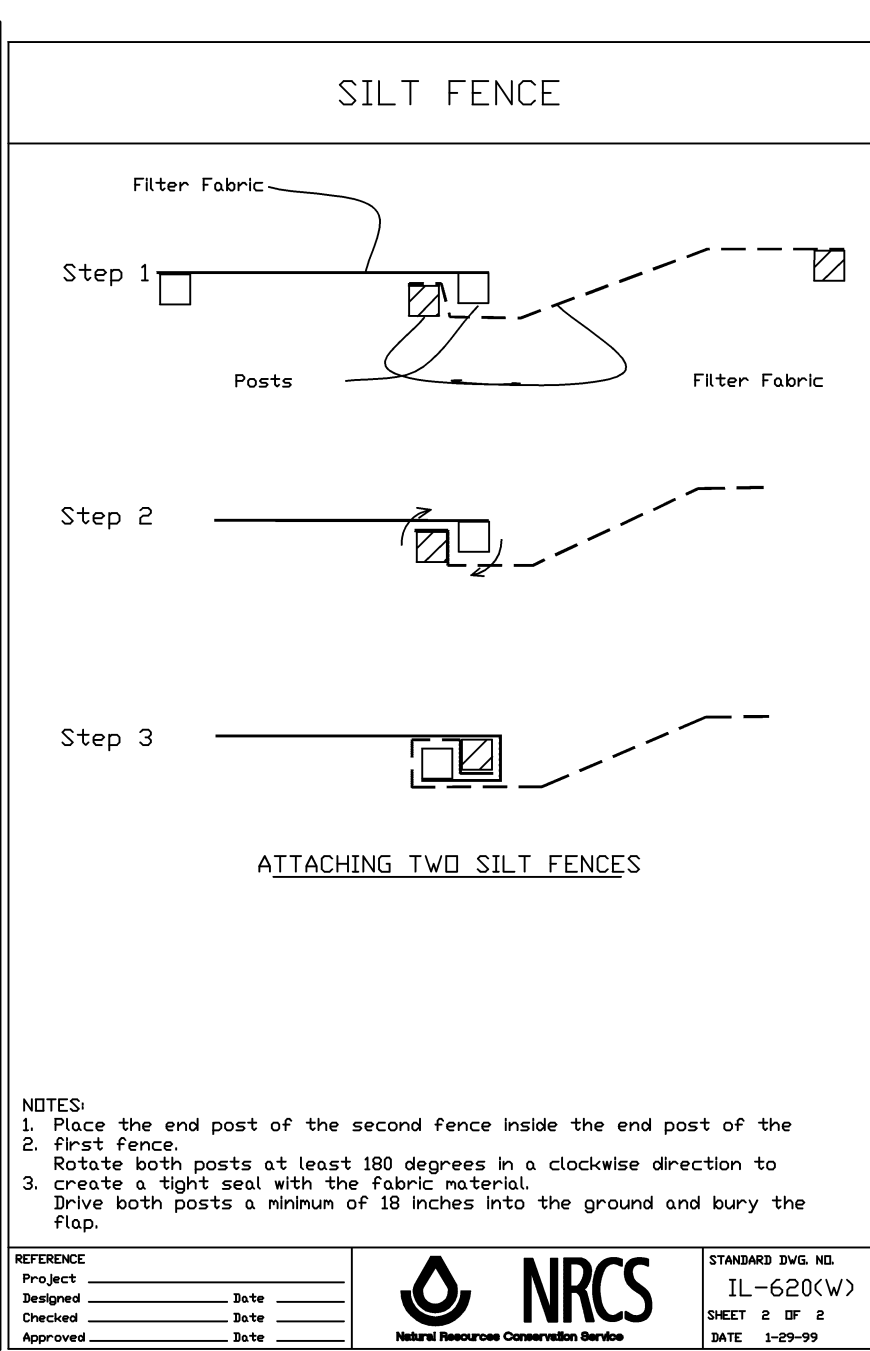
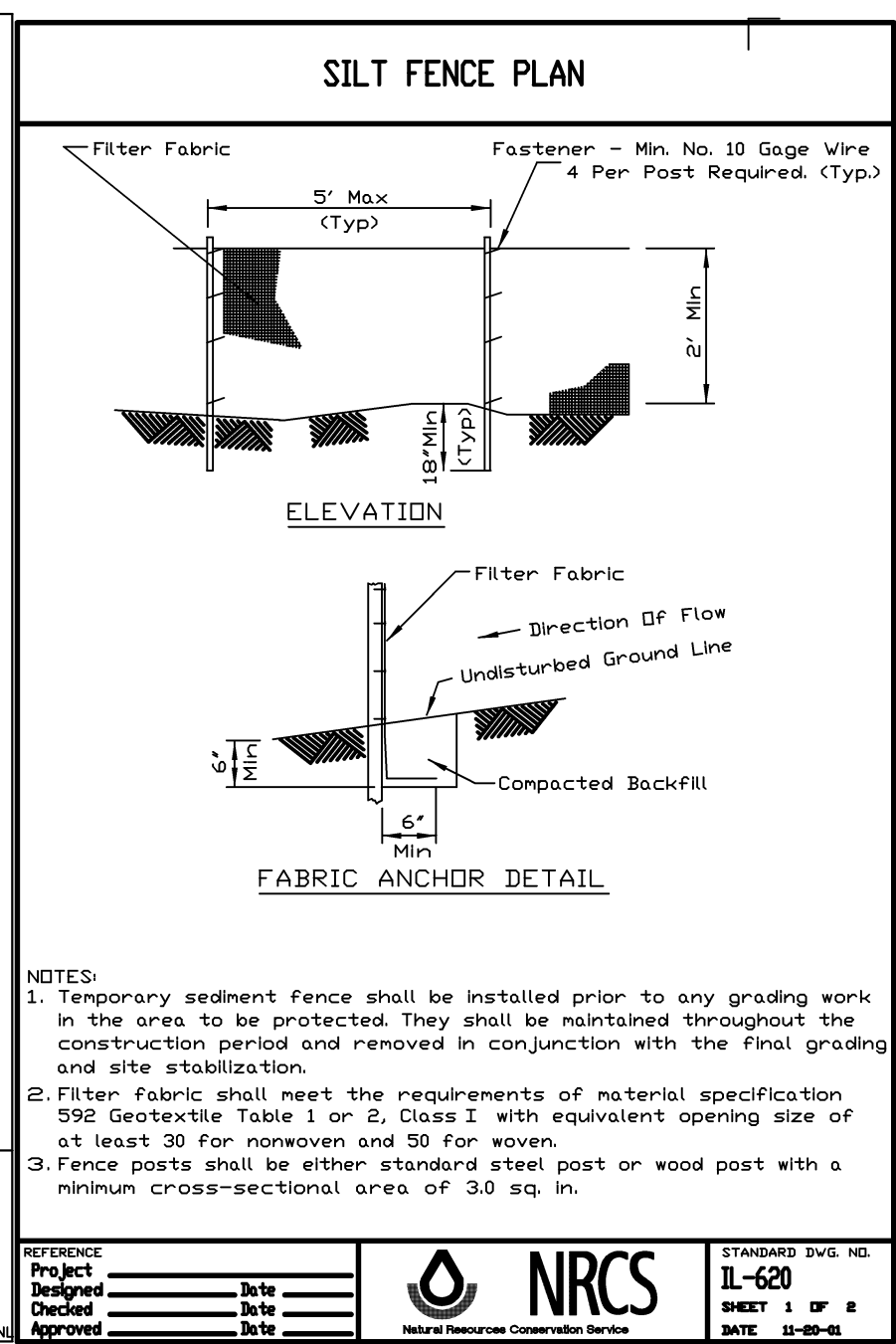
