City of Carroll

112 E. 5th Street Carroll, Iowa 51401-2799 (712) 792-1000 FAX: (712) 792-0139

MEMO TO: Honorable Mayor and City Council Members

FROM: Mike Pogge-Weaver, City Manager MSP-W

DATE: October 10, 2019

SUBJECT: Carroll County Law Enforcement Center

- Possible motion to reconsider the third reading of the Ordinance to amend parking on Main Street
- Ordinance to amend parking on Main Street – Third Reading and possible adoption
- Motion directing staff to restripe the parking on the east side of Main Street between 4th Street and 5th Street to a 60-degree angle which would add two additional parking spaces.
- Motion directing staff to remove the drive access to the south police department parking lot on the east side of Main Street which will add four additional parking spaces on the east side of Main Street with the upcoming Streetscape Phase 10 project.

Carroll County is in the process of developing a new Law Enforcement Center (LEC) adjacent to the Carroll County Courthouse. At the August 12th meeting the City Council approved modifications to the Downtown Streetscape with certain conditions and approved a Resolution approving a record of resolutions related to a City Complex Beautification agreement between Carroll County and the City of Carroll. The Council also approved the first reading of an ordinance to amend parking on Main Street. On August 26th the City Council approved the second reading of the ordinance. At the September 23rd meeting the third reading of the Ordinance change was not approved by the Carroll City Council with a vote of 3-3.

To accommodate two access entrances on Main Street to the new LEC, a minimum of two parking spaces are required to be removed on Main Street. The access review report completed by Bolton & Menk recommended that two additional parking spaces be removed to improve overall safety. The proposed Ordinance removes four angled parking spaces on the east side of Main Street from 5th Street to 225 feet north of 5th Street.

Since the September 23rd meeting, discussions have occurred focusing on adding additional parking spaces on Main Street that would offset the loss of the four parking spaces. Two possible ways to add parking has been identified in the section of Main Street between 4th Street and 5th Street. The first would be to change the angle of the parking from 45 degrees to 60 degrees. On the east side, changing the angle of parking would result in the addition of two parking spaces being added with minimal impact to the drive lanes on Main Street. Staff also

reviewed the west side and while 1 additional space could be added, staff would not recommend this change as the one new parking space would encroach into the southbound drive lane on Main Street. Restriping the parking spaces on the east side of Main Street could be completed yet this fall, depending on weather. It should be noted, due to the turn lane at Highway 30 and Main and the striped middle section that is used for deliveries there is not sufficient room to restripe the parking spaces in the section of Main Street between 5th Street and US Highway 30.

The second possible change would be to eliminate the driveway access to the south police department parking lot on the east side of Main Street. In discussion with Chief Burke, he would support the elimination of this driveway as it is used as a cut through, especially when trains are blocking Main Street. By eliminating this driveway four additional parking spaces could be added on the east side of Main Street. This change would involve reconstructing this area so staff would recommend that it be added to Streetscape Phase 10 that will start next spring. Included with this memo is a drawing that was prepared by City Engineer Randy Krauel that details both of these changes.

RECOMMENDATION: If a motion to reconsider the third reading of the Ordinance to amend parking on Main Street is made and approved, then Staff would recommend Mayor and City Council consider and approve of the following:

- Third reading of an Ordinance to amend parking on Main Street.
- Final adoption of an Ordinance to amend parking on Main Street.
- Motion directing staff to restripe the parking on the east side of Main Street between 4th Street and 5th Street to a 60-degree angle which would add two parking spaces.
- Motion directing staff to remove the drive access to the south police department parking lot on the east side of Main Street which will add four additional parking spaces on the east side of Main Street with the upcoming Streetscape Phase 10 project.

Attachments

Proposed Ordinance
Diagram of Parking Changes on Main Street between 4th Street and 5th Street
Bolton & Menk Carroll County Law Enforcement Center Access Review dated 6/6/2019
Letter from Shive-Hattery dated 8/6/2019
Site plan dated 7/30/2019
Building elevations

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF CARROLL, IOWA, BY AMENDING PROVISIONS PERTAINING TO ANGLE PARKING.

BE IT ENACTED by the City Council of the City of Carroll, Iowa:

SECTION 1. SECTION MODIFIED. Section 69.03, Subsection 18 of the Code of Ordinances of the City of Carroll, Iowa, is repealed and the following adopted in lieu thereof:

18. Main Street

A. On the east side from Third Street to the railroad tracks;

B. On the east side from 100 feet north of the centerline of Fourth Street to Fifth Street;

C. On the east side from 235 feet north of the centerline of Fifth Street to 105 feet north of the centerline of Seventh Street;

D. On the west side from Third Street to the railroad tracks;

E. On the west side from Fourth Street to 200 feet north of the centerline of Seventh Street.

SECTION 2. SEVERABILITY CLAUSE. If any section, provision, or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.

SECTION 3. WHEN EFFECTIVE. This ordinance shall be in effect from and after its final passage, approval, and publication as provided by law.

Passed by the Council the _____ day of _____, 2019, and approved the _____ day of _____, 2019.

_____
Eric P. Jensen, Mayor

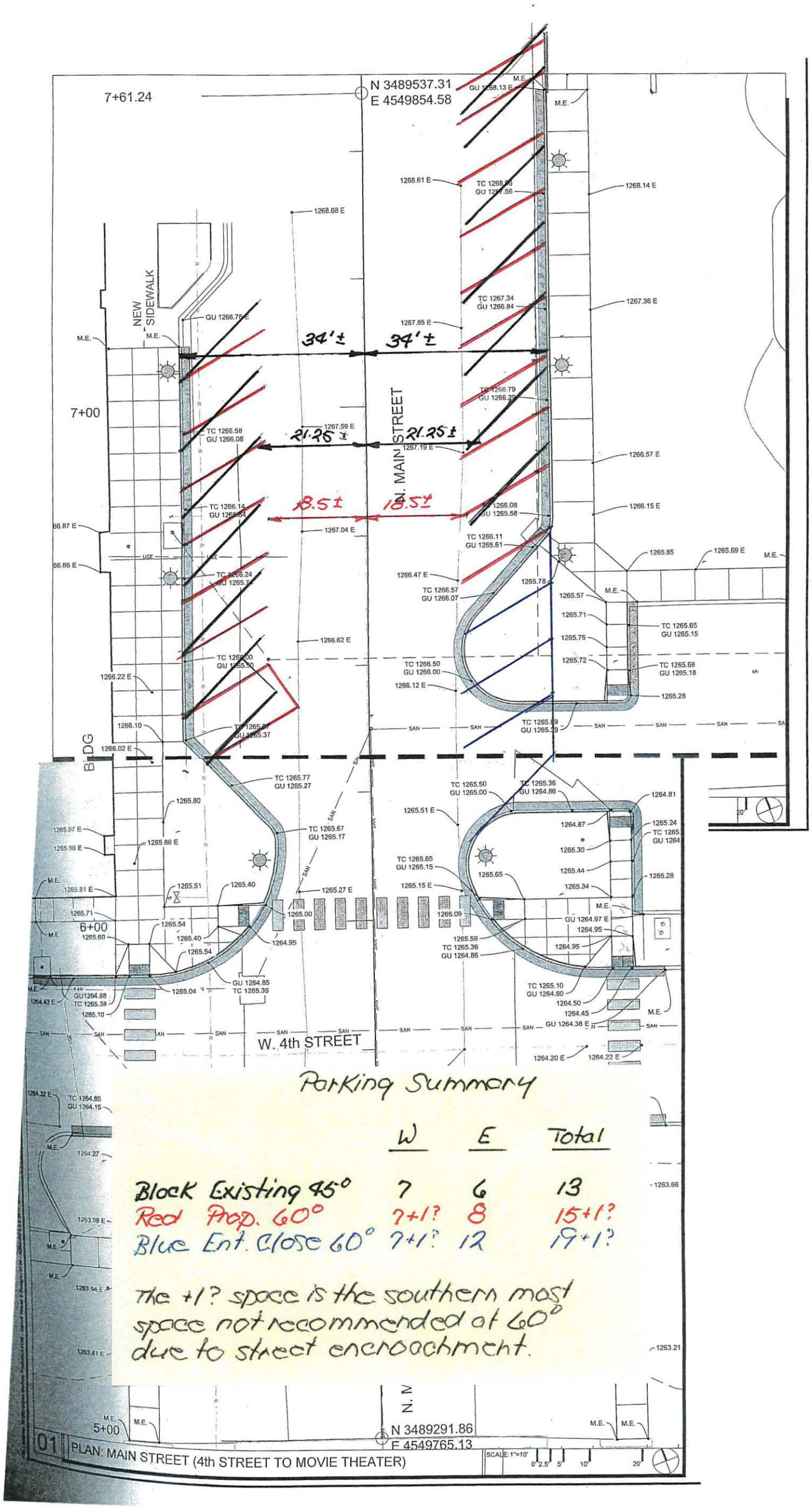
ATTEST:

By: _____
Laura A. Schaefer, City Clerk

First Reading: _____
Second Reading: _____
Third Reading: _____

I certify that the foregoing was published as Ordinance No. _____ on the _____ day of _____ _____, 2019.

_____
Laura A. Schaefer, City Clerk



Parking Summary

	W	E	Total
Block Existing 45°	7	6	13
Red Prop. 60°	7+1?	8	15+1?
Blue Ent. Close 60°	7+1?	12	19+1?

The +1? space is the southern most space not recommended at 60° due to street encroachment.

BOLTON & MENK
Real People. Real Solutions.

300 W McKinley Street
PO Box 68
Jefferson, IA 50129

Ph: (515) 386-4101
Bolton-Menk.com

MEMORANDUM

Date: June 6, 2019

To: Randy Krauel, Public Works Director/City Engineer

From: Jennifer McCoy, P.E. P.T.O.E.

Subject: Carroll County Law Enforcement Center Access Review
City of Carroll, IA
Project No.: A14.118749

Background

On behalf of the City of Carroll, IA, Bolton & Menk completed a review of the parking access for the proposed Carroll County Law Enforcement Center. This building is planned to be constructed on the north half of an existing at-grade parking lot on the east side of N. Main Street, just north of W. 5th Street in downtown Carroll. See site location in **Figure 1**. This review will examine the factors that influence the ability and ease of motorists and pedestrians to use N. Main Street adjacent to the site with the proposed new parking access and provide recommendations to the City for next steps in conversations with Carroll County.

Figure 1 - Site Location

Surrounding Network

N. Main Street is one of three streets in the city that run the entire way north-south through Carroll. N. Main Street has a 2016 volume of 4,580 vehicles/day per the Iowa DOT making it one of the top five highest volume streets in the city.

N. Main Street is approximately two-miles from residential development on the south to the Carroll Municipal Golf Course on the north. N. Main Street has a two-lane cross-section with one travel lane in each direction. The speed limit is 25 mph and it is classified as a minor arterial.

Crash History

Crash Data was reviewed for ten years from January 1, 2008 to December 31, 2017. There were five crashes on N. Main Street between W. 5th Street and Hwy 30 in the 10-year period. A summary of crash type is provided in the **Table 1** below. Using the 2016 volume provided by the Iowa DOT, provides for a segment crash rate for N. Main Street in this area of 249 crashes/100 million vehicle miles. This is a higher rate than the statewide average of 207 crashes/100 million vehicle miles for similar municipal minor arterial roadways.

Table 1 –10-yr Crash Summary by Type

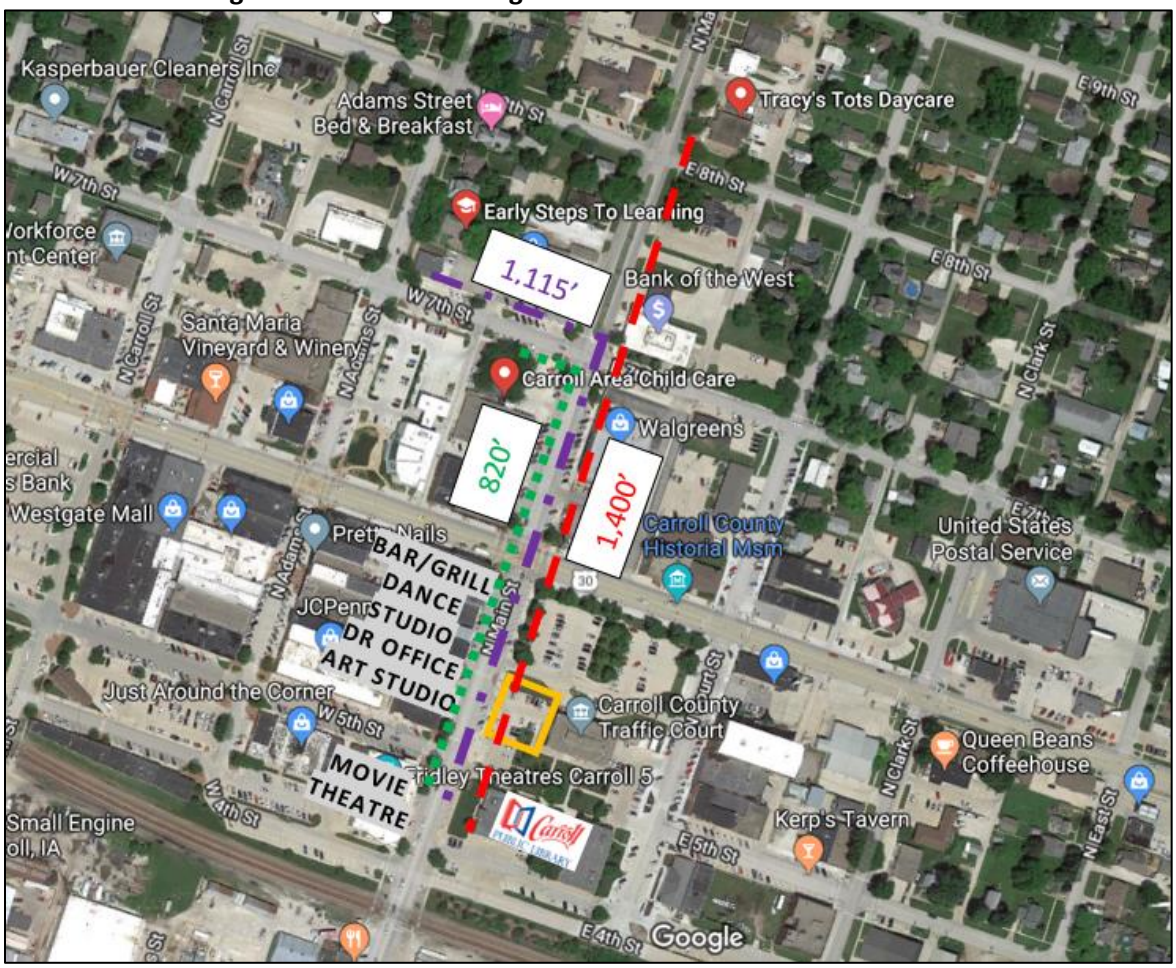
CRASH TYPE		% OF TOTAL
REAR END	2	40%
BROADSIDE	2	40%
PARKED CAR	1	20%
TOTAL	**5**	**100%**

Pedestrian Circulation

Downtown Carroll has been designed with many streetscape elements over the last few years to enhance the appeal of the area while promoting safety and walkability. Several of these streetscape elements and pedestrian crossing amenities along with on-street parking are present along N. Main Street. This street has several destination businesses along it such as the Carroll County Courthouse, City of Carroll Police Station, a movie theatre, art studio, doctor's office, dance studio, and a bar & grill. Also in the area is the Carroll City Library, located just south of the proposed site, which is currently undergoing a major renovation which will increase its attractiveness to visitors. The library currently hosts a variety of programing including preschool story time, book clubs, and a summer reading program.

