AGENDA
HANOVER CITY COUNCIL
APRIL 17, 2018

MAYOR
CHRIS KAUFFMAN

COUNCIL
DOUGLAS HAMMERSENG
KEN WARPULA
JIM ZAJICEK
MARYANN HALLSTEIN

1. **Call to Order Regular City Council Work Session: 6:00 p.m.**

2. **Approval of Agenda**

3. **Consent Agenda Items:**
   a. **Approve Minutes of April 3, 2018 Local Board of Appeals and Equalization Meeting** *(4)*
   b. **Approve Minutes of April 3, 2018 City Council Meeting** *(5)*
   c. **Approve Claims as Presented:** *(7)*
      - **Claims $ 75,776.52**
      - **Payroll $ 9,108.33**
      - **P/R taxes & Exp. $ 3,278.72**
      - **Other Claims $ 2,311.70**
      - **Total Claims $ 90,475.27**
   d. **Res No 04-17-18-42 – Appointing Probationary Fire Department Member** *(34)*
   e. **Res No 04-17-18-43 – Approving Chops Bar 2AM Closing** *(35)*

4. **Vitalization Award – Jeff Olson**

5. **Public Information – 2018 Pavement Improvement Project**

6. **Res No 04-17-18-45 – Awarding Bid for 2018 Pavement Improvement Project** *(36)*

7. **Res No 04-03-18-40 – Approving Site Plan for Hanover Dental** *(49)*

8. **Res No 04-17-18-44 – Approving EDA Matching Grant Incentive** *(113)*

9. **Hanover Cove Concept Plan** *(114)*

10. **Shoreland Ordinance Information** *(117)*

11. **Settlers Park Ballfield Lighting – Funding Update**

12. **FRA Audit – GASB 67 and 68 Statements** *(118)*

13. **Hanover Sign on Hanover Elementary Monument Pole & BankWest Monument**

14. **Reports**

15. **Adjournment**

To: **Mayor Kauffman & Members of the Hanover City Council**

From: **Brian Hagen, City Administrator**

Date: **April 12, 2018**

Re: **Review of April 17, 2018 City Council Work Session Agenda**

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1. **Call to Order Regular City Council Work Session: 6:00 p.m.**

2. **Approval of Agenda**

3. **Consent Agenda Items:** *See enclosed consent agenda.*
   a. **Approve Minutes of April 3, 2018 Local Board of Appeals and Equalization Meeting** *(4)*
   b. **Approve Minutes of April 3, 2018 City Council Meeting** *(5)*
   c. **Approve Claims as Presented:** *(7)*
      - **Claims** **$ 75,776.52**
      - **Payroll** **$ 9,108.33**
      - **P/R taxes & Exp.** **$ 3,278.72**
      - **Other Claims** **$ 2,311.70**
      - **Total Claims** **$ 90,475.27**
   d. **Res No 04-17-18-42 – Appointing Probationary Fire Department Member** *(34)*
   e. **Res No 04-17-18-43 – Approving Chops Bar 2AM Closing** *(35)*

4. **Vitalization Award – Jeff Olson**
   Jeff Olson served as Hanover Elementary Principal for several years. The City of Hanover would like to present a Vitalization award to show their appreciation for what Mr. Olson brought to the school and the community. Mr. Olson will be present to receive the award.

5. **Public Information – 2018 Pavement Improvement Project**
   Messner will present information to the public on this year's project. Residents impacted by the project were notified of this meeting and invited to attend to ask questions.

6. **Res No 04-17-18-45 – Awarding Bid for 2018 Pavement Improvement Project** *(36)*
   Enclosed is a memo and resolution outlining the bids and awarding the project. Messner will be present to answer any questions.

7. **Res No 04-03-18-40 – Approving Site Plan for Hanover Dental** *(49)*
   Enclosed is a memo and resolution approving the site plan for Hanover Dental. This was tabled from the April 3rd meeting. The purpose of the table decision was to allow Hanover Dental to meet with the Hanover EDA to discuss funding options to add aesthetics to the building. The Hanover EDA approved a $7,500 grant towards masonry block. The applicant has supplied an updated colored rendering showing the added block work. Nash will be present to answer any questions.