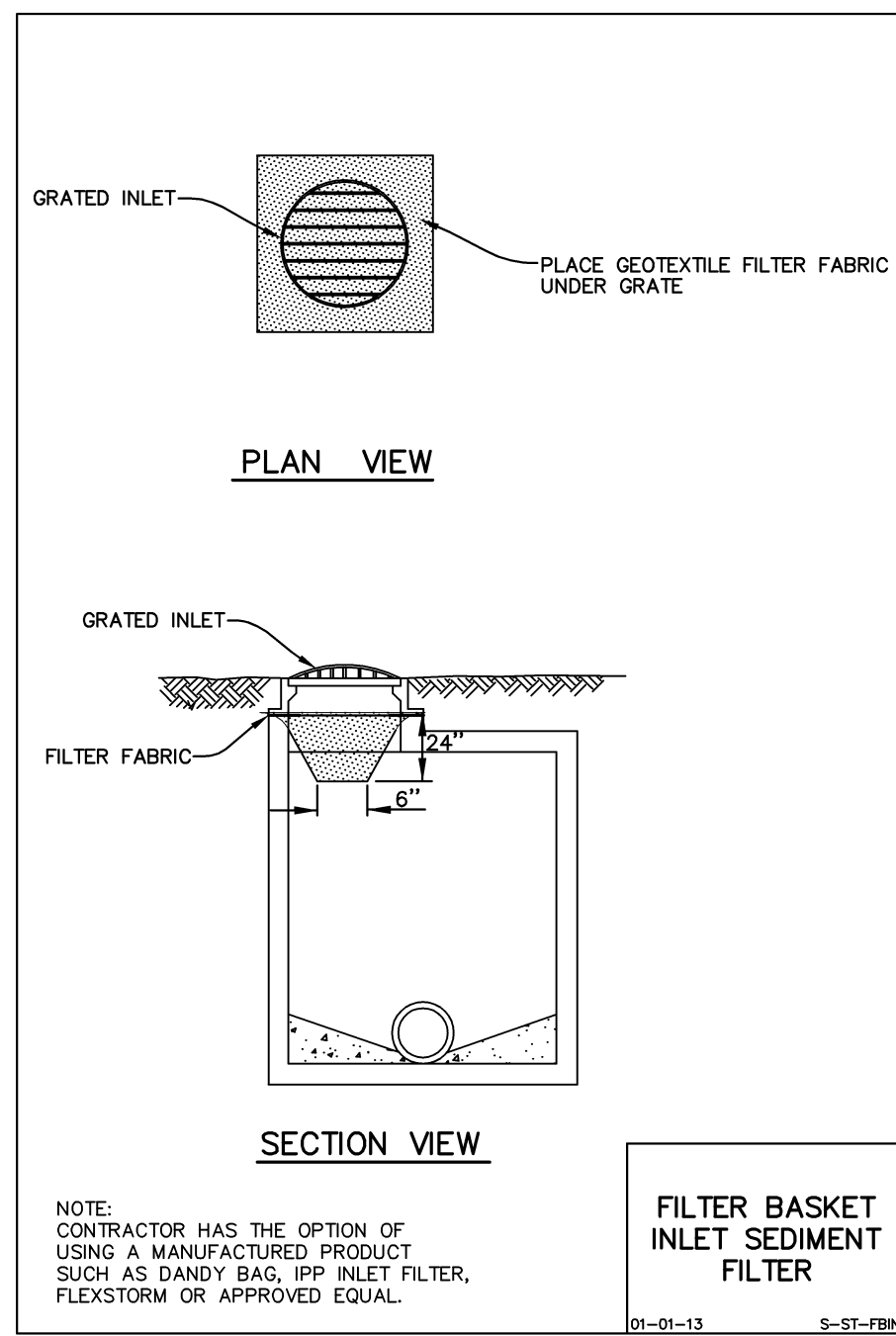
SEE SHEET 4 FOR TYPICAL SOIL EROSION AND SEDIMENT CONTROL AND GRADING NOTES