Figure 2 shows several of these destination sites along with three different childcare centers that are located within walking distance of the downtown area. The three colored walk routes depict the routes that children visiting downtown from these centers may take as part of field trip to area businesses or the updated library.

Figure 2 – Pedestrian Origin-Destinations in Downtown Carroll

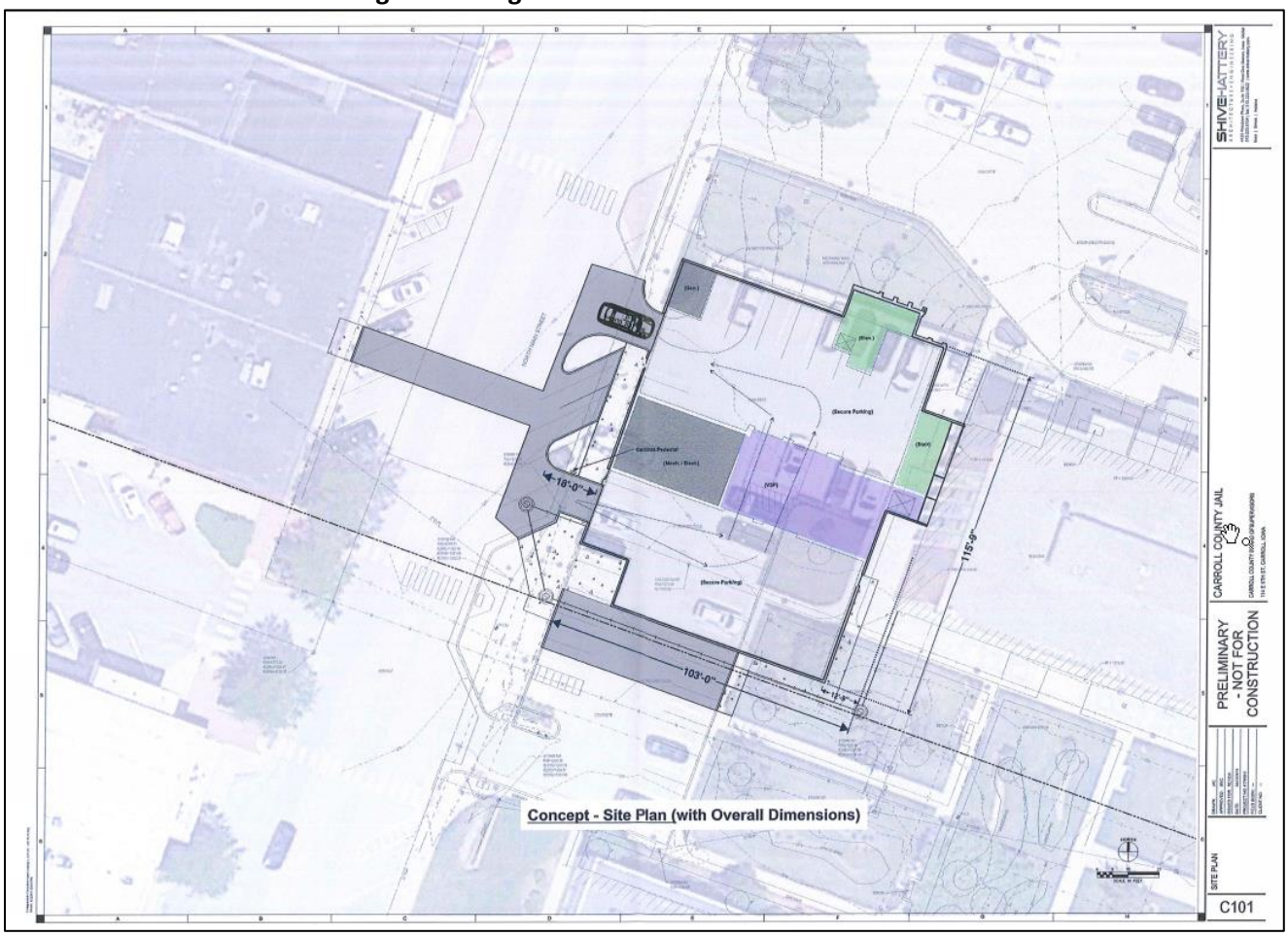


Proposed Site Changes

The original site plan shared with the City for the Carroll County Law Enforcement Center is shown in **Figure 3**. The Center is planned to be a three-story building with parking on the ground floor. The building will house offices for the county sheriff, dispatch, and up to 50 jail cells. To access the ground-floor parking, two access points on N. Main Street are planned to be constructed. These access points were proposed to allow two-way traffic out of either driveway.

Per the County Sheriff, the main vehicles to enter and exit this secured parking under the building will be dispatchers, jailers, and those vehicles transporting prisoners to and from the sally port which will also be located on the ground floor of the proposed building. The County also plans to park its lesser used vehicles here. The Sheriff estimates that the traffic entering/exiting this ground level parking will consist of three employees per each shift (1 dispatcher and 2 jailers) with a total of three shifts per day. The vehicles transporting prisoners could equate to 3 vehicles per day.

Figure 3 - Original Site Plan and Site Access



Best Practices in Parking Access Design

As part of the review of this proposed Law Enforcement Center site plan and parking access, research was conducted on best practices in the planning and design of parking facilities. The Dimensions of Parking, 5th Edition, published by the Urban Land Institute and National Parking Association was used as the main reference for our review. This book states that "to minimize conflicts between street traffic and vehicles existing from the parking facility, its best to locate exits on low volume streets…to prevent conflicts between parking facility traffic and intersection traffic, entrances should be located 75 feet from any intersection." Chapter 8 of this book also states that parking control devices should be located far enough in from the street so that if a vehicle is at the card-reader control box the vehicle can clear the sidewalk.

Chapter 21 of this book discusses several technology options for parking access control equipment. This section states that "in older systems, the card had to be swiped or inserted into a reader. Newer systems use a "prox card," which only needs to be within a few inches of the reader…saving time and increasing lane throughput."

Coordination and Communication

In May 2019, conversations took place with City and County Staff along with Bolton & Menk staff and Shive-Hattery staff, the architects on this Law Enforcement Center project. Although the number of daily vehicles entering or exiting this facility is anticipated to be low, there are still impacts from the proposed parking access design on the ability and ease of motorists and pedestrians to use N. Main Street. The main concerns about what was shown in the original site plan in **Figure 3** were:

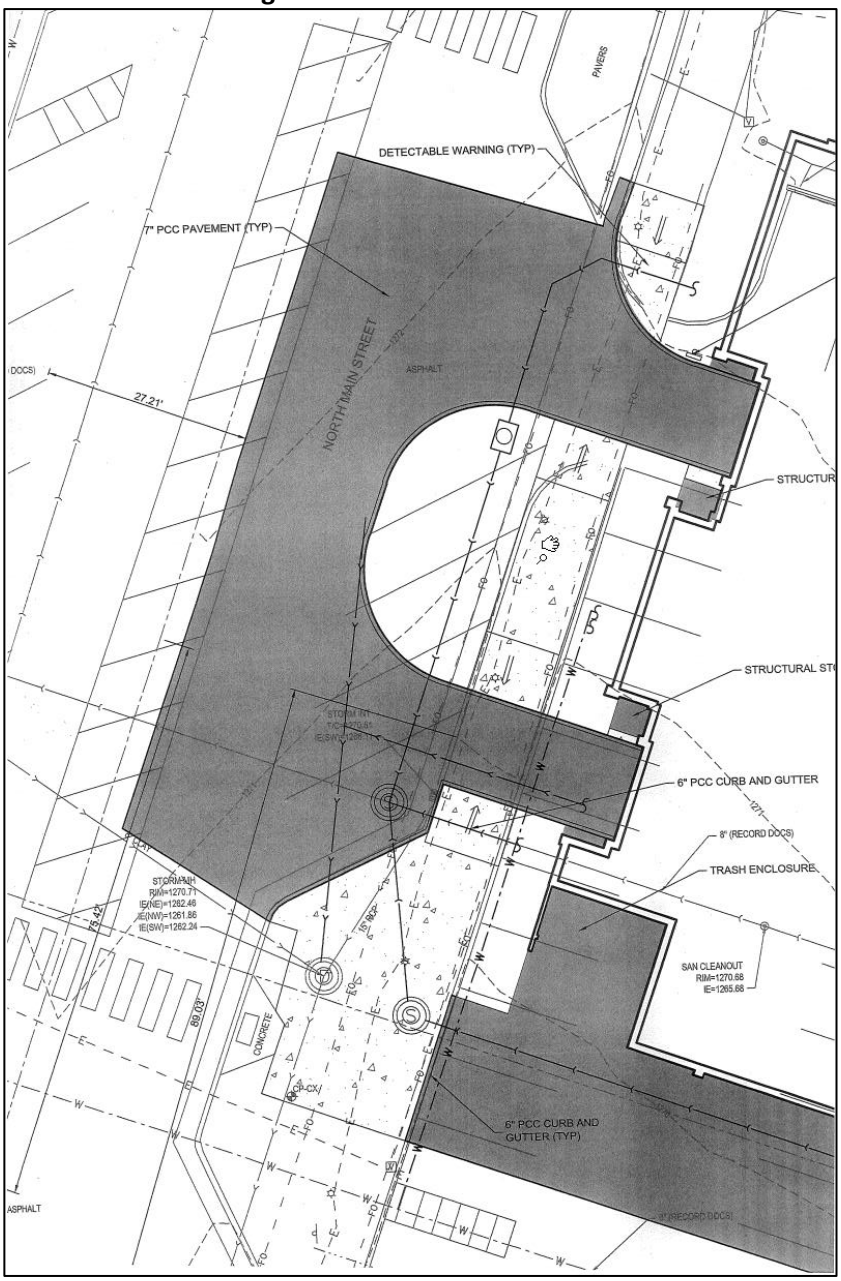
- Conflicting turn movements out of both driveways
- Call-box/card reader in the right-of-way
- Stacking in the street and blocking of sidewalk as vehicles wait to enter the facility
- In/Out access thru one 12' wide access point
- The south entrance is 50' from the intersection of W. 5th Street/N. Main Street
- On-street parking between the drives creates lack of visibility for vehicles exiting the facility
- Addition of another access point on N. Main Street
- Access directly on N. Main St instead of using the parking lot to the south to gain access

To address these concerns, several options were discussed for possible changes to what was shown in **Figure 3**. These included recessed door openings, entrance from Main and exit to parking lot to south, entrance and call box in the south parking lot and exit onto Main, and utilizing the parking lot to the south for the only entrance and exit.

Based on the conversations about these options, Carroll County worked with Shive-Hattery to design changes to the parking access and circulation. These revisions, shown in **Figure 4,** include:

- The access points remained on N. Main Street
- On-street parking removed between the drives
- Circulation created within the garage
- The north access was made an entrance only and the south access an exit only.
- The only entrance is now over 75' away from W. 5th Street
- The building was moved back from the right-of-way so that the call-box/card reader will be out of the right-of-way. The call-box/card reader will be at the north access entrance only.
- The sidewalk slopes down to be level with the two driveways on N. Main Street

Figure 4 – Revised Site Access



Findings and Recommendations

Several meetings to coordinate and communicate on these proposed parking access points have taken place over the past month. Many concerns have been raised by the City regarding these proposed driveways as they relate to access and integration into the existing transportation system. The County has also raised concerns for the operation of the facility and the safety of its employees and the public.

Some of the city's concerns have been addressed in the latest proposed layout shown in **Figure 4**, but some are still outstanding. Whereas, there are many positives to the revised access concept, there are

still several concerns, particularly when it comes to pedestrians travelling adjacent to the site and traffic flow in the area.

These concerns should be addressed as N. Main Street serves as a major connection through Carroll, providing direct access to numerous pedestrian destinations locations within the area, while carrying some of the highest vehicle volumes in the city with a crash rate over the statewide average. This project should minimize the impact to both vehicles and pedestrians on or along this street to the fullest extent possible.