8. **Res No 04-17-18-44 – Approving EDA Matching Grant Incentive** *(113)*
   This resolution is tied to the Hanover Dental site plan approval, and the direction to add more aesthetics to the exterior of the building. The updated rendering is included with the site plan.

9. **Hanover Cove Concept Plan** *(114)*
   Enclosed is an updated concept plan provided by Paxmar. Paxmar will be present to review the updated plan. Nash and Messner will also be present to address any questions or concerns.

10. **Shoreland Ordinance Information** *(117)*
    Enclosed is a memo from Nash outlining the discussion to be held. Nash will be present to provide further explanation and discuss Council's desire on how to proceed.

11. **Settlers Park Ballfield Lighting – Funding Update**
    Athletic Association President, Stan Kolasa, will be present to provide an update on the donation intentions of the Hanover Athletic Association towards ballfield lighting. Direction on how staff is to proceed with the project is requested.

12. **FRA Audit – GASB 67 and 68 Statements** *(118)*
    Enclosed are two memos outlining new information related to GASB requirements on FRA pension funds. Heinz will be present to discuss options and to receive direction on how Council would like to proceed. This item is time sensitive due to calendar restraints on when financial statements must be completed. Should the council desire to proceed with Option 2 identified in the memos, the City would have one month to complete the requirements.

13. **Hanover Sign on Hanover Elementary Monument Pole & BankWest Monument**
    There are two signs located at the school and BankWest which pertain to the City. The sign at BankWest is discolored due to rust in the water used for irrigation and the sign at the school has the old City logo on it. The Hanover EDA has expressed support in funding for an updated sign at BankWest. The estimated cost is $2,100. Staff is seeking direction from Council on the City's desire to update the sign at the school. Estimated cost would be $1,800. Staff could bring back updated renderings and formal quotes should the Council desire. Hallstein can speak to the discussion held at the April EDA meeting.

14. **Reports**

15. **Adjournment**

CITY OF HANOVER
LOCAL BOARD OF APPEALS AND EQUALIZATION
APRIL 3, 2018 – DRAFT MINUTES

Call to Order/Pledge of Allegiance Local Board of Appeal and Equalization:
Vice Mayor Doug Hammerseng called the 2018 Local Board of Appeals and Equalization of Tuesday, April 3, 2018 to order at 7:00 p.m. Present were Councilors Doug Hammerseng, Ken Warpula and Jim Zajicek. Also present were Accountant / Deputy Clerk Jacki Heinz, City Engineer Justin Messner, Wright County Assessors Tammy Anderson and Mitch Douglas and Hennepin County Assessors Jason Vaith and Kari Theisen. Other guests included Carl Robertson.

Wright County Assessor's Office read an opening statement explaining the purpose of the meeting. Wright County Assessor's presented to Council the changes in land values. Hanover's residential value increased 6.28%.

The Hennepin County Assessor's Office stated that residential properties on the river increased 10.2% in value. Townhome values increased 14.6% over the last year. Commercial properties increased 3.1%. Industrial properties increased 3.0%. Overall value increase for Hanover in Hennepin County was 7.7%.

PID: 108-500-353400
Wright County Assessors have reviewed the request and recommend an adjustment in valuation from $703,800 down to $662,100.

MOTION by Warpula to approved the recommended adjustment, seconded by Zajicek. **Motion carried unanimously.**

MOTION by Warpula to close the Local Board of Appeals Meeting at 7:12 pm, seconded by Zajicek. **Motion carried unanimously.**

APPROVED:

_____
Vice Mayor, Doug Hammerseng

ATTEST:

_____
Jackie Heinz, Deputy Clerk

CITY OF HANOVER
CITY COUNCIL MEETING
APRIL 3, 2018 – DRAFT MINUTES

Call to Order/Pledge of Allegiance:
Vice Mayor Doug Hammerseng called the regular meeting of Tuesday, April 3, 2018 to order at 7:13 p.m. Present were Councilors Doug Hammerseng, Ken Warpula and Jim Zajicek. Also present were City Engineer Justin Messner and Accountant / Deputy Clerk Jackie Heinz. Other guests included Carl Robertson. Mayor Chris Kauffman and Councilor MaryAnn Hallstein were absent.