GRADING, UTILITIES, AND SOIL EROSION & SEDIMENT CONTROL PLAN

Manhard CONSULTING LTD.
 7000 Springier Drive, Lombard, IL 60148
 Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
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OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION
VILLAGE OF OAKBROOK, ILLINOIS
EMPLOYEE PARKING AREA IMPROVEMENTS

PROJ. MGR.: JPD
 PROJ. ASSOC.: JSP
 DRAWN BY: JSP
 DATE: 04-27-15
 SCALE: 1"=10'
 SHEET 6 OF 8
 OBPOBIL.01



Manhard CONSULTING LTD.

700 Springers Drive, Lombard, IL 60148 | Phone: 630.691.8500 | Fax: 630.691.8585 | Email: manhard.com

Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
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OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION

VILLAGE OF OAKBROOK, ILLINOIS

CONSTRUCTION DETAILS

PROJ. MGR.: JPD
 PROJ. ASSOC.: JSP
 DRAWN BY: JSP
 DATE: 04-27-15
 SCALE: N.T.S.

SHEET 7 OF 8
 OBPOBIL.01

MANHARD CONSULTING, LTD. STANDARD SPECIFICATIONS

GENERAL CONDITIONS CONTRACTOR acknowledges and agrees that the use and reliance of these Plans and Specifications is sufficient consideration for CONTRACTOR'S covenants stated herein.

DEFINITION OF TERMS

- a. 'CLIENT' shall mean Oak Brook Park District, which is the person or entity with whom Manhard Consulting, Ltd. has contracted with to prepare Civil Engineering PLANS and SPECIFICATIONS.
b. 'ENGINEER' shall mean Manhard Consulting, Ltd., a Civil Engineering consultant on the subject project.
c. 'PLANS and SPECIFICATIONS' shall mean the Civil Engineering PLANS and SPECIFICATIONS prepared by the ENGINEER, which may be a part of the contract documents for the subject project.
d. 'CONTRACTOR' shall mean any person or entity performing any work described in the PLANS and SPECIFICATIONS.

INTENT OF THE PLANS AND SPECIFICATIONS

The intention of the PLANS and SPECIFICATIONS is to set forth certain requirements of performance, type of equipment and structures, and standards of materials and construction. They may also identify labor and materials, equipment and transportation necessary for the proper execution of the work but are not intended to be infinitely determined so as to include minor items obviously required as part of the work.

INTERPRETATION OF PLANS AND SPECIFICATIONS

- a. The CLIENT and/or CONTRACTOR shall promptly report any errors or ambiguities in the PLANS and SPECIFICATIONS to the ENGINEER. Questions as to meaning of PLANS and SPECIFICATIONS shall be interpreted by the ENGINEER, whose decision shall be final and binding on all parties concerned.
b. The ENGINEER will provide the CLIENT with such information as may be required to show revised or additional details of construction.

GOVERNING BODIES

All works herein proposed shall be completed in accordance with all requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, and all such pertinent laws, decrees, ordinances and the like shall be considered to be a part of these SPECIFICATIONS. If a discrepancy is noted between the PLANS and SPECIFICATIONS and requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, the CLIENT and/or the CONTRACTOR shall immediately notify the ENGINEER in writing.