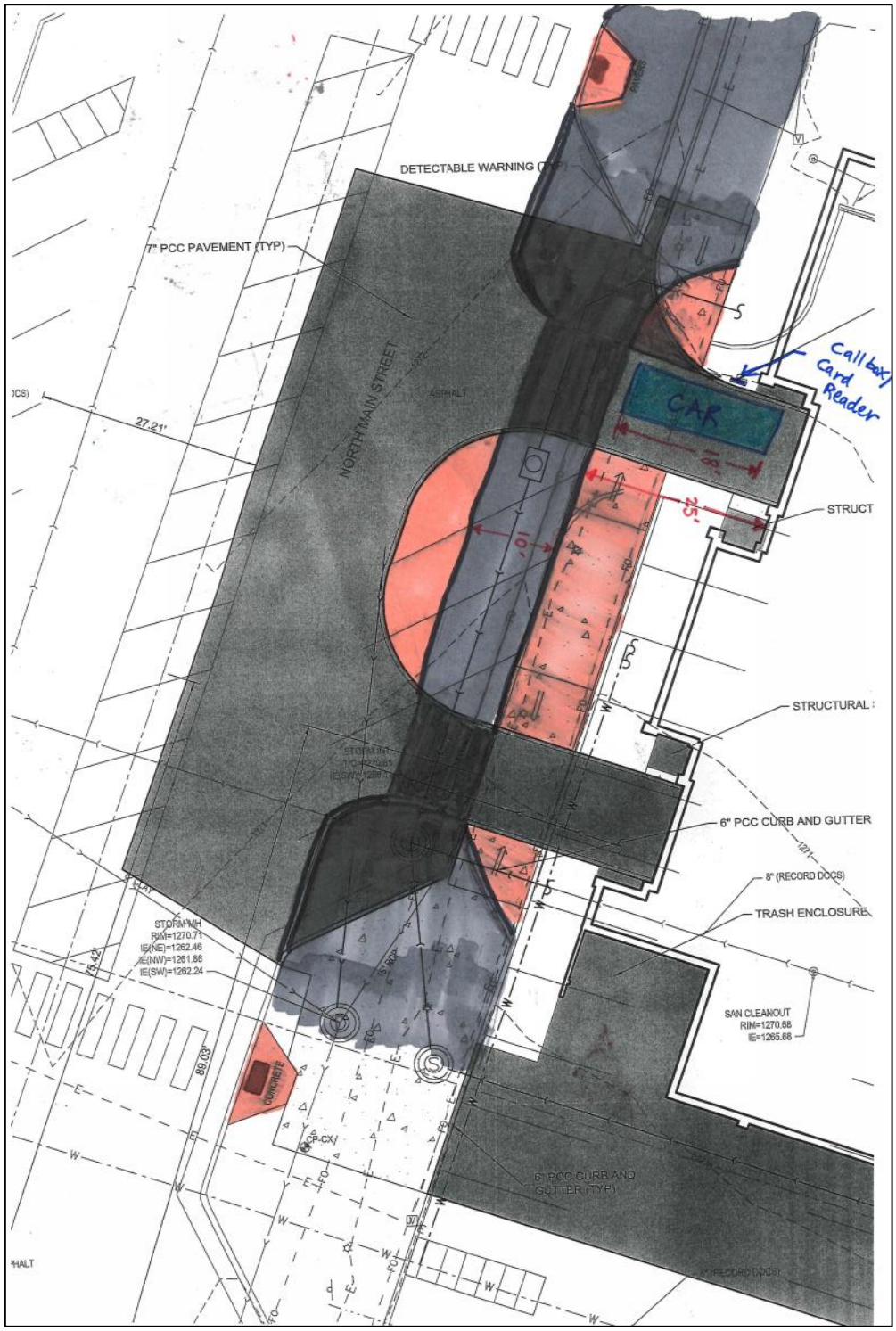
Based on the revised concept, the following items still need to be addressed:

- Blocking of sidewalk by vehicle waiting for the access door to open or waiting at the call-box/card reader to be given access
    - An average truck/van is 18' long, a driver typically sits 6' back from the front, this means that a driver at the call-box/card reader will be blocking nearly all the sidewalk as they wait for the access door to open
- The sidewalk should not dip down across the driveways, but should stay level across the driveways. The driveway approaches should be designed to slope up to meet the sidewalk and provide drainage away from the building without a "rollercoaster" effect to the sidewalk.
- The current existing bump outs need to be reconfigured to provide better driveway/access design and integration into the streetscape. What is shown has old curbs and new curbs joining at odd angles which could become maintenance issues for snow removal dirt and debris collection. The flush paver bump out on the north end of the site should be raised completely to better tie into the proposed driveways for this site.

The sketch in **Figure 5** has been prepared to highlight ways that the remaining concerns could be addressed with modifications to the site design provided. The changes included with this sketch address the City's concerns with N. Main Street that are still outlying and recommend that the Law Enforcement Center site drawings be revised to address the remaining concerns. We also recommend that Carroll County explore the use of parking facility access technology to aid in the expedience of entering the parking area under the Center to minimize the impact to the travelling public in downtown Carroll.

As the County progresses through the final stages of design and plan development for this facility, we would be happy to review future layouts or construction site plans and continue to work with the City for a positive outcome for all stakeholders.

Figure 5 – Additional Recommended Site Modifications



SHIVEHATTERY
ARCHITECTURE + ENGINEERING

August 6, 2019

City of Carroll, Iowa
Attn: Mayor and City Council Members
112 E 5th St.
Carroll, IA 51401

Re: Carroll County Law Enforcement Center – City Council Review Request

Dear Mayor and Council Members,

On behalf of our client, Carroll County, we respectfully request a waiver of the City streetscape requirements to eliminate the parking stalls along North Main Street in front of the proposed Carroll County Law Enforcement Center. By eliminating these parking stalls, it would provide a widened pedestrian sidewalk along the building and crossings at the incoming/outgoing building drive accesses. It also provides better sightlines for drivers to see pedestrians and vehicular traffic when entering and leaving the enclosed parking areas.

The preferred site layout from the County's perspective provides a 30.67' from the proposed back of curb to the face of the overhead doors. Included in the documentation is a bid alternate to recess the overhead building doors an additional 6' from the face of the building to provide even more clearance for pedestrians to cross the access drives. However, the bid alternate would likely increase the overall cost to accommodate the structural overhang for the upper levels of the building. The County has reduced the size of the Security Vehicular Sallyport to provide a pull through internal within the building. This will allow for the north overhead door to be entry only and the south overhead door to be exit only satisfying a concern expressed by the City.

We request this project to be presented at the August 12th City Council meeting for approval. Please refer to the submitted Site Plans for additional design information. If additional information is required, or you if you have any questions, please contact Monica Converse at 515-223-8104, or email mconverse@shive-hattery.com.

Sincerely,

SHIVE-HATTERY, INC.

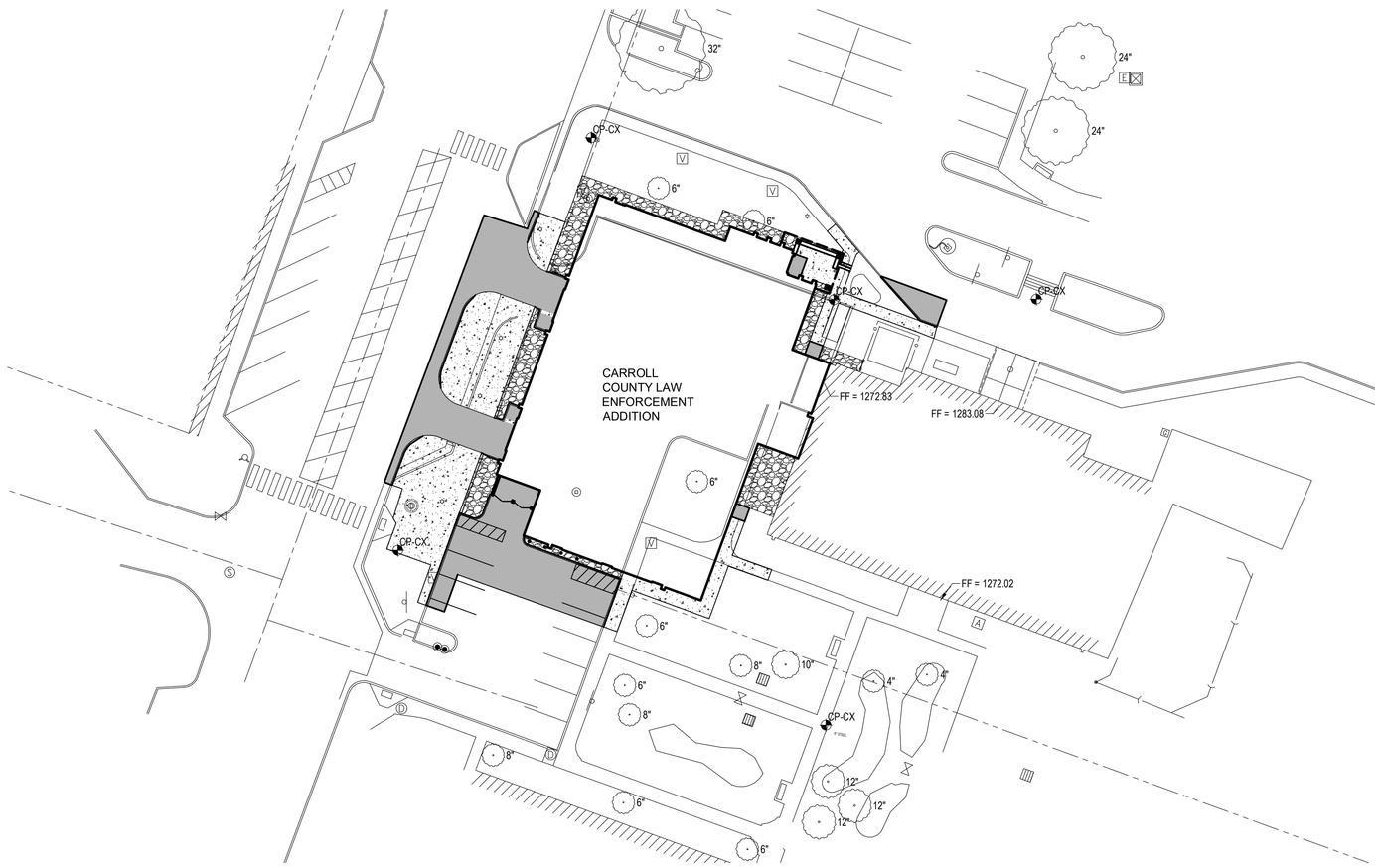
Monica M. Converse

Monica M. Converse, PE

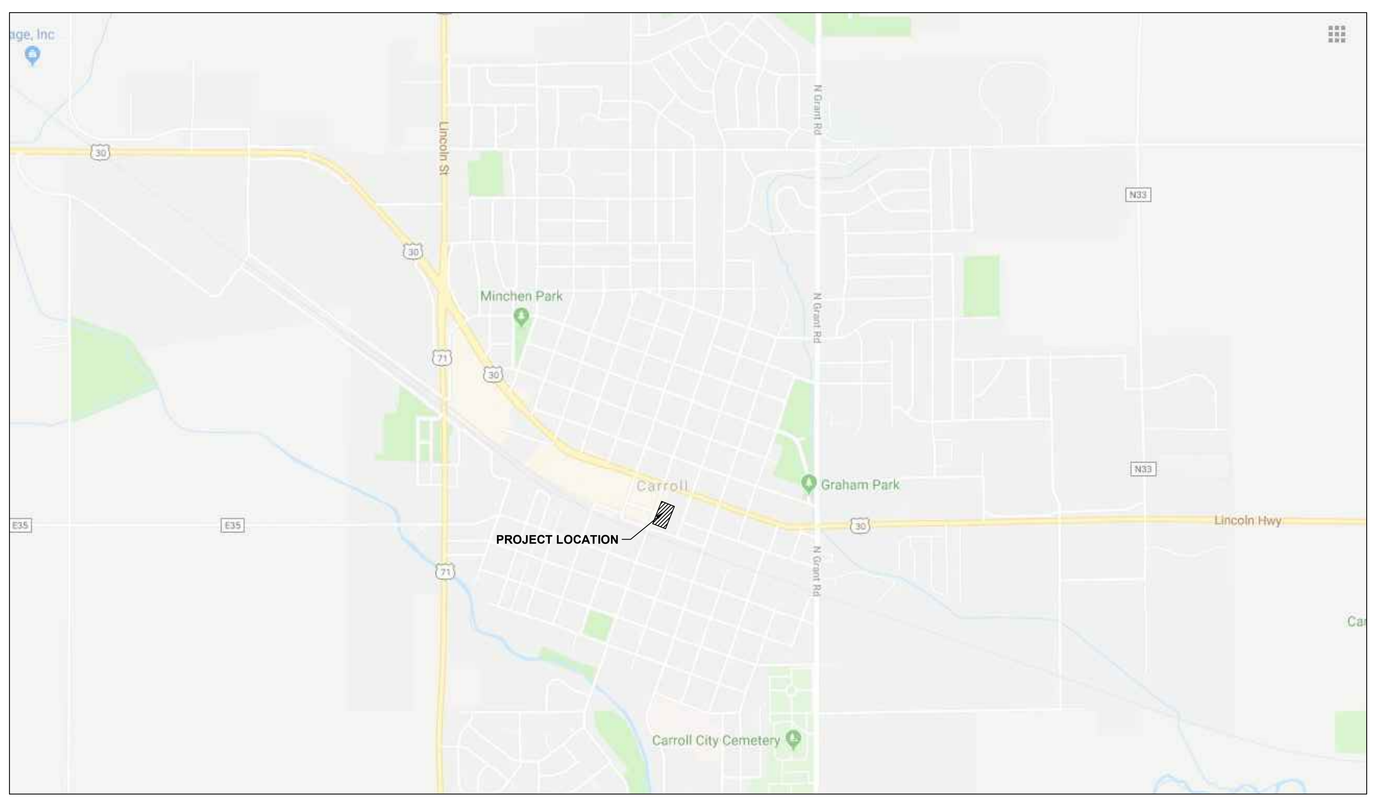
Project #4174880

CARROLL COUNTY LAW ENFORCEMENT CENTER

CARROLL COUNTY, IA
114 E 6TH STREET
CARROLL, IOWA 51401



PROJECT LOCATION
1" = 30'