Approval of Agenda:
MOTION by Warpula to approve the agenda, seconded by Zajicek. **Motion carried unanimously.**

Consent Agenda:
MOTION by Warpula to approve the consent agenda, seconded by Zajicek.

a. **Approve Minutes of March 20, 2018 City Council Work Session Meeting**
b. **Approve Claims as Presented:**
   - **Claims** **$ 152,782.65**
   - **Payroll** **$ 9,147.32**
   - **P/R taxes & Exp** **$ 3,266.43**
   - **Other Claims** **$ 2.294.55**
   - **Total Claims** **$ 167,490.95**

c. **Res No 04-03-18-37 – Approving Public Works Facility Construction Pay Voucher #5**
d. **Res No 04-03-18-38 – Approving Hire of Summer Seasonal Position**
e. **Res No 04-03-18-39 – Approving Benefit Adjustment**
f. **Res No 04-03-18-41 – Approving Purchase of Fire Department Pagers**

Motion carried unanimously.

Citizen's Forum:
None

Public Hearings:
None

Unfinished Business:
None

New Business:

Res. No. 04-03-18-40 – Approving Site Plan for Hanover Dental

Carl Robertson from Sjoquist Architects stated the proposed site plan is for a 2,500 square foot building. The current plan is to start with 5 chairs, in 3-5 years add 2 additional chairs and in 10 years add onto the building. Hammerseng stated the positioning of the building on the lot should be changed. With the current layout half of the lot is wasted, recommended moving the building towards the Fire Station.

Robertson stated additions would be made to the South in 3-5 years for growth and again in 10 years for a specialist.

Warpula inquired cost per square foot, Robertson replied $260.

Zajicek stated the building is representing Hanover and should be welcoming, inquired about the use of brick on the exterior.

Warpula suggest to table the site plan and have Robertson attend the next EDA meeting for grant information and possible funding.

MOTION by Warpula to table Res. No. 04-03-18-40, seconded by Zajicek. **Motion carried unanimously.**

Reports

Messner
- Pavement Project bids will be opened Thursday at 10 am.

Heinz
- Audit is next week, everything is prepared and ready.

Zajicek
- Easter Egg Hunt was moved inside due to the snow, had a great turn out. Suggested having old Public Works area cleaned up.

Warpula
- Lions Stuffed Hashbrown Breakfast is on Sunday.
- The Fire Department served 632 people on Palm Sunday.

Adjournment
MOTION by Warpula to adjourn at 7:37 p.m., seconded by Zajicek. **Motion carried unanimously.**

APPROVED BY:

_____
Doug Hammerseng, Vice Mayor

ATTEST:

_____
Jackie Heinz, Deputy Clerk

CITY OF HANOVER

Payments

Current Period: April 2018

Batch Name 04/17/18 PAY
Payment Computer Dollar Amt $75,776.52 **Posted**

Refer 2353 *ALEX AIR APPARATUS, INC* Ck# 033387 4/17/2018

Cash Payment	E 100-42280-220 Repair/Maint Supply (GE	Annual Air Compressor Test	$115.00
Invoice INV-36072	4/5/2018		
Cash Payment	E 100-42280-220 Repair/Maint Supply (GE	Bauer Compressor Service, P2S Full	$615.00
Invoice INV-36072	4/5/2018		
Cash Payment	E 100-42280-220 Repair/Maint Supply (GE	3000 - 7500 PSI DIN Connector	$175.00
Invoice INV-36072	4/5/2018		

Transaction Date 4/12/2018 Due 0 Cash 10100 **Total** $905.00

Refer 2321 *AMERICAN SOLUTIONS FOR BUS.* Ck# 033388 4/17/2018

Cash Payment	E 100-41570-220 Repair/Maint Supply (GE	Reordered 1,000 Checks: 205.00 + 19.98 Shipping	$224.98
Invoice INV03476700	4/2/2018		

Transaction Date 4/10/2018 Due 0 Cash 10100 **Total** $224.98

Refer 2318 *BOYER TRUCKS* Ck# 002316E 4/17/2018

Cash Payment	E 100-43000-220 Repair/Maint Supply (GE	Freightliner: Repair Coolant Leak, Trailer Receptacle, Lube, Oil & Filter, DOT Inspection	$1,798.12
Invoice 477405	3/22/2018		