LOCATION OF UNDERGROUND FACILITIES AND UTILITIES

When the PLANS and SPECIFICATIONS include information pertaining to the location of existing underground facilities and utilities (including but not limited to water mains, sanitary sewers, storm sewers, electric, telephone, gas and cable TV lines), such information represents only the opinion of the ENGINEER as to the approximate location and elevation of such facilities and utilities. At the locations wherein detailed positions of these facilities and utilities become necessary to the new construction, including all points of connection, the CONTRACTOR shall furnish all labor and tools to verify or definitely establish the exact location, elevation, size and material of existing facilities and utilities.

UNSATURABLE SOILS

The PLANS have been prepared by the ENGINEER based on the assumption that all soils on the project are suitable to support the proposed improvements shown. The CLIENT or CONTRACTOR shall immediately notify the ENGINEER if he discovers or encounters an obstruction that prevents the installation of the improvement according to the line and grades shown on the PLANS.

PROTECTION OF TREES

All trees that are not to be removed shall be protected from damage. Trees shall not be removed unless requested to do so in writing by the CLIENT.

NOTIFICATION OF OWNERS OF FACILITIES AND UTILITIES

The CONTRACTOR shall notify all applicable Jurisdictional Governmental Entities or utility companies, i.e., water, sewer, electric, telephone, gas and cable TV prior to beginning any construction so that said entity or company can establish the location and elevation of underground pipes, conduits or cables adjoining or crossing proposed construction.

TRAFFIC CONTROL

The CONTRACTOR shall provide when required by any JURISDICTIONAL GOVERNMENTAL ENTITY, all signs, equipment, and personnel necessary to provide for safe and efficient traffic flow in all areas where the work will interrupt, interfere or cause a change in any form, the conditions of traffic flow that existed prior to the commencement of any portion of the work.

WORK AREA

The CONTRACTOR, his agents and employees and their employees and all equipment, machinery and vehicles shall confine their work within the boundaries of the project or work area specified by the Client. The CONTRACTOR shall be solely liable for damage caused by him or his agents and employees and their equipment, machinery and vehicles on adjacent property or areas outside designated work areas.

UTILITY POLES

It shall be the responsibility of the CONTRACTOR to arrange for the relocation or bracing of existing utility poles that may be within the working limits of this contract. It is expressly understood that all work and costs connected with the maintenance of these utility poles, their temporary relocations, etc., shall be the responsibility of the CLIENT or the CONTRACTOR.

RESTORATION

It is the intent of these SPECIFICATIONS that clean-up and final restoration shall be performed immediately upon completion of each phase of the work, both inside and outside the Project, or when so directed by the CLIENT so that these areas will be restored as nearly as possible to their original condition or better, and shall include but not be limited to, restoration of maintained lawns and rights-of-way, roadways, driveways, sidewalks, ditches, bushes, hedges, trees, shrubs, fences, mailboxes, sewers, drain tiles, water mains, etc.

CLEANING UP

The CONTRACTOR shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work he shall remove all his rubbish, tools, scaffolding and surplus materials and shall leave his work "broom clean" or its equivalent, unless more exactly specified.

ROAD CLEANING

The CONTRACTOR shall maintain roadways adjoining the project site free from mud and debris at all times. If mud and/or debris is carried onto the roadways from vehicles entering onto the highway from either the CONTRACTOR'S trucks, his employees' vehicles, or his material suppliers, the CONTRACTOR shall immediately remove said mud and/or debris.

SAFETY AND PROTECTION

The CONTRACTOR shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. The CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss, and shall erect and maintain all necessary safeguards for such safety and protection.

HOLD HARMLESS

To the fullest extent permitted by law, any CONTRACTOR, material supplier or other entity by use of these plans and specifications hereby waives any right of contribution and agrees to indemnify, defend, save and hold harmless the CLIENT and ENGINEER and its agents, employees and consultants from and against all manner of claims, causes, causes of action, damages, losses and expenses, including but not limited to, attorneys' fees arising out of, resulting from or in connection with the performance of any work, pursuant to or with respect to these plans and specifications. However, this indemnity shall not be construed to indemnify ENGINEER, its consultants, agents or employees against its own negligence.

INSURANCE

Any party using or relying on these plans, including any contractor, material supplier, or other entity shall obtain, (prior to commencing any work) general public liability insurance insuring against all damages and claims for any bodily injuries, death or property damage arising out of any work, including the construction work provided for in these plans, and shall name the CLIENT and ENGINEER and its consultants, agents and representatives as additional insureds under such insurance policy, provided that any party using or relying on these plans having obligations to maintain specific insurance by reason of any agreement with CLIENT or any CONTRACTOR or ENGINEER shall provide evidence and certificates of insurance as required by such contract or agreement.

THIRD PARTY BENEFICIARY

Manhard Consulting, Ltd., the ENGINEER, is intended to be a third party beneficiary of this willing agreement and requirement. Note: These Specifications are for Northern Illinois.