VICINITY MAP

PROPERTY OWNER

CARROLL COUNTY BOARD OF SUPERVISORS
114 E 6TH STREET
CARROLL, IA 51401

APPLICANT

CARROLL COUNTY BOARD OF SUPERVISORS
114 E 6TH STREET
CARROLL, IA 51401

ENGINEER

SHIVE-HATTERY, INC.
ATTN: MONICA CONVERSE
4125 WESTOWN PARKWAY, SUITE 100
WEST DES MOINES, IA 50266
PHONE: 515-223-8104

Sheet List Table

Sheet Number	Sheet Title
C000	COVER SHEET
C001	GENERAL NOTES AND SPECS
C002	EXISTING CONDITIONS
CD01	DEMOLITION PLAN
C101	SITE PLAN
C201	GRADING PLAN
C301	UTILITY PLAN
C501	CONSTRUCTION DETAILS

CIVIL ENGINEER

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA

Signature: Date

Printed or typed name: Monica M. Converse
License Number: -
My License Renewal Date is: DECEMBER 31, 2019
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL:
ALL SHEETS

SHIVEHATTERY
ARCHITECTURE + ENGINEERING
4125 Westown Pkwy., Suite 100 | West Des Moines, Iowa 50266
515-223-8104 | fax 515-223-8022 | www.shive-hattery.com
Iowa | Illinois | Indiana

LAW ENFORCEMENT CENTER ADDITION
CARROLL COUNTY, IA
114 E 6TH STREET, CARROLL, IOWA

PRELIMINARY - NOT FOR CONSTRUCTION

07-30-2019
CITY SUBMITTAL
PROJECT NO: 4174880
CLIENT NO: ---

C000

GENERAL NOTES:

1. THE LOCATIONS OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS PLOTTED ON THE DRAWINGS ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC. AND NOT SHOWN ON THIS DRAWING. THE UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR.
2. PRIOR TO CONSTRUCTION, UNCOVER EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION.
3. IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL BY CALLING 811 OR 1-800-292-8989, NOT LESS THAN 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.
4. THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.
6. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
7. MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION.
8. SITE CLEAN-UP TO BE PERFORMED ON A DAILY BASIS. SIDEWALKS, PARKING LOTS, ROADWAYS, ETC. SHALL BE KEPT CLEAN AT ALL TIMES.
9. PROTECT ALL OPEN EXCAVATIONS.
10. REPLACE ANY PROPERTY MONUMENTS REMOVED OR DESTROYED BY CONSTRUCTION. MONUMENTS SHALL BE SET BY A LAND SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF IOWA.
11. ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT, IT TO BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION TO BE ALLOWED FOR THE COMPLETION OF THIS WORK.
12. WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE, FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK, SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER, AS REQUIRED BY SHIVE-HATTERY, INC. AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRARY TO THE INSTRUCTIONS OF SHIVE-HATTERY, INC., WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT AUTHORITY WILL NOT BE PAID FOR.
13. ALL SLOPES IN PAVEMENT TO BE UNIFORM TO AVOID PONDING.
14. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE.
15. CONTOURS AND SPOT ELEVATIONS SHOWN ARE TO FINISHED GRADE.
16. NO PONDING OF WATER WILL BE ACCEPTED ON ANY NEW PAVEMENT OR OVERLAY AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ANY AREAS OF EXISTING OR PROPOSED PAVEMENTS THAT HAVE POTENTIAL TO POND WATER AND MAKE ANY ADJUSTMENTS NECESSARY TO ENSURE THAT WATER WILL POSITIVELY DRAIN ACROSS THE PAVING OR OVERLAY.
17. STAGING LOCATION FOR CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.
18. THE CONTRACTOR TO PROVIDE EROSION CONTROL MEASURES NECESSARY TO PROTECT AGAINST SILTATION, EROSION, AND DUST POLLUTION ON THE PROJECT SITE AND ANY OFF SITE BORROW OR DISPOSAL AREAS USED FOR THIS PROJECT. COMPLY WITH SOIL EROSION CONTROL REQUIREMENTS OF IOWA CODE, FEDERAL REGULATIONS, AND LOCAL ORDINANCES.
19. ALL AREAS DISTURBED BY CONSTRUCTION, NOT DESIGNATED AS PLANTED, TO BE SODDED.
20. PROVIDE AT LEAST ONE OPEN LANE OF TRAFFIC AT ALL TIMES WHEN PERFORMING WORK WITHIN THE PUBLIC RIGHT OF WAY. PROVIDE TRAFFIC CONTROL ACCORDING TO MUTCD STANDARDS AND COORDINATE WITH THE CITY OF CARROLL FOR ANY AND ALL PERMITTING RELATED TO TRAFFIC CONTROL IN THE PUBLIC R.O.W.
21. THE SITE IS TO BE MAINTAINED IN COMPLIANCE WITH ALL CITY CODE APPLICABLE ON THE DATE OF SITE PLAN APPROVAL.
22. NOTIFY UTILITY COMPANIES WHO HAVE FACILITIES THAT ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS OF THE SCHEDULE PRIOR TO EACH STAGE OF CONSTRUCTION.
23. CONTROL DUST SPREADING FROM ALL WORK AND STAGING AREAS.
24. COORDINATE ANY GRADE ADJUSTMENTS WITH THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
25. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
26. COORDINATE ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION. ANY WORK ON A PUBLIC STREET OR ALLEY THAT REQUIRES CLOSURE WILL REQUIRE A CLOSURE NOTICE SUBMITTED TO CARROLL PUBLIC WORKS 48 HOURS IN ADVANCE.
27. ALL EXISTING UTILITY STRUCTURES TO BE ADJUSTED TO FINAL FINISH GRADES.
28. ALL WATER WORK, PUBLIC OR PRIVATE, TO BE DONE IN ACCORDANCE WITH SUDAS STANDARD SPECIFICATIONS.
29. SIGNING, STRIPING OR OTHER TRAFFIC CONTROL DEVICES ON THE DRIVEWAY APPROACHES TO PUBLIC STREETS SHOULD CONFORM TO THE (MUTCD) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (FEDERAL HIGHWAY ADMINISTRATION, 2009 EDITION).
30. AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W. / EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWER AND STREETS, CONTACT THE CITY OF CARROLL TO GATHER AND FILL OUT ALL PERMITS THAT MAY BE NECESSARY. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS / AGREEMENTS AND APPLICABLE PERMITS.

GRADING AND EROSION CONTROL NOTES:

1. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
2. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
3. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
4. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
5. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
6. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE SEEDED OR SODDED. THESE AREAS SHALL BE SEEDED OR SODDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
7. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
8. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
9. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, WATTLES, INLET PROTECTION, ETC.) TO PREVENT EROSION.
11. ALL STORM SEWER INTAKES THAT RECEIVE STORMWATER RUNOFF FROM DISTURBED AREAS SHALL BE PROVIDED WITH INLET PROTECTION. SEE DETAIL.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, PERIODIC CHECKING AND REINSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES.
13. OWNER SHALL ASSUME RESPONSIBILITY FOR ALL EROSION CONTROL UNTIL DELEGATED TO CONTRACTOR ONCE THE PROJECT CONSTRUCTION STARTS.
14. THE CONSTRUCTION SITE SHALL NOT EXCEED OVER AN ACRE OF DISTURBED GROUND. A SWPPP AND GENERAL PERMIT #2 WILL NOT BE REQUIRED FOR CONSTRUCTION. HOWEVER, CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROLS AS REQUIRED TO PREVENT THE RELEASE OF SEDIMENT INTO PUBLIC STORM SEWER.

WATER LINE CONSTRUCTION NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES AND WHETHER ADDITIONAL UTILITIES EXIST.
2. CONTRACTOR SHALL NOTIFY CITY OF CARROLL ONE WEEK PRIOR TO WATER LINE CONSTRUCTION.
3. WATER TO BE INSTALLED WITH A MINIMUM COVER OF 5.5 FEET DEEP OR LOWER TO ACCOMMODATE UTILITY CROSSINGS.
4. ALL WATER WORK, PUBLIC OR PRIVATE, SHALL BE DONE IN ACCORDANCE WITH SUDAS STANDARD SPECIFICATIONS AND CITY REQUIREMENTS.
5. CONTACT FIRE DEPARTMENT OF ANY CHANGES THAT AFFECT FIRE/EMERGENCY ACCESS TO SITE, BUILDING, FDC'S, PIV'S, HYDRANTS, AND FRONT DOORS.
6. ALL EXISTING AND PROPOSED HYDRANTS AND VALVES SHALL BE ADJUSTED TO FINAL GRADES.
7. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE CITY'S CROSS CONNECTION CONTROL/CONTAINMENT PROVISION.
8. CONTACT THE CITY OF CARROLL FOR ANYTHING AFFECTING WATER INFRASTRUCTURE.

SANITARY SEWER CONSTRUCTION NOTES:

1. VERIFY THE EXACT LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES AND WHETHER ADDITIONAL UTILITIES EXIST.
2. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE SUDAS STANDARDS.
3. PIPE LENGTHS SHOWN ARE CENTERLINE TO CENTERLINE OF STRUCTURES.
4. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING AND REBUILDING MANHOLES AS NECESSARY TO MATCH FINAL GRADES. CHIMNEY SEALS MAY BE USED.

STORM SEWER CONSTRUCTION NOTES:

1. VERIFY THE EXACT LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES AND WHETHER ADDITIONAL UTILITIES EXIST.
2. ALL STORM SEWER CONSTRUCTION SHALL CONFORM TO SUDAS SPECIFICATIONS.
3. PIPE LENGTHS SHOWN ARE INSIDE EDGE TO INSIDE EDGE OF STRUCTURES.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL STORM FLOW IN EXISTING CITY SYSTEM UNTIL NEW SYSTEM IS INSTALLED AND APPROVED.
5. MODIFY EXISTING INVERTS TO ACCOMMODATE NEW PIPE CONNECTIONS.
6. ALL BENDS AND CONNECTIONS SHALL BE MANUFACTURED CONNECTIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING STORM SEWER WITHIN THE PROJECT AREA.
8. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING AND REBUILDING STORM STRUCTURES AS NECESSARY TO MATCH FINAL GRADES.
9. WHERE RCP STORM SEWER CROSSES THE WATER SERVICE, PROVIDE O-RING GASKETS AT JOINTS ONE FULL LENGTH OF SEWER PIPE ON EITHER SIDE OF THE CROSSING.

TRAFFIC CONTROL:

1. PROVIDE ALL REQUIRED SIGNAGE AND WORK IN THE RIGHT OF WAY AS REQUIRED BY ROADWAY JURISDICTIONS.
2. IT IS CONTRACTOR'S RESPONSIBILITY TO CONTROL TRAFFIC DURING CONSTRUCTION AND PROVIDE ADEQUATE TRAFFIC AND PEDESTRIAN CONTROL AND SIGNAGE.
3. CONTRACTOR TO INSTALL AND MAINTAIN CHAIN LINK CONSTRUCTION FENCE AROUND PROJECT LIMITS. CONTRACTOR SHALL ASSUME PEDESTRIAN TRAFFIC WILL NEAR THE AREA THROUGHOUT THE PROJECT DURATION.

TECHNICAL SPECIFICATIONS:

THE MOST RECENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND THE CITY OF CARROLL SUPPLEMENTAL SPECIFICATIONS SHALL APPLY TO ALL SITE WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN.

A. CONCRETE PAVING:
MATERIALS AND MIXING FOR ALL CONCRETE WORK, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO IOWA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, SECTIONS 2301.01 THROUGH 2301.03 AND MATERIALS I.M. 529 FOR AIR-ENTRAINED TYPE C-4 MIX WITH TYPE I CEMENT. M-MIX CAN BE USED WITH APPROVAL OF ENGINEER.

COARSE AGGREGATE DURABILITY SHALL BE CLASS II

COMPRESSIVE STRENGTH 3000 PSI @ 7 DAYS AND 4000 PSI @ 28 DAYS

SLUMP: 3" ± 1"

AIR CONTENT: 7.0% ± 1.0%

TESTING - ONE SET OF TEST CYLINDERS REQUIRED FOR EACH 100 C.Y. OR ONE PER DAY IF LESS THAN 100 CY FROM SAME READY MIX PLANT. TESTING TO BE COMPLETED BY AN INDEPENDENT TESTING LABORATORY AND PAID FOR BY OWNER. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK. SUBMIT ALL REPORTS TO THE ENGINEER.

SURFACE CURING: CONTRACTOR SHALL APPLY WHITE PIGMENT LIQUID CURING COMPOUND IN A FINE SPRAY TO FORM CONTINUOUS UNIFORM FILM AFTER FINISHING AND SURFACE MOISTURE HAS DISAPPEARED, OR WITHIN 30 MINUTES OF PLACEMENT.

PROVIDE ENGINEER WITH CONCRETE MIX DESIGN FOR APPROVAL.

COLD-WEATHER PLACEMENT: COMPLY WITH ACI 306.1 AND AS FOLLOWS. PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES.
1. WHEN AVERAGE HIGH AND LOW TEMPERATURE IS EXPECTED TO FALL BELOW 40 DEG F FOR THREE SUCCESSIVE DAYS, MAINTAIN DELIVERED CONCRETE MIXTURE TEMPERATURE WITHIN THE TEMPERATURE RANGE REQUIRED BY ACI 301.
2. DO NOT USE FROZEN MATERIALS OR MATERIALS CONTAINING ICE OR SNOW. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE OR ON SUBGRADE CONTAINING FROZEN MATERIALS.
3. DO NOT USE CALCIUM CHLORIDE, SALT, OR OTHER MATERIALS CONTAINING ANTIFREEZE AGENTS OR CHEMICAL ACCELERATORS UNLESS OTHERWISE SPECIFIED AND APPROVED IN MIXTURE DESIGNS.