Transaction Date 4/10/2018 Due 0 Cash 10100 **Total** $1,798.12

Refer 2340 *CARDMEMBER SRVC (CENTRAL B* Ck# 033389 4/17/2018

Cash Payment	E 100-42260-212 Motor Fuels	Premium Gas	$8.62
Invoice 5869	3/13/2018		
Cash Payment	E 100-42260-240 Small Tools and Minor E	Red / Blue Nightsticks, Yellow Cones	$101.85
Invoice 1028216	3/13/2018		
Cash Payment	E 100-41570-205 Bank Fees	Late Fee	$35.00
Invoice	3/27/2018		
Cash Payment	E 100-41570-205 Bank Fees	Interest Fees	$2.13
Invoice	3/27/2018		

Transaction Date 4/11/2018 Due 0 Cash 10100 **Total** $147.60

Refer 2331 *CARSON, CLELLAND & SCHREDE* Ck# 033390 4/17/2018

Cash Payment	E 100-41610-304 Legal Fees	Legal Support / Work - March 2018	$85.71
Invoice	3/30/2201		

Transaction Date 4/10/2018 Due 0 Cash 10100 **Total** $85.71

Refer 2330 *CENTERPOINT ENERGY* Ck# 033391 4/17/2018

Cash Payment	E 100-42280-383 Gas Utilities	Fire Station Gas Utilities: 02/23/18 - 03/26/18	$384.04
Invoice	3/28/2018		
Cash Payment	E 100-41940-383 Gas Utilities	City Hall Gas Utilities: 02/23/18 - 03/26/18	$437.32
Invoice	3/28/2018		
Cash Payment	E 100-41940-383 Gas Utilities	PW Bldg, Gas Utilities: 02/23/18 - 03/26/18	$672.86
Invoice	3/28/2018		

Transaction Date 4/10/2018 Due 0 Cash 10100 **Total** $1,494.22

Refer 2357 *CENTURY LINK* Ck# 033392 4/17/2018

Cash Payment	E 100-42280-321 Telephone	Fire Station Landline - 03/28/18 - 04/27/18	$34.06
Invoice	3/28/2018		

CITY OF HANOVER

Payments

Current Period: April 2018

Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$34.06
Refer	2316 *CITY OF CORCORAN*		Ck# 033393 4/17/2018			
Cash Payment	E 100-43125-224 Street Maint Materials		Ice Control Salt - 111 Ton @ $59.68 per Ton			$6,624.48
Invoice	3/27/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$6,624.48
Refer	2324 *CITY OF ST. MICHAEL*		Ck# 002317E 4/17/2018			
Cash Payment	E 602-49455-310 Other Professional Servi		SAC Fee - 9808 Jasmine Avenue			$4,712.00
Invoice	3/31/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$4,712.00
Refer	2333 *COMCAST*		Ck# 033394 4/17/2018			
Cash Payment	E 100-41940-321 Telephone		CH: Digital Voice & Internet - April 2018			$221.26
Invoice	3/25/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$221.26
Refer	2338 *COTTENS, INC.*		Ck# 033395 4/17/2018			
Cash Payment	E 100-42260-220 Repair/Maint Supply (GE		Tanker 11: Bulb			$3.98
Invoice 116269	3/23/2018					
Cash Payment	E 100-42220-221 Equipment Parts		Pressure Washer: Fittings			$4.68
Invoice 116428	3/24/2018					
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE		Ford: Battery, Core Deposit			$156.99
Invoice 116564	3/26/2018					
Cash Payment	E 100-42260-220 Repair/Maint Supply (GE		E12; Battery, Cable Lug, Battery Cable			$448.70
Invoice 116564	3/26/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$614.35
Refer	2351 *CROW RIVER FARM EQUIPMENT*		Ck# 033396 4/17/2018			
Cash Payment	E 100-43000-215 Shop Supplies		Steel			$493.44
Invoice 188097	3/14/2018					
Cash Payment	E 100-43000-240 Small Tools and Minor E		Vise			$255.40
Invoice 188097	3/14/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$748.84
Refer	2349 *DEPT OF EMPLOYMENT & ECON*		Ck# 033397 4/17/2018			
Cash Payment	E 100-43000-142 Unemployment Benefit P		Unemployment Benefits 4th Qtr. 2018 - S. Vogel			$5,200.44
Invoice	4/10/2018					
Cash Payment	E 100-42210-142 Unemployment Benefit P		Unemployment Benefits 1st Qtr. 2018 - L. Pollock			$167.88
Invoice	4/10/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$5,368.32
Refer	2329 *DONALD SALVERDA & ASSOCIAT*		Ck# 033398 4/17/2018			
Cash Payment	E 100-41400-208 Training and Instruction		Enrollment for Brian in 2018 Leadership Growth Program - 6 Sessions			$600.00
Invoice P-1803-7	3/22/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$600.00
Refer	2355 *FINKEN WATER SOLUTIONS*		Ck# 033399 4/17/2018			
Cash Payment	E 100-42280-220 Repair/Maint Supply (GE		10 Gallons of Drinking Water			$12.40
Invoice 26135TH	3/6/2018					
Cash Payment	E 100-42280-220 Repair/Maint Supply (GE		Solar Salt 40#			$9.25
Invoice 26135TH	3/6/2018					