DETAILED SPECIFICATIONS

- I. DEMOLITION
A. The CONTRACTOR shall coordinate with respective utility companies prior to the removal and/or relocation of utilities. The CONTRACTOR shall coordinate with the utility company concerning portions of work which may be performed by the Utility Company's forces and any fees which are to be paid to the utility company for their services.
B. Should removal and/or relocation activities damage features indicated to remain, the CONTRACTOR shall provide new materials/structures in accordance with the contract documents.
C. Prior to demolition occurring, all erosion control devices are to be installed.
D. All existing utility lines and conduits located under proposed buildings shall be removed and properly backfilled.
E. CONTRACTOR shall perform all demolition work in accordance with all applicable Federal, State and local requirements.
F. The CONTRACTOR is responsible for demolition, removal and disposal (in a location approved by all JURISDICTIONAL GOVERNING ENTITIES) of all structures, pads, wells, flumes, foundations, road, parking lots, drains, drainage structures, utilities, etc., such that the improvements shown on these plans can be constructed.
G. The CONTRACTOR is responsible for removing all debris from the site and disposing the debris in a lawful manner.
H. The CONTRACTOR is responsible for obtaining all permits required for demolition and approval.
I. Electrical, telephone, cable, water, fiber optic cable and/or gas lines needing to be removed shall be coordinated by the CONTRACTOR with the affected utility company.
J. CONTRACTOR must protect the public at all times with fencing, barricades, enclosures, and other appropriate best management practices.
K. Continuous access shall be maintained for surrounding properties at all times during demolition.
L. All fire access lanes within the project area shall remain in service, clear of debris, and accessible for use by emergency vehicles.
M. The CONTRACTOR shall coordinate water main work with the Fire Department and the JURISDICTIONAL GOVERNING ENTITY to plan the proposed improvements and to ensure adequate fire protection is constantly available to the facility and site throughout this specific work and through all phases of construction.

CONTRACTOR shall be responsible for any required water main shut offs with the JURISDICTIONAL GOVERNING ENTITY during construction. Any costs associated with water main shut offs will be the responsibility of the CONTRACTOR and no extra compensation will be provided.

- N. CONTRACTOR shall maintain all existing parking areas, sidewalks, drives, etc. clear and free from any construction activity and/or material to ensure easy and safe pedestrian and vehicular traffic to and from the site.
O. CONTRACTOR may limit sand-and pavement removal to only those areas where it is required as shown on these construction plans, however if any damage is incurred on any of the surrounding pavement, etc. the CONTRACTOR shall be responsible for its removal and repair.
P. Any existing wells encountered shall be exposed and sealed 2' below proposed finish grade by the CONTRACTOR in accordance with Section 920.120 (latest edition) of the Illinois Water Well Construction Code, Department of Public Health, and all applicable local rules and regulations.
Q. Any existing septic tanks and grease traps encountered shall have all liquids and solids removed and disposed of by a licensed commercial hauler in accordance with JURISDICTIONAL GOVERNING ENTITY regulations, and the tank and grease traps shall then be filled with suitable materials or removed from the site and disposed of by the CONTRACTOR.
R. Voids left by any item removed under any proposed building, pavement, walk, etc. or within 24" thereof shall be filled and compacted with suitable materials by the CONTRACTOR.
S. The CONTRACTOR shall be responsible for the disconnection of utility services to the existing buildings prior to demolition of the buildings.
T. Any material containing asbestos found within existing structures shall be removed from the site and disposed of off-site by the CONTRACTOR in accordance with County, State and Federal regulations.
U. CONTRACTOR shall develop and implement a dust control program of dust control and shall submit and obtain JURISDICTIONAL GOVERNING ENTITY approval of dust control procedures prior to demolition of any structures.
V. The CONTRACTOR shall coordinate all demolition with the JURISDICTIONAL GOVERNING ENTITY and CLIENT to ensure protection and maintenance of sanitary sewer and water utilities as necessary and to provide stormwater conveyance until new facilities are constructed, tested and placed into operation.
W. The locations of all existing utilities shown on this plan have been determined from the best information available and are given for the convenience of the CONTRACTOR and are not to be interpreted as the exact location, or as the only obstacles that may occur on the site.
X. The CONTRACTOR is responsible for removing the existing irrigation system in the areas of proposed improvements.
Y. The parking lot shall be completed in sections so that it does not interrupt the facility operations.

II. EARTHWORK

A. STANDARDS
This work shall be completed in conformance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition except as modified below.

B. SOIL BORING DATA

Copies of results of soil boring and reports, if such borings were taken by the CLIENT in the vicinity of the proposed construction site, may be made available by the CLIENT to the CONTRACTOR. These borings are presented for whatever purpose the CONTRACTOR chooses to make of them.

Further, the ENGINEER does not assume responsibility for the possibility that during construction, the soil and groundwater condition may be different than indicated. Neither does the ENGINEER assume responsibility for variations of soil and groundwater at location between borings.

C. EARTHWORK CALCULATIONS AND CROSS SECTIONS

The CONTRACTOR understands that any earthwork calculations, quantities or cross sections that have been furnished by the ENGINEER are for information only and are provided without any guarantee by the CLIENT or ENGINEER whatsoever as to their sufficiency or accuracy.

D. CLEARING, GRUBBING AND TREE REMOVAL

The site shall be cleared, grubbed, and trees and stumps removed where designated on the PLANS. Trees designated to remain shall be protected from damage.