B. SEALANTS:
ALL JOINTS SHALL BE SEALED.

ALL EXPANSION JOINTS SHALL BE SEALED WITH A PEDESTRIAN RATED, SELF-LEVELING, ELASTOMERIC POLYURETHANE SEALANT, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUBMITTAL OF ALL SEALANTS TO ENGINEER FOR REVIEW.

C. PAVEMENT JOINTING:
PROVIDED 3/4" ISOLATION JOINT WITH SEALANT ALONG ALL STRUCTURES AND AT LOCATIONS AS SHOWN ON THE DRAWINGS.

JOINTING SHOULD CONFORM TO SUDAS SECTION 7010.

CONTRACTOR TO SUBMIT JOINTING PLAN TO ENGINEER FOR APPROVAL, PRIOR TO PAVING. SPACE TRANSVERSE JOINTS IN 7" PAVING NO FURTHER THAN 14'. TRANSVERSE JOINTS IN 5" SIDEWALK PAVING SHOULD BE SPACED TO MATCH THE WIDTH OF THE SIDEWALK, NOT TO EXCEED 6'.

PROVIDE "BT" JOINT WHEN TYING INTO EXISTING PAVING, AND BETWEEN PROPOSED CURB AND SIDEWALK SECTIONS.

D. SITE EARTHWORK:
REFER TO GEOTECHNICAL REPORT AND STRUCTURAL EXCAVATION AND BACKFILL REQUIREMENTS FOR ALL EARTHWORK ASSOCIATED WITH BUILDING AND FOUNDATIONS.

COMPLETE SITE EARTHWORK AND TRENCHING ACCORDING TO SUDAS REQUIREMENTS UNLESS OTHERWISE SPECIFIED. CONSTRUCT TO ELEVATIONS SHOWN.

SCARIFY A MINIMUM OF TWELVE (12") INCHES OF MATERIAL UNDER THE PROPOSED PAVEMENT SUBBASE AND RECOMPACT TO 95% PERCENT DENSITY, ASTM D698 (STANDARD PROCTOR).

PROVIDE WATER AS NEEDED TO OBTAIN OPTIMUM MOISTURE CONTENT (0 TO + 4%, OR -2% TO +3% IF WITHIN THE UPPER ONE FOOT OF PAVEMENT SUBGRADE) OR MOISTURE CONTENT DIRECTED BY GEOTECHNICAL ENGINEER FOR ALL COMPACTION.

EXCESS SOIL AND GRANULAR MATERIAL SHALL BE REMOVED FROM THE SITE.

PROOF ROLL EXPOSED SUBGRADES WITH HEAVY CONSTRUCTION EQUIPMENT PRIOR TO PLACEMENT OF ANY NEW FILL. GEOTECHNICAL ENGINEER TO OBSERVE PROOF ROLLING OPERATIONS AND TO RECOMMEND ANY CORRECTIVE ACTION.

PROVIDE COMPACTION TESTS FOR AREAS UNDER PAVING AND MAKE ONE TEST PER 5,000 SQUARE FEET. TESTING TO BE DONE AND PAID FOR BY OWNER. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK.

PROVIDE A MINIMUM OF 6" OF TOPSOIL IN ALL LANDSCAPE AND SODDED AREAS. ALL AREAS TO RECEIVE TOPSOIL SHALL BE TILLED OR RIPPED TO A MINIMUM 6" DEPTH TO LOOSEN SUBSOIL.

E. TRAFFIC AND PEDESTRIAN CONTROL:
PROVIDE BARRICADES, FENCING, AND OTHER DEVICES TO KEEP UNAUTHORIZED PERSONNEL FROM PROJECT SITE. KEEP INTERFERENCE WITH TRAFFIC TO A MINIMUM. PROVIDE OWNERS REPRESENTATIVE WITH A CONSTRUCTION STAGING PLAN SHOWING CONSTRUCTION SEQUENCING, STAGING AREAS, AND ALL ACCESS ROUTES.

FOR WORK WITHIN THE CITY RIGHT-OF-WAY, COORDINATE TRAFFIC CONTROL WITH THE CITY.

KEEP INTERFERENCE WITH TRAFFIC TO A MINIMUM. DO NOT BLOCK EXISTING SITE ROADWAYS OR DRIVEWAYS.

ALL VEHICULAR AND PEDESTRIAN CONTROL SIGNAGE SHALL CONFORM TO THE STANDARDS IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION AND ADDITIONAL REQUIREMENTS OF MUNICIPALITIES HAVING JURISDICTION.

CONTRACTOR TO MAINTAIN CHAIN LINK CONSTRUCTION FENCE AROUND PROJECT LIMITS THROUGHOUT THE PROJECT DURATION, AND COORDINATE ANY FENCING WITHIN THE RIGHT-OF-WAY WITH THE CITY.

F. PAVEMENT MARKINGS
FACTORY MIX QUICK DRYING, NON-BLEEDING WATERBORNE PAINT COMPLYING WITH IOWA DOT STANDARD SPECIFICATION SECTION 4183. MATCH EXISTING FOR STREET WORK AND WHITE FOR PARKING LOTS.

G. SANITARY AND STORM SEWER PIPES, FITTINGS AND STRUCTURES:
MATERIALS AND INSTALLATION TO MEET THE CURRENT SPECIFICATIONS FOR IOWA "STATEWIDE URBAN DESIGN AND SPECIFICATIONS" (SUDAS) AND CITY OF CARROLL SUPPLEMENTAL REQUIREMENTS. ALL HDPE PIPE SHALL BE DUAL-WALLED.

H. WATER SERVICE AND FITTINGS:
MATERIALS AND INSTALLATION TO MEET THE CURRENT SPECIFICATIONS FOR IOWA "STATEWIDE URBAN DESIGN AND SPECIFICATIONS" (SUDAS) AND CITY OF CARROLL SUPPLEMENTAL REQUIREMENTS.

I. SANITARY GRINDER AND INTERCEPTORS:
SANITARY SEWER GRINDER SHALL BE 30005-0008 MUFFIN MONSTER GRINDER, OR APPROVED EQUIVALENT. CONTRACTOR SHALL SUPPLY SUBMITTAL OF PROPOSED GRINDER AND PRE-ENGINEERED HOUSING MANHOLE TO ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO ORDERING.

GRINDER SHALL BE INSTALLED IN A 48" MINIMUM DIAMETER LID-TYPE MUFFIN MONSTER PRE-ENGINEERED MANHOLE STRUCTURE OR APPROVED EQUIVALENT. LID SHALL HAVE A PEDESTRIAN-RATED, FOLDING HATCH AND LOCKING MECHANISM FOR ACCESS WITH FIBERGLASS ACCESS LADDER.

REFER TO PLUMBING PLANS FOR GREASE INTERCEPTOR AND SAND/OIL SEPARATOR SPECIFICATIONS.

J. STORM WATER POLLUTION PREVENTION:
THE PROJECT AREA IS ANTICIPATED TO BE LESS THAN ONE ACRE, SO AN IOWA DNR NPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITY WILL NOT BE REQUIRED. CONTRACTOR SHALL STILL IMPLEMENT BEST MANAGEMENT PRACTICES TO LIMIT THE AMOUNT OF OFF SITE SEDIMENT TRANSPORT AND MEET ALL LOCAL EROSION CONTROL REQUIREMENTS AND PERMITTING.

K. SODDING
SOD ENTIRE SITE ACCORDING TO SUDAS REQUIREMENTS.

L. PAVERS
ANY EXISTING CITY STREETSCAPE PAVERS AREAS THAT ARE DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AND REPLACED TO MATCH EXISTING CONDITIONS.

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ARCHITECTURE + ENGINEERING
4125 Westown Pkwy, Suite 100 | West Des Moines, Iowa 50266
515.223.8104 | fax: 515.223.0622 | www.shive-hattery.com
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LAW ENFORCEMENT CENTER ADDITION

CARROLL COUNTY, IA

114 E 6TH STREET, CARROLL, IOWA

DRAWN:	CWH
APPROVED:	MMC
ISSUED FOR:	CONSTRUCTION DOCUMENTS
DATE:	07-17-2019
PROJECT NO:	4174880
FIELD BOOK:	---
CLIENT NO:	---

GENERAL NOTES AND SPECS

C001

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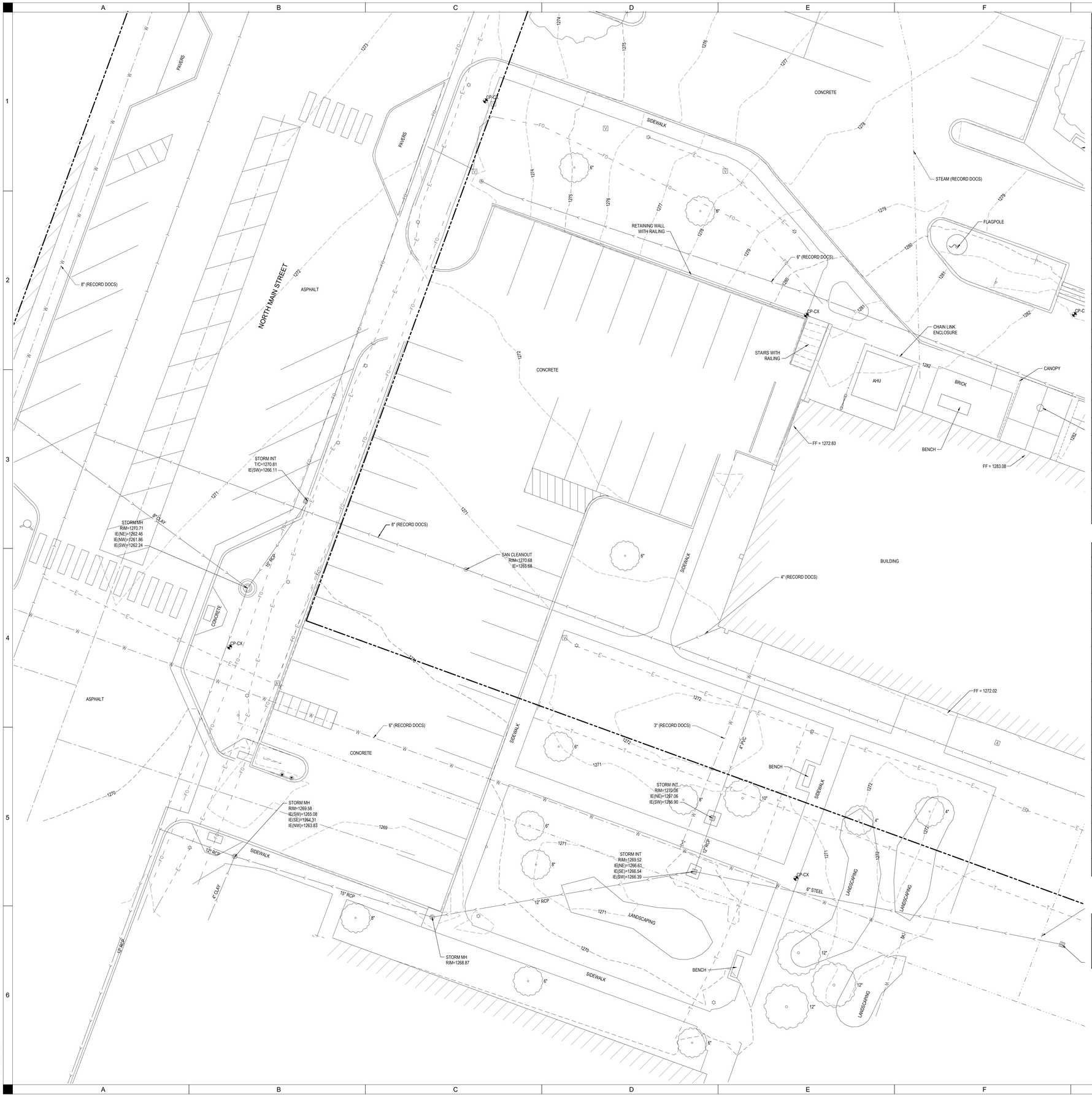

LEGEND

GENERAL SITE

PLAN MARK	DESCRIPTION
	EXISTING STRUCTURE
	GUARD POST/ BOLLARD
MB	MAILBOX
PM	PARKING METER
	FLAGPOLE
	HANDICAPPED PARKING
	SHRUB
	DECIDUOUS TREE
	CONIFEROUS TREE
	SINGLE POLE SIGN
	DOUBLE POLE SIGN
	TRAFFIC SIGNAL WITH ARM
	TRAFFIC SIGNAL
	UTILILTY MARKER
	RAILROAD CROSSING SIGNAL
	TRAFFIC MANHOLE
	WIRE FENCE
	WOOD FENCE
	CHAINLINK FENCE
	RAILROAD
	GUARD RAIL
	TREE LINE
621	MINOR CONTOUR
620	MAJOR CONTOUR
	CONCRETE
	GRAVEL
	ASPHALT

LEGEND

SURVEY

PLAN MARK	DESCRIPTION
BM	BENCH MARK
CP	CONTROL POINT
	IRON ROD - FOUND
	IRON ROD - SET
	SECTION CORNER FOUND
	MONUMENT SET
	X CUT FOUND
	X CUT SET
	RIGHT OF WAY MARKER
	NAIL FOUND
	NAIL SET
	STATION MARKER
	SOIL BORING
(00)	RECORD BEARING/DISTANCE
00	MEASURED BEARING/DISTANCE
POB	POINT OF BEGINNING
POR	POINT OF REFERENCE

UTILITY NOTE

THE LOCATIONS OF UTILITY MAINS, STRUCTURES, AND SERVICE CONNECTIONS PLOTTED ON THIS DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES, AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC., AND NOT SHOWN ON THIS DRAWING.