CITY OF HANOVER

Payments

Current Period: April 2018

Cash Payment	E 100-42280-220 Repair/Maint Supply (GE	Cook & Cold Rental Cooler 04/01/18 - 04/30/18				$9.50
Invoice 4992012	4/1/2018					
Cash Payment	E 100-42280-220 Repair/Maint Supply (GE	Cook & Cold Rental Cooler 04/01/18 - 04/30/18				$9.50
Invoice 4992022	4/1/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$40.65
Refer	2336 *FYCC*		Ck# 033400 4/17/2018			
Cash Payment	E 100-45200-310 Other Professional Servi	2018 Summer Parks Program				$6,800.00
Invoice 36	4/6/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$6,800.00
Refer	2335 *GRUPP, JEFF*		Ck# 033401 4/17/2018			
Cash Payment	E 100-45200-440 Programs	Candy for Easter Egg Hunt				$21.46
Invoice	3/29/2018					
Cash Payment	E 100-45200-440 Programs	Easter Eggs				$12.77
Invoice	4/2/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$34.23
Refer	2337 *HARDWARE HANK*		Ck# 033402 4/17/2018			
Cash Payment	E 100-42220-221 Equipment Parts	AAA Batteries, 9 Volt Batteries				$27.62
Invoice 1467361	3/12/2018					
Cash Payment	E 100-43000-215 Shop Supplies	Masonry Hammer, SDS PH WF HD10-24x1-7/16				$29.66
Invoice 1467601	3/13/2018					
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE	Coupling, Galv. Cap, Galv. Pipe Nipple				$9.69
Invoice 1468677	3/19/2018					
Cash Payment	E 100-42280-520 Buildings and Structures	Drywall Taping Knife				$9.89
Invoice 1469048	3/22/2018					
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE	Plastic Bonder Syringe				$7.19
Invoice 1469048	3/22/2018					
Cash Payment	E 100-42280-520 Buildings and Structures	Joint Compound				$17.98
Invoice 1469173	3/23/2018					
Cash Payment	E 100-42260-220 Repair/Maint Supply (GE	Car Turtle Wax, Shop Towels				$8.98
Invoice 1469731	3/26/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$111.01
Refer	2346 *HEALTH PARTNERS*		Ck# 002321E 4/17/2018			
Cash Payment	G 100-21706 Medical/Dental Ins	Medical & Dental Premiums - May 2018				$3,867.58
Invoice 80433842	4/5/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$3,867.58
Refer	2343 *INITIATIVE FOUNDATION*		Ck# 033403 4/17/2018			
Cash Payment	E 201-41330-306 Dues & Subscriptions	Endowment Pledge - 2018				$310.00
Invoice 9978	4/1/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$310.00
Refer	2323 *JOINT POWERS WATER BOARD*		Ck# 033404 4/17/2018			
Cash Payment	E 601-49410-310 Other Professional Servi	WAC Fees - 9808 Jasmine Avenue				$2,001.00
Invoice	3/31/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$2,001.00
Refer	2334 *KENYON, TANEAL*		Ck# 033405 4/17/2018			
Cash Payment	G 100-22000 Deposits	Hall Damage Deposit Release - 02/17 Event Moved to 03/18/18				$200.00
Invoice	4/10/2018					