E. TOPSOIL STRIPPING

Upon completion of demolition, clearing, grubbing and tree removal, all topsoil shall be stripped from under all buildings and pavements areas, and other areas necessary to complete the work.

F. TOPSOIL RESPREAD

Upon completion of roadway and/or parking lot improvements and installation of underground utilities a minimum of four inches (4") of topsoil shall be respread over all unpaired areas which have been disturbed by earthwork construction, except building pads and other designated areas, which shall be kept free from topsoil.

G. SEEDING

Upon completion of topsoil respread, the CONTRACTOR shall apply seed and fertilizer to all respread areas in accordance with IDOT standards or as depicted on landscape drawings and specifications provided by the CLIENT.

H. SODDING

Upon completion of topsoil respread, the CONTRACTOR shall install sod to all areas designated on the plans or as designated on the landscape drawings and specifications provided by the CLIENT.

I. EXCAVATION AND EMBANKMENT

Upon completion of topsoil stripping, all excavation and embankments shall be completed as shown on the PLANS. All suitable excavated materials shall be hauled, placed (moisture conditioned if necessary) and compacted in the embankment areas.

Specifically included in the scope of Excavation and Embankments is grading and shaping of all cut or fill areas including swales and ditches; handling of sewer spoil, etc., and all work required to provide positive drainage at the end of each working day and upon completion of a section.

The CONTRACTOR shall be responsible for the excavation of all swales and ditches and for the excavation or filling of the roads, building pads and parking lots within the work limits to lines & grades shown on the plans. He shall be responsible for obtaining compaction in accordance with the minimum values listed in the table below for all embankments unless more stringent values are listed in the soils report, and to use any method approved by the CLIENT necessary to obtain this compaction (i.e., soil fabric or any undercutting that may be required).

Table with 5 columns: Percent, Compaction, Pavement & Floor Slabs, Grass Areas, Type Material, Standard, 95%, 90%, 95%, 90%

unless approved otherwise in the soils report or by the CLIENT. The CONTRACTOR shall notify the CLIENT if proper compaction cannot be obtained so that the CLIENT may determine what remedial measures may be needed.

A soils testing firm employed by the CLIENT shall determine which soils are unsuitable. Materials in their natural state being defined as unsuitable that would be suitable material if moisture conditioned, shall be conditioned by the CONTRACTOR and used as suitable embankment material or hauled from the site.

- 1. Any soil whose optimum moisture content exceeds 25%.
2. Any cohesive soil with an unconfined compressive strength of 1.5 tons per square foot or less.
3. Any soil whose all content exceeds 60% by weight.
4. Any soil whose maximum density is less than 100 pounds per cubic foot.
5. Any soil containing organic, deleterious, or hazardous material.

Upon completion of excavation and shaping of the water retention areas intended to maintain a permanent pool of water, all silt areas and granular or sandy soils shall be removed to a minimum depth three feet below the subgrade and replaced with an impermeable clay liner, including adjacent to and under storm sewer inlets and outlets.

The CONTRACTOR shall notify the CLIENT immediately upon encountering groundwater during excavation. If in the opinion of the CLIENT or the JURISDICTIONAL GOVERNING ENTITY this condition necessitates the installation of perforated drain tile bedded in washed gravel or open storm sewer joints wrapped with fabric, the CONTRACTOR shall install the same.

During excavation and embankment, grades may be adjusted to provide an overall site earthwork balance. The CONTRACTOR shall coordinate fully with the CLIENT in adjustment of grades, construction methods and placement of material to meet the above goals and shall immediately advise CLIENT if he believes that the earthwork will not balance.

It is the intent of these PLANS that storm waters falling on the site be diverted into sedimentation / lake / detention basins during construction. The CONTRACTOR shall construct and maintain any temporary ditches or swales that are necessary to accomplish this prior to beginning mass excavation.

J. EROSION CONTROL

Suitable erosion control practices shall be maintained by the CONTRACTOR in accordance with Illinois Urban Manual and all applicable Soil Erosion and Sedimentation Control ordinances and the PLANS.

K. UNDERCUTTING DURING EARTHWORK

If the subgrade cannot be dried adequately by dicing as outlined above for placement of material to planned grades and if the CLIENT determines that the subgrade does not meet the standards set forth above, the CLIENT may require undercutting.

L. MISCELLANEOUS CONTRACT ITEMS

The following items may be required at the CLIENT'S option, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY:

- (1) GEOTEXTILE FABRIC
Geotextile fabric or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY where proper compaction of embankments over existing soft soils is not possible.
(2) EROSION CONTROL BLANKET
Erosion control blanket or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY for the stabilization of disturbed areas.
III. UNDERGROUND IMPROVEMENTS
A. GENERAL
STANDARDS
All underground improvements shall be constructed and tested in accordance with the Standard Specifications for Water and Sewer Construction in Illinois and Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition.
SELECTED GRANULAR BACKFILL
Selected Granular Backfill shall be required for all sewer and water main trenches lying under existing or proposed streets, driveways, parking lots and within 24" thereof, and where noted on PLANS. All material placed in such trenches shall be in accordance with the above standards.
MANHOLES, CATCH BASINS, INLETS & VALVE VAULTS
All Manholes, Catch Basins, Inlets, and Valve Vaults shall be constructed of reinforced precast concrete ring construction with tongue and groove joints in conformance with the latest revision of ASTM designation C-478.
MANHOLES, BELOW SHALL BE SEALED WITH MASTIC TYPE BITUMINOUS JOINTING COMPOUND.