NORTH

0 5 10 20

SCALE IN FEET

LEGEND

UTILITIES

PLAN MARK	DESCRIPTION
	FLOODLIGHT
	LIGHT POLE OVERHANG
	LIGHT POST
	SIREN POLE
	UTILITY POLE
	GUY ANCHOR
	UTILITY POLE W/TRANSFORMER
	FIRE HYDRANT
	FLARED END SECTION
	UTILITY END CAP
	VALVE
PIV	POST INDICATOR VALVE
C	CABLE TV PEDESTAL
	CLEANOUT
J	JUNCTION BOX
MH	MANHOLE
D	DRAINAGE MANHOLE
E	ELECTRICAL MANHOLE
S	SANITARY MANHOLE
T	TELEPHONE MANHOLE
T	TELEPHONE PEDESTAL
V	VAULT BOX
W	MONITORING WELL
W	WATER MANHOLE
W	WATER IRRIGATION VALVE
	WATER SHUTOFF VALVE
HH	HANDHOLE
S	SIGNAL BOX
G	GAS METER
E	ELECTRIC METER
	TRANSFORMER
W	WATER METER
A	AIR CONDITIONER
	CURB INLET
	INTAKE - CIRCLE
	INTAKE - RECTANGLE
	INTAKE - SQUARE
	RA-3 INTAKE
	RA-5 INTAKE
	RA-8 INTAKE
	YARD HYDRANT
F	FIRE DEPARTMENT VALVE
R	GAS REGULATOR
	STORM ROOF DOWNSPOUT

LEGEND

UTILITY LINES

LINE TYPE	DESCRIPTION
OE	ELECTRIC - OVERHEAD
E	ELECTRIC - UNDERGROUND
G	GAS MAIN
W	WATER MAIN
	SANITARY SEWER
	STORM SEWER
OT	TELEPHONE - OVERHEAD
T	TELEPHONE - UNDERGROUND
OC	CABLE LINE - OVERHEAD
C	CABLE LINE - UNDERGROUND
FO	FIBER OPTICS
ST	STEAM

SHIVEHATTERY
ARCHITECTURE + ENGINEERING
4125 Westown Pkwy., Suite 100 | West Des Moines, Iowa 50266
515.222.3101 | fax 515.222.3602 | www.shive-hattery.com
Iowa | Illinois | Indiana

LAW ENFORCEMENT CENTER ADDITION

CARROLL COUNTY, IA
114 E 6TH STREET, CARROLL, IOWA

DRAWN: CHH
APPROVED: MMC
ISSUED FOR: CONSTRUCTION DOCUMENTS
DATE: 07-17-2019
PROJECT NO: 4174880
FIELD BOOK: --
CLIENT NO: --

EXISTING CONDITIONS

C002

PROTECT EXISTING SIDEWALK AND UTILITIES
PROTECT EXISTING STREETSCAPING
PROTECT EXISTING FIBER
REMOVE AND DISPOSE OF EXISTING TREES (TYP)
PROTECT EXISTING ELECTRIC LINE
PROTECT EXISTING PAVEMENT
REMOVE AND DISPOSE OF EXISTING PCC SIDEWALK (TYP)
PROTECT EXISTING UTILITY BOX
REMOVE AND DISPOSE OF EXISTING STORM PIPE
REMOVE AND RELOCATE EXISTING LIGHT FIXTURE
PROTECT EXISTING UTILITY
PROTECT FLAG POLE AND ISLAND
REMOVE AND DISPOSE OF EXISTING HMA PAVEMENT
PROTECT EXISTING CURB
REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK
PROTECT EXISTING PAVEMENT
REMOVE AND REINSTALL EXISTING LIGHT FIXTURE
REMOVE AND DISPOSE OF EXISTING PCC PAVEMENT
REMOVE AND DISPOSE OF EXISTING RETAINING WALL AND RAILING
REMOVE AND DISPOSE OF EXISTING PCC CURB AND GUTTER
PROTECT EXISTING AIR HANDLING UNIT AND FENCING
PROTECT EXISTING UTILITIES (TYP)
RELOCATE FIBER AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW CANOPY
PROTECT EXISTING PAVEMENT AND MAINTAIN ACCESS TO EXISTING BUILDING ENTRANCE
REMOVE AND DISPOSE OF EXISTING PCC PAVEMENT
REMOVE AND DISPOSE OF EXISTING STAIRS AND RAILING
REMOVE AND DISPOSE OF RETAINING WALL
REMOVE AND DISPOSE OF EXISTING PCC SIDEWALK (TYP)
REMOVE AND REINSTALL EXISTING LIGHT FIXTURE
REMOVE AND DISPOSE OF EXISTING SANITARY SEWER
REMOVE EXISTING INTAKE
REMOVE AND REINSTALL EXISTING LIGHT FIXTURE
REMOVE AND DISPOSE OF EXISTING CURB (TYP)
PROTECT EXISTING UTILITIES (TYP)
REMOVE AND DISPOSE OF EXISTING PCC PAVEMENT
PROTECT EXISTING BUILDING
REMOVE AND DISPOSE OF EXISTING TREE (TYP)
REMOVE EXISTING CLEANOUT
REMOVE AND DISPOSE OF EXISTING PCC SIDEWALK (TYP)
REMOVE AND DISPOSE OF STORM SEWER
REMOVE AND DISPOSE OF EXISTING SANITARY SEWER
MAINTAIN SERVICE TO EXISTING BUILDING DURING CONSTRUCTION. COORDINATE ANY SERVICE INTERRUPTIONS WITH THE OWNER
PROTECT EXISTING MANHOLE
REMOVE AND REINSTALL EXISTING LIGHT FIXTURE
REMOVE AND RELOCATE EXISTING VAULT
REMOVE AND DISPOSE OF EXISTING ELECTRIC
REMOVE AND SALVAGE EXISTING LIGHT FIXTURE TO OWNER
PROTECT EXISTING SIDEWALK RAMP AND CURB
REMOVE SIGN - SALVAGE TO OWNER
PROTECT EXISTING SIDEWALK
PROTECT EXISTING LIGHT POLE
PROTECT EXISTING UTILITY BOX
REMOVE AND DISPOSE OF EXISTING TREE (TYP)
PROTECT EXISTING UTILITIES (TYP)
PROTECT EXISTING SIGN
PROTECT EXISTING UTILITIES (TYP)
PROTECT EXISTING SIDEWALK
PROTECT EXISTING PAVEMENT
PROTECT TREES (TYP)

NORTH MAIN STREET

NORTH

0 5 10 20
SCALE IN FEET

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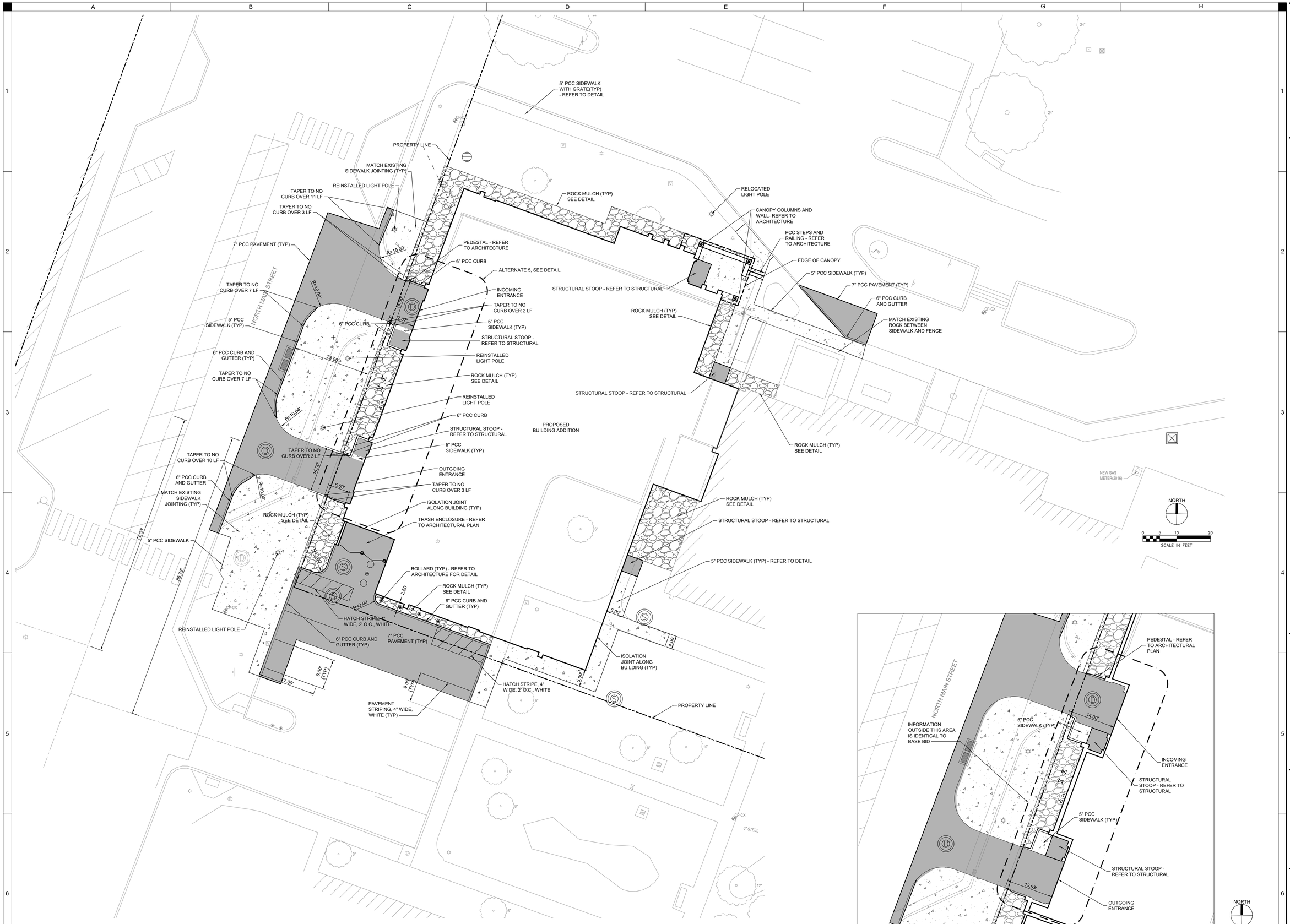
DEMOLITION PLAN

CD01



1 ALTERNATE #5 - VEHICLE ENTRANCES
1" = 10'

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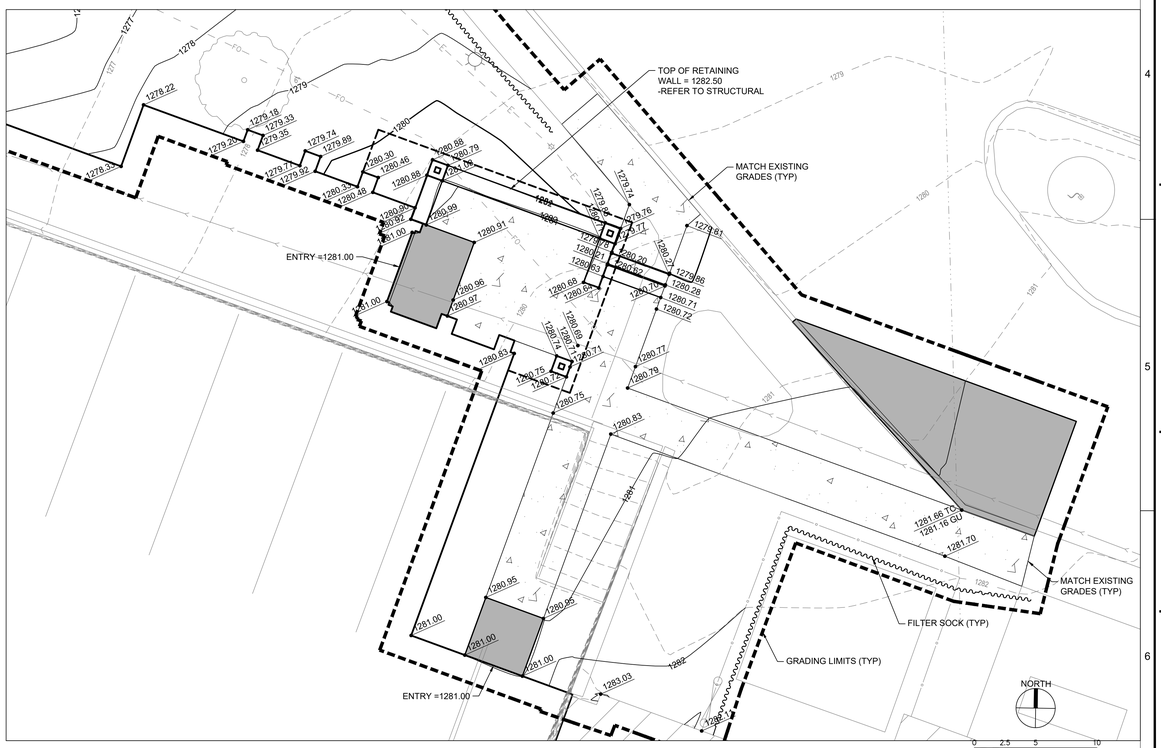
SITE PLAN