CITY OF HANOVER

Payments

Current Period: April 2018

Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$200.00
Refer	2350 *KRIS ENGINEERING INC.*		Ck# 033406 4/17/2018			
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE		Plow Blade			$121.98
Invoice 29876	4/9/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$121.98
Refer	2342 *MENARDS - BUFFALO*		Ck# 033407 4/17/2018			
Cash Payment	E 100-43000-240 Small Tools and Minor E		24" LED Bronze 900LM			$49.97
Invoice 66716	4/4/2018					
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE		1" CPVC Cap, 1" CPVC Tee, 1" 90 Degree Elbow, Perfect Tear Pth Wall			$23.17
Invoice 66716	4/4/2018					
Cash Payment	E 100-43000-215 Shop Supplies		Lysol, Purple Primer Cleaner, Clear Primer, Handsoap, Gloves, Paper Towels			$124.52
Invoice 66716	4/4/2018					
Cash Payment	E 100-43000-215 Shop Supplies		PVC Coupling, PVC Union, Female Adapters, Male Adapters, Bushings, Unions, Tees			$60.88
Invoice 66830	4/5/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$258.54
Refer	2345 *MN DEPT OF LABOR AND INDUST*		Ck# 002320E 4/17/2018			
Cash Payment	E 100-42401-310 Other Professional Servi		Surcharge Fees - 1st Qtr. 2018 - Confirmation #MARCH0530852018			$206.93
Invoice	4/11/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$206.93
Refer	2352 *NORTHLAND TRUST*		Ck# 033408 4/17/2018			
Cash Payment	E 314-47000-611 Bond Interest		$1,225,000 GO Improvement Crossover Refunding Bonds, Series 2011A - Interest Payment			$7,587.50
Invoice HAN11A - 04051	4/5/2018					
Cash Payment	E 314-47000-620 Fiscal Agents Fees		$1,225,000 GO Improvement Crossover Refunding Bonds, Series 2011A - Fiscal Agent Fee			$495.00
Invoice HAN11A - 04051	4/5/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$8,082.50
Refer	2327 *PETERSON, ABBY*		Ck# 002319E 4/17/2018			
Cash Payment	E 100-45200-440 Programs		Easter Baskets Prizes for 2018			$25.60
Invoice	4/3/2018					
Cash Payment	E 100-45200-440 Programs		Easter Basket Prizes for 2019			$13.44
Invoice	4/3/2018					
Cash Payment	E 100-45200-440 Programs		Easter Basket Prizes for 2019			$4.25
Invoice	4/3/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$43.29
Refer	2325 *QUILL CORPORATION*		Ck# 002318E 4/17/2018			
Cash Payment	E 100-41570-200 Office Supplies (GENER		Clear Acrylic Base Sign - T. Zrust			$17.29
Invoice 111916348	3/30/2018					
Cash Payment	E 100-41570-200 Office Supplies (GENER		Clear Acrylic Base Sign - S. Jamison			$17.29
Invoice 111916348	3/30/2018					
Cash Payment	E 100-41570-200 Office Supplies (GENER		Clear Acrylic Base Sign - D. Vetrano			$17.29
Invoice 111916348	3/30/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$51.87