AUGER/BORING AND CASING

Casing pipe shall be welded steel pipe, installed where shown on the PLANS. The carrier pipe shall be securely blocked and banded and sanitary and storm sewers shall maintain the specified gradient.

AUGER (OPEN BORE)

The CONTRACTOR shall auger (open bore) where noted on PLANS.

HORIZONTAL AND VERTICAL SEPARATION OF WATER AND SEWER MAINS

Horizontal and vertical separation of water and sewer mains shall be in accordance with Standard Specifications for Water and Sewer Construction in Illinois Section 41-2.01A and 41-2.01B and Standard Drawing 18, 19, 20, 21, 22, 23 and 24.

STRUCTURE ADJUSTMENTS

Structures shall be adjusted to the finished grade as shown on PLANS.

B. SANITARY SEWERS AND APPURTENANCES

*INTENTIONALLY DELETED

C. WATER MAINS AND APPURTENANCES

*INTENTIONALLY DELETED

D. STORM SEWERS AND APPURTENANCES

STORM SEWER PIPE

Storm sewer pipe shall conform to the following:

- (1) Reinforced concrete pipe minimum Class IV in conformance with the latest revision of ASTM designation C76 with C361 or C443 flexible gasket joints, except that bituminous mastic joints may be used in grass areas.
(2) Polyvinyl Chloride (PVC) Pipe: ASTM D3034 (4-inch thru 15-inch) or ASTM F673 (18-inch thru 96-inch), rated SDR 35, continually marked with manufacturer's name, pipe size, cell category, SDR rating. Joints shall be flexible elastomeric seals conforming to ASTM D3212.
(3) Ductile Iron Pipe (DIP) shall conform to ANSI/AWWA C151/21.5, Class 50 cement lined with push on type joints conforming to ANSI/AWWA C111/A21.11.
(4) *INTENTIONALLY DELETED
(5) High Density Polyethylene Pipe (HDPE) Smooth Interior, AASHTO Designation M252 and M294, maximum diameter of 48 inches. Pipe joints and fittings shall be watertight gasketed joints. No band seals will be allowed.
(6) *INTENTIONALLY DELETED
(7) *INTENTIONALLY DELETED

Precast tees, bends, and manholes may be used if permitted by the JURISDICTIONAL GOVERNMENTAL ENTITY.

Storm sewers may be constructed with reinforced concrete pipe using only flexible gasket joints (ASTM 361 or 443) for water main crossings.

Storm sewer shall include bedding and trench backfill.

MANHOLES, INLETS & CATCH BASINS

Manholes, Inlets and Catch Basins shall be constructed in conformance with Section IIIA Manholes, etc. above. The space between connecting pipes and the wall of the manhole shall be completely filled with non-shrink hydraulic cement mortar.

FLARED END SECTION

Flared end sections shall be pre-cast reinforced concrete flared end section with an end block cast separate as per the Illinois Department of Transportation Standard 542301 and shall be installed where shown on the PLANS.

PILE RAP

Storm rip rap consisting of pieces of "A" quality stone 4 to 8" in diameter shall be furnished and installed in accordance with IDOT Specifications and shall be placed where shown on the plans, to a minimum thickness of 12" and a width as indicated on the plans.

FOUNDATION, BEDDING AND HAUNCHING

Foundation, Bedding and Haunching shall be wet coarse aggregate or moist fine aggregate in accordance with the above standards and placed as shown on the detail.

UNDERDRAINS

Pipe underdrains shall be corrugated flexible plastic pipe conforming to AASHTO Designation M262 perforated corrugated polyethylene pipe (PE) with a smooth interior of the class indicated on the PLANS and wrapped in a soil fabric liner supplied and installed by the CONTRACTOR.

MISCELLANEOUS

- (1) All existing field drainage tile or storm sewers encountered or damaged during construction shall either be restored to their original condition, properly reworked and/or connected to the storm sewer system.
(2) *INTENTIONALLY DELETED

CONNECTION FOR STORM SERVICE TO STORM MAIN

*INTENTIONALLY DELETED

E. ROADWAY AND PARKING LOT IMPROVEMENTS

STANDARDS

Work shall be completed in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition (hereinafter referred to collectively as the "Standard Specifications") except as modified below and except that payment will be defined as detailed in the contract documents between the CLIENT and the CONTRACTOR.

The CONTRACTOR shall be responsible for the excavation of all swales and ditches and for the excavation or filling of the roads, building pads and parking lots within the work limits to lines & grades shown on the plans. He shall be responsible for obtaining compaction in accordance with the minimum values listed in the table below for all embankments unless more stringent values are listed in the soils report, and to use any method approved by the CLIENT necessary to obtain this compaction (i.e., soil fabric or any undercutting that may be required).