C101

SOD ALL DISTURBED AREAS NOT TO BE PAVED

PROPOSED BUILDING ADDITION
FIRST FLOOR ELEVATION = 1287.67
LOBBY ELEVATION = 1281.00
GROUND FLOOR ELEVATION = 1272.00

GRADING LIMITS (TYP)
PROPERTY LINE
INLET PROTECTION (TYP)
FILTER SOCK (TYP)
MATCH EXISTING GRADES (TYP)
LOW POINT
NORTH MAIN STREET
ENTRY = 1272.00
ADJUST EXISTING MANHOLE RIM
SAN CLEANOUT RIM=1270.68 IE=1265.68
STORM MH RIM=1269.58 IE(SW)=1265.08 IE(SE)=1264.31 IE(NW)=1263.83
STORM MH RIM=1268.87
STORM INT RIM=1269.52 IE(NE)=1266.61 IE(SE)=1266.54 IE(SW)=1266.39
STORM INT RIM=1270.06 IE(NE)=1267.06 IE(SW)=1266.90
CONCRETE
SIDEWALK
BENCH
LANDSCAPING
RETAINING WALL
FLAGPOLE
STAIRS
CHAIN LINK ENCLOSURE
STAIRS WITH RAILING
AHU
BRICK
CANOPY
PILLAR
FF = 1272.83
FF = 1283.08
NEW GAS METER(2016)
GARAGE
6" STEEL
NORTH
SCALE IN FEET



1 STAIRTOWER/ENTRANCE AREA UTILITY PLAN
1"=10'

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GRADING PLAN

C201

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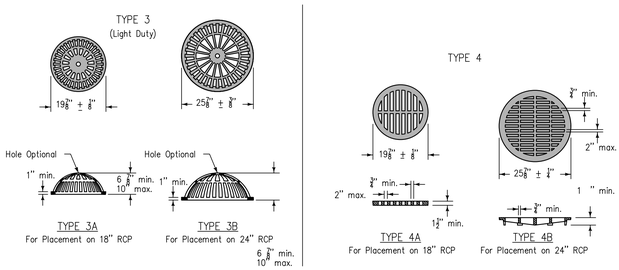
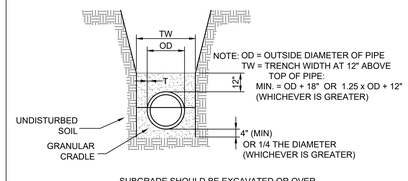
CLIENT NO: --

UTILITY PLAN

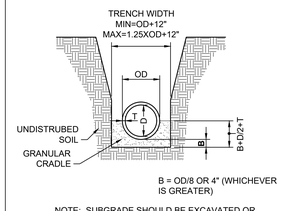
C301



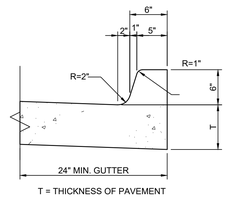
C2 CASTINGS FOR AREA INTAKES (SW-604)
NOT TO SCALE



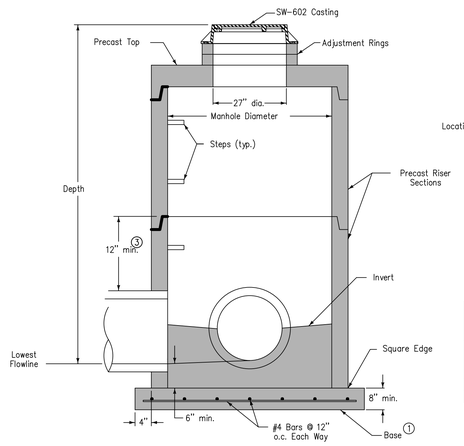
E2 FLEXIBLE PIPE BEDDING
NOT TO SCALE

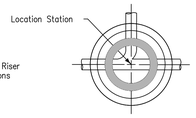


G2 RIGID PIPE EXCAVATION & BEDDING
NOT TO SCALE



H2 PCC CURB AND GUTTER
NOT TO SCALE

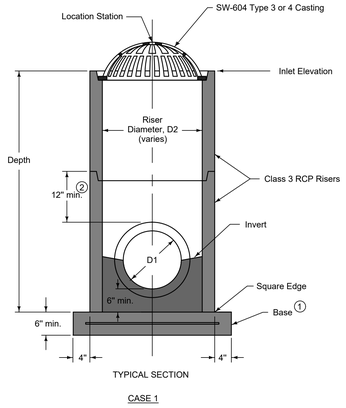




1. Cast-in-place base shown. If base is precast integral with bottom riser, the footprint of the base is not required to extend beyond the outer edge of the riser.
2. For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
3. 12 inch minimum riser height above all pipe openings.

Manhole Diameter (inches)	Maximum Pipe Diameter (2) (inches) for 2 Pipes	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

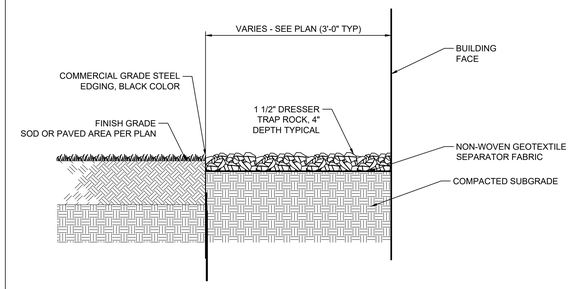
A3 CIRCULAR STORM SEWER MANHOLE (SW-401)
NOT TO SCALE



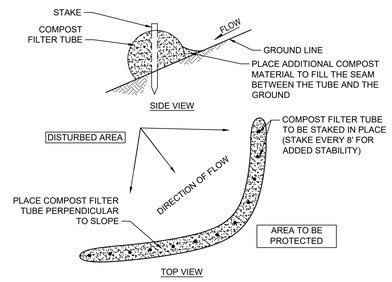
1. Precast (shown) or cast-in-place base:
   - Precast: 6 inch thick concrete with #6 welded wire mesh on 4 inch centers (WWF 4" x 4"). Center mesh vertically within base.
   - Cast-in-place: 8 inch thick non-reinforced concrete.
2. 12 inch minimum riser height above all pipes.

INTAKE SIZE - CASE 1	
Outlet Pipe Diameter, D1	Minimum Riser Diameter, D2
12"	18"
15"	24"
18"	24"
21"	30"
24"	30"
27"	36"

D3 AREA INTAKE (SW-512)
NOT TO SCALE



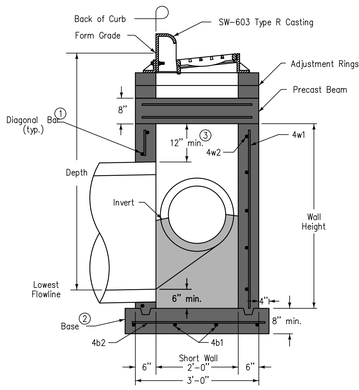
G3 ROCK MULCH STRIP
NOT TO SCALE

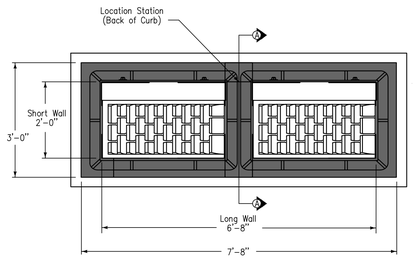


G4 FILTER SOCK
NOT TO SCALE

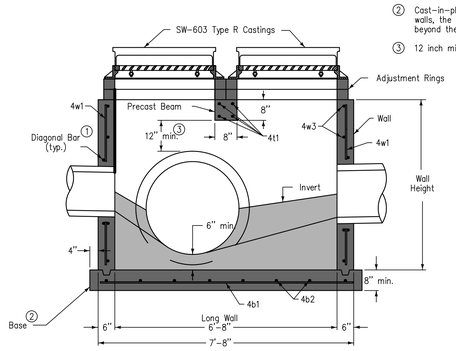
Refer to SW-514 for boxout details.

1. Install four #4 diagonal bars at all pipe openings.
2. Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
3. 12 inch minimum wall height above all pipes.





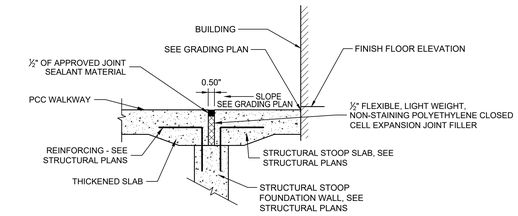
1. Install four #4 diagonal bars at all pipe openings.
2. Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
3. 12 inch minimum wall height above all pipes.



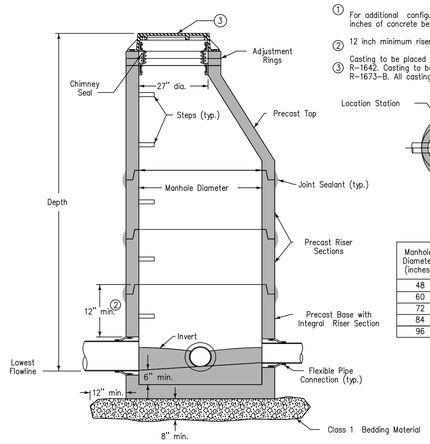
REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Beam	——	4	2'-8"	4"
4b1	4	Base	——	4	7'-10"	10"
4b2	4	Base	——	8	3'-2"	12"
4w1	4	Walls	——	20	Wall Height minus 4"	12"
4w2	4	Long Walls	——	Varies	7'-4"	12"
4w3	4	Short Walls	——	Varies	2'-8"	12"

MAXIMUM PIPE DIAMETERS		
Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	15"	18"
Long Wall	60"	66"

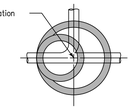
A6 STORM SEWER INTAKE (SW-505)
NOT TO SCALE



E4 PCC WALK @ STRUCTURAL STOOP
NOT TO SCALE

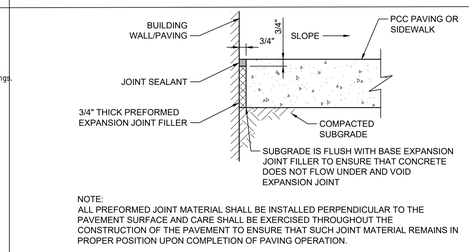


1. For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
2. 12 inch minimum riser height above all pipe openings.
3. Casting to be placed in green space shall be Neenah R-1642. Casting to be placed in paving shall be Neenah R-1673-B. All castings and lids shall be self sealing.



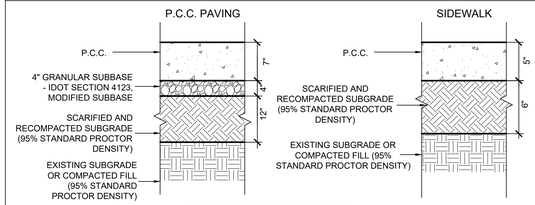
Manhole Diameter (inches)	Maximum Pipe Diameter (1) (inches) for 2 Pipes	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

E6 SANITARY SEWER MANHOLE (SW-301)
NOT TO SCALE



NOTE:
ALL PREFORMED JOINT MATERIAL SHALL BE INSTALLED PERPENDICULAR TO THE PAVEMENT SURFACE AND CARE SHALL BE EXERCISED THROUGHOUT THE CONSTRUCTION OF THE PAVEMENT TO ENSURE THAT SUCH JOINT MATERIAL REMAINS IN PROPER POSITION UPON COMPLETION OF PAVING OPERATION.

G5 ISOLATION JOINT
NOT TO SCALE



NOTE: SUBGRADE PREPARATION SHALL EXTEND 24" BEYOND EDGE OF PAVING

G6 PAVEMENT CROSS SECTIONS
NOT TO SCALE

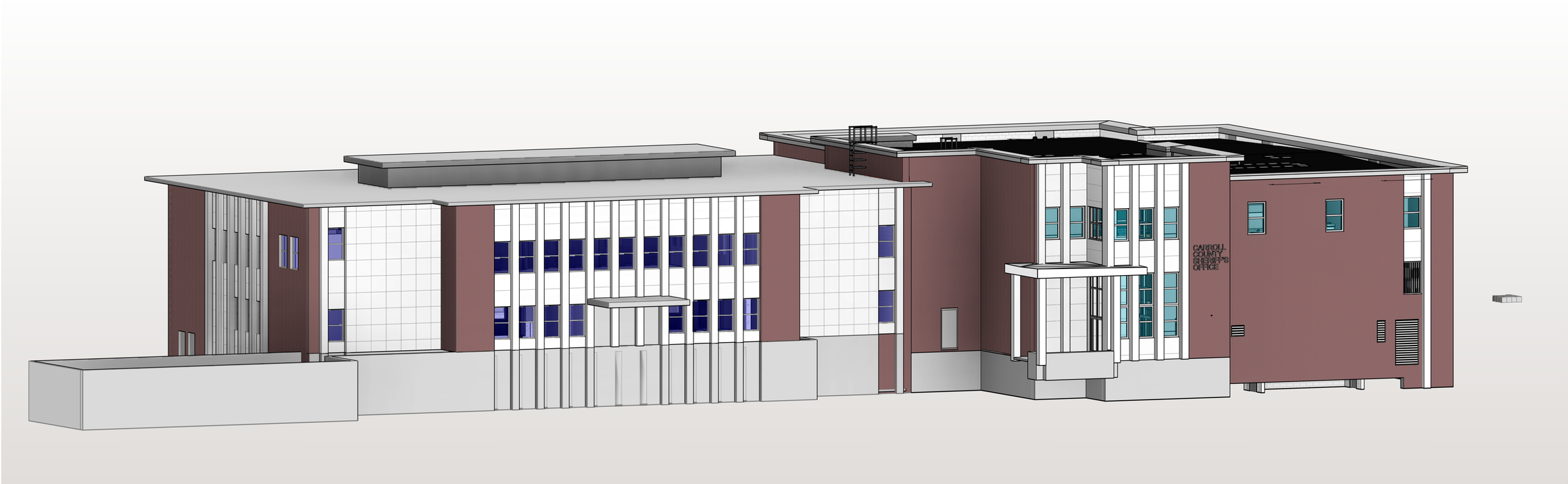
SHIVEHATTERY
ARCHITECTURE + ENGINEERING
4125 Westown Pkwy, Suite 100 | West Des Moines, Iowa 50266
515.223.8104 | fax: 515.223.0622 | www.shiveHattery.com
Iowa | Illinois | Indiana