SUBGRADE PREPARATION

The CONTRACTOR shall be responsible for full grade compaction and preparation to the lines and grades shown on the plans.

AGGREGATE BASE COURSE TYPE 'B'

Aggregate Base Course Type B shall be limited to CA-6 or CA-10 gradation. Aggregate base courses shall be proof rolled as outlined below.

PROOF ROLL

The CONTRACTOR shall proof roll the subgrade with either a 2-axle truck loaded to 27,000 lbs. Or a 3-axle truck loaded to 45,000 lbs. or as specified by the JURISDICTIONAL GOVERNING ENTITY.

Pavement subgrade material shall not be removed, placed or disturbed after proof rolling testing has been completed prior to the pavement construction. Additional testing will be required if the pavement subgrade is disturbed and/or material is removed from or placed on the pavement subgrade after proof rolling approval.

HOT-MIX ASPHALT BASE COURSE

HMA Base Course shall meet the requirements of IDOT or MSO mix design as indicated and shown on the plans. The maximum amount of recycled asphalt pavement allowed shall not exceed 30% in a MSO mix design and 20% in a HMA mix design.

HOT-MIX ASPHALT BINDER AND SURFACE COURSE

HMA binder and surface courses, shall be constructed to the compacted thickness as shown on the PLANS. The base course shall be cleaned and primed in accordance with the JURISDICTIONAL GOVERNING ENTITY. The surface course shall be placed after the base and courses have gone through one winter season, or as directed by the CLIENT. Before applying the surface course, the binder course shall be thoroughly cleaned and primed in accordance with the JURISDICTIONAL GOVERNING ENTITY.

CONCRETE PAVEMENTS

Concrete pavements shall be constructed in accordance with American Concrete Institute Standard AC308R-08 and as shown on the PLANS.

Slabs and driveway aprons shall be constructed with 6" x 6" - W2.9 x W2.9 welded wire fabric positioned on steel chair supports. Placing fabric during the concrete pouring operation will not be allowed.

Sawing of joints shall commence as soon as the concrete has cured and hardened sufficiently to permit sawing without excessive raveling, but no later than eight hours after the concrete has been placed. All joints shall be sawed to the depth as shown in the details and before uncontrolled shrinkage cracking takes place. If necessary, the sawing operation shall occur during the day or at night, regardless of weekends, holidays or weather conditions.

The CONTRACTOR is responsible to guard fresh concrete until it sets and hardens sufficiently to prevent people from walking, riding bicycles or otherwise permanently marking, delimiting or causing depressions of any type in the concrete. Any concrete so marked will be removed and replaced by the CONTRACTOR at the CONTRACTOR'S expense.

The CONTRACTOR shall protect the pavement against all traffic, including that of their own employees or other workers, until test specimens have attained the specified strength.

SIDEWALKS

Concrete sidewalks shall be constructed to width and thickness as shown on the PLANS. Sidewalks shall be thickened to a minimum of 6" at all driveways. All sidewalks shall be IDOT Class SI concrete, on aggregate base as shown on the detail.

CURB AND GUTTER

Curb and gutter shall be as per the detail shown on the PLANS, which shall include compacted aggregate base course under the curb and gutter. All contraction and expansion joints shall be constructed as per the detail.

CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

The CONTRACTOR shall saw out and remove the existing concrete curb where shown on the PLANS and install a curb of similar cross section and pavement to that removed (or depressed curb and gutter if shown on the PLANS). Upon completion of the curb and gutter any voids between the existing pavement and the new curb shall be filled with concrete to within 2" of the final surface, which is to be filled with bituminous pavement.

The CONTRACTOR shall be responsible for making final adjustments and the setting on a blumorous mastic jointing compound all castings located in the roadway, sidewalks, and parking areas prior to construction of any curbing, sidewalk, or finish surface. Any structures that needs to be lowered, or raised in excess of 4" shall be completed and the work backcharged against the underground contractor. This Contractor shall also be responsible for cleaning all of the above structures immediately upon completion of this phase of work.

PAVEMENT MARKING - PAINT

The CONTRACTOR shall furnish and apply painted marking lines, letters & symbols of the patterns, sizes and colors where shown on the PLANS. Paint pavement marking shall be applied in accordance with the IDOT Standard Specifications.

PAVEMENT MARKING - THERMOPLASTIC

The CONTRACTOR shall furnish and apply extruded thermoplastic pavement marking lines, letters and symbols of the patterns, sizes and colors where shown on the PLANS. Thermoplastic pavement marking shall be installed in accordance with the IDOT Standard Specifications.

QUALITY CONTROL

The CONTRACTOR shall provide all testing necessary to ensure improvements are in accordance with the project specifications and provide testing documentation that specifications were met.

Table with columns: DRAWN BY, DATE, REVISIONS, and a grid for revision tracking.

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Project title: OAK BROOK PARK DISTRICT CENTRAL PARK - RECREATIONAL CENTER PARKING LOT EXPANSION. Village of Oakbrook, Illinois. Construction Specifications. Sheet 8 of 8. OBPOBIL.01