LAW ENFORCEMENT CENTER ADDITION
CARROLL COUNTY, IA
114 E 6TH STREET, CARROLL, IOWA

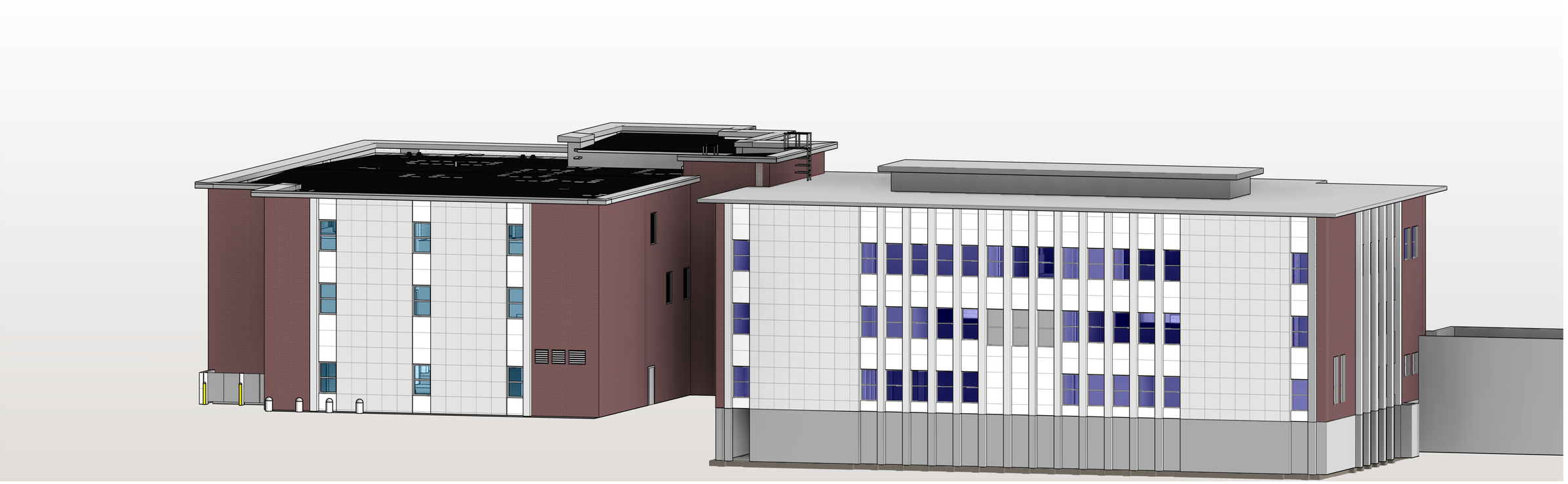
DRAWN: CHH
APPROVED: MMC
ISSUED FOR: CONSTRUCTION DOCUMENTS
DATE: 07-17-2019
PROJECT NO: 4174680
FIELD BOOK: --
CLIENT NO: --

CONSTRUCTION DETAILS

C501



E4 NORTHEAST VIEW
NOT TO SCALE



E6 SOUTHEAST VIEW
NOT TO SCALE

SHIVEHATTERY
ARCHITECTURE + ENGINEERING
4125 Westown Pkwy, Suite 100 | West Des Moines, IA 50266
515.223.8104 | www.shive-hattery.com

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LAW ENFORCEMENT CENTER ADDITION

CARROLL COUNTY, IA
114 E. 6TH STREET, CARROLL, IA

DRAWN: Author
APPROVED: Approver
ISSUED FOR: CONSTRUCTION DOCUMENTS
DATE: 07-17-2019
PROJECT NO:4174880
FIELD BOOK:

IMAGES

A700

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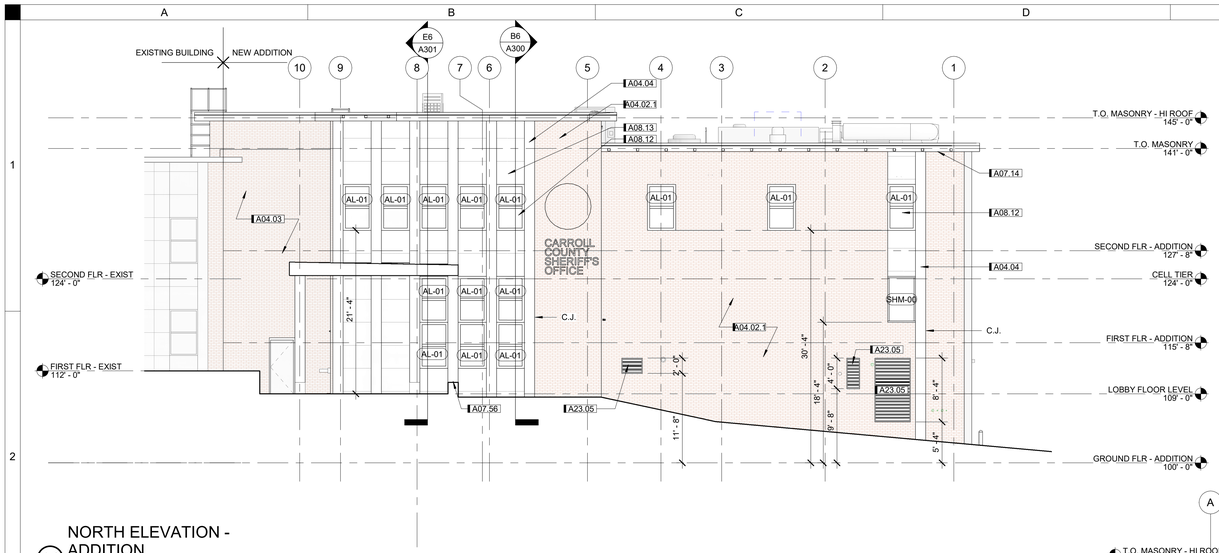
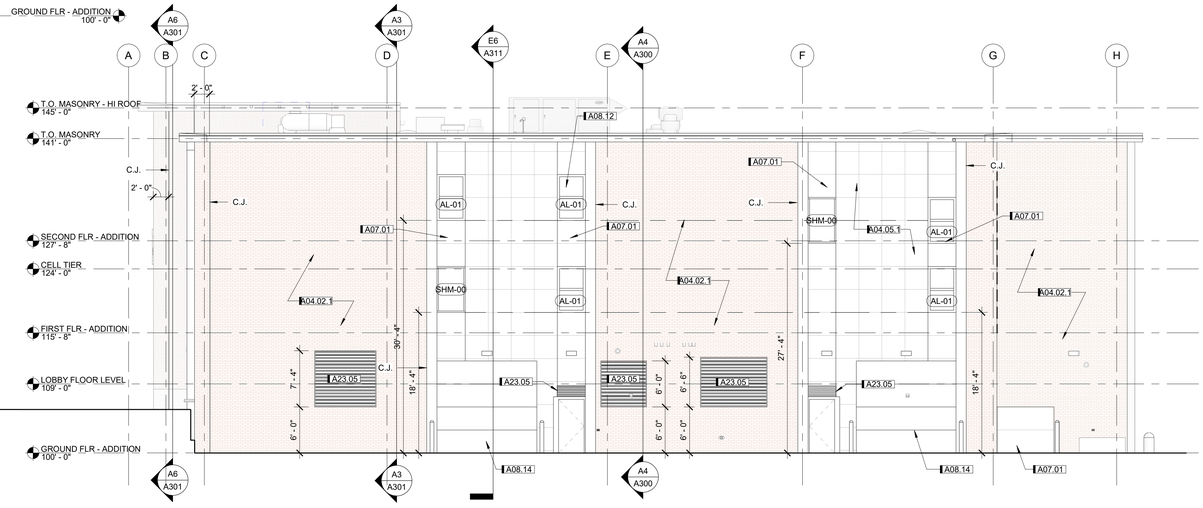
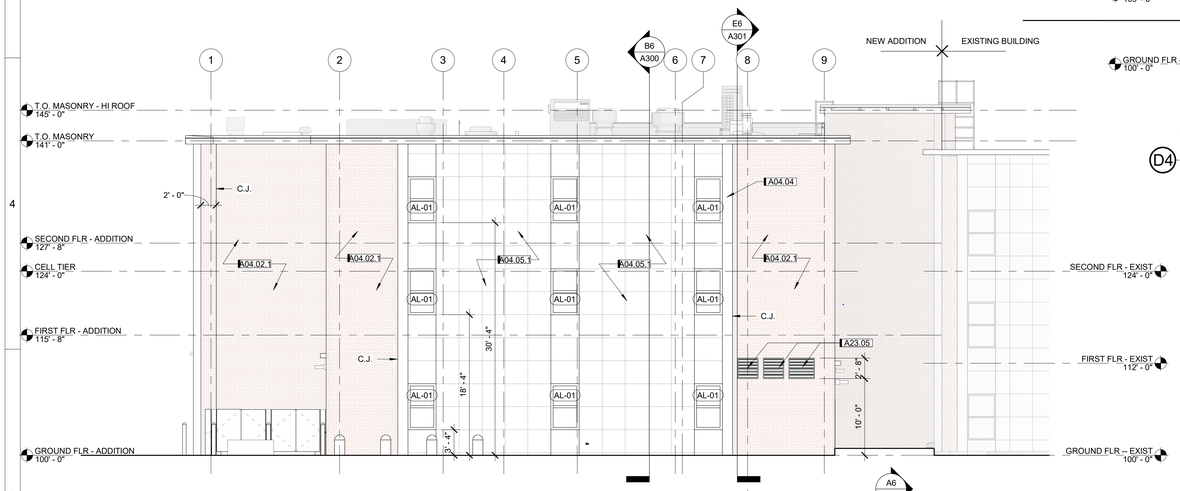


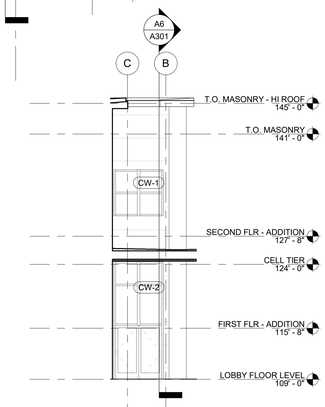
NORTH ELEVATION - ADDITION
A2 1/8" = 1'-0"



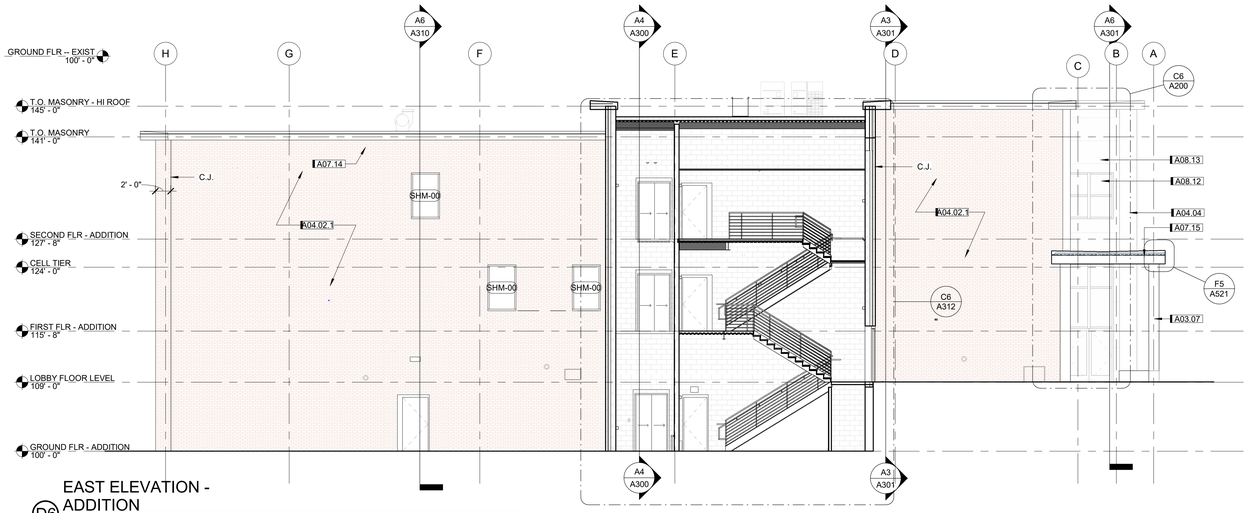
WEST ELEVATION - ADDITION
D4 1/8" = 1'-0"



SOUTH ELEVATION - ADDITION
A5 1/8" = 1'-0"



ELEVATION - MAIN ENTRANCE
C6 1/8" = 1'-0"



EAST ELEVATION - ADDITION
D6 1/8" = 1'-0"

KEYNOTE LEGEND

KEY	NOTE
A03.07	CONCRETE COLUMN, SEE STRUCTURAL
A04.02.1	BRICK VENEER (BASE BID). THIN BRICK PANEL SYSTEM (ALT BID 2)
A04.03	FACE BRICK (MATCH EXISTING)
A04.04	STONE PILASTER
A04.05.1	STONE VENEER (BASE BID)
A07.01	INSULATED METAL WALL PANELS
A07.14	METAL SOFFIT
A07.15	CANOPY
A07.56	DOWNSPOUT ON STONE PIER
A08.12	ALUMINUM WINDOW
A08.13	SPANDREL GLASS IN ALUMINUM STOREFRONT
A08.14	OVERHEAD DOOR
A23.05	MECHANICAL LOUVERS

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LAW ENFORCEMENT CENTER ADDITION

CARROLL COUNTY, IA
114 E. 6TH STREET, CARROLL, IA

DRAWN: NWD
APPROVED: PJP
ISSUED FOR: CONSTRUCTION DOCUMENTS
DATE: 07-17-2019
PROJECT NO:4174980
FIELD BOOK:

EXTERIOR ELEVATIONS

A200

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