CITY OF HANOVER

Payments

Current Period: April 2018

Refer	2319 *RAMTHUN, JASON*		Ck# 033409 4/17/2018			
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE		Cap CPVC CTS 1-1/2" Flow GLD, CPVC 1-1/2" x 1"Reduce			$6.61
Invoice D790433	4/6/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$6.61
Refer	2344 *ROBERT J. HIIVALA*		Ck# 033410 4/17/2018			
Cash Payment	R 612-36100 Special Assessments		City Hall: Interest on Special Assessments - PID #R108-500-362102			$1,037.46
Invoice						
Cash Payment	R 612-36100 Special Assessments		City Hall: Principal on Special Assessments - PID #R108-500-362102			$4,094.14
Invoice						
Cash Payment	R 612-36100 Special Assessments		Fire Dept: Interest on Special Assessment - PID #R108-500-363214			$13.24
Invoice						
Cash Payment	R 612-36100 Special Assessments		Fire Dept: Principal on Special Assessment - PID #R108-500-363214			$102.85
Invoice						
Cash Payment	E 100-41940-325 Taxes		Spruce Tree Terrace Outlot A: Property Taxes 2018			$26.00
Invoice						
Cash Payment	E 100-41940-325 Taxes		Crow River Hts West 3rd Add Outlot A: Property Taxes 2018			$12.00
Invoice						
Cash Payment	E 100-41940-325 Taxes		Crow River Hts West 3rd Add Outlot B: Property Taxes 2018			$12.00
Invoice						
Cash Payment	E 100-41940-325 Taxes		Crow River Hts West 3rd Add Outlot C: Property Taxes 2018			$12.00
Invoice						
Cash Payment	E 201-41330-310 Other Professional Servi		11234 River Road NE: Property Taxes 2018			$736.00
Invoice						
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$6,045.69
Refer	2339 *RUPP ANDERSON SQUIRES & WA*		Ck# 033411 4/17/2018			
Cash Payment	E 100-41610-304 Legal Fees		Mileage, Photocopies, Online Legal Research: February 2018			$62.14
Invoice 7093	4/4/2018					
Cash Payment	G 818-20200 Accounts Payable		Bob Ronning: February 2018			$1,170.00
Invoice 7093	4/4/2018			Project 208243		
Cash Payment	G 818-20200 Accounts Payable		Methodist Church: February 2018			$72.00
Invoice 7093	4/4/2018			Project 208238		
Cash Payment	E 100-41610-304 Legal Fees		Miscellaneous: February 2018			$864.00
Invoice 7093	4/4/2018					
Cash Payment	E 100-41610-304 Legal Fees		City Council and Board / Commission Meetins			$300.00
Invoice 7093	4/4/2018					
Cash Payment	G 818-20200 Accounts Payable		Methodist Church: February 2018			$1,418.17
Invoice 7094	4/4/2018			Project 208238		
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$3,886.31
Refer	2348 *RUSSELL SECURITY RESOURCE I*		Ck# 002322E 4/17/2018			
Cash Payment	E 100-41940-520 Buildings and Structures		City Hall: ISO Proximity Cards, Key Fobs			$60.55
Invoice A31822	3/30/2018					

CITY OF HANOVER

Payments

Current Period: April 2018

Cash Payment	E 100-41940-520 Buildings and Structures	PW Bldg: 4 Keys Made by Code				$50.60
Invoice A31855	4/4/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$111.15
Refer	2328 *SCHENDEL, KARLA*	Ck# 033412 4/17/2018				
Cash Payment	G 100-22000 Deposits	Hall Damage Deposit Release - 04/01/18 Event				$200.00
Invoice	4/2/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$200.00
Refer	2356 *SOUTH CENTRAL COLLEGE*	Ck# 033413 4/17/2018				
Cash Payment	E 100-42240-208 Training and Instruction	K. Warpula: 2018 Fire School, Full Conference 12 Hours				$150.00
Invoice 247527	3/9/2018					
Cash Payment	E 100-42240-208 Training and Instruction	A. Wychgram: 2018 Fire School, Full Conference 12 Hours				$150.00
Invoice 247527	3/9/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$300.00
Refer	2326 *VEOLIA WATER NORTH AMERICA*	Ck# 033414 4/17/2018				
Cash Payment	E 601-43252-310 Other Professional Servi	Water Services - May 2018				$3,076.50
Invoice 90144470	4/2/2018					
Cash Payment	E 602-43252-310 Other Professional Servi	Sewer Services - May 2018				$4,248.50
Invoice 90144470	4/2/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$7,325.00
Refer	2354 *VERIZON*	Ck# 033415 4/17/2018				
Cash Payment	E 100-42280-321 Telephone	iPad Data Plan - 03/03/18 - 04/02/18				$50.84
Invoice 9804636482	4/2/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$50.84
Refer	2317 *WESTSIDE WHOLESALE TIRE & S*	Ck# 002315E 4/17/2018				
Cash Payment	E 100-43000-220 Repair/Maint Supply (GE	Ford: 4 New Hankook Tires				$636.64
Invoice 808377	4/3/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$636.64
Refer	2332 *WRIGHT COUNTY AUDITOR-TREA*	Ck# 033416 4/17/2018				
Cash Payment	E 100-42102-310 Other Professional Servi	WC Patrol Services - April 2018				$8,760.00
Invoice April18	3/30/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$8,760.00
Refer	2341 *WRIGHT COUNTY JOURNAL PRES*	Ck# 033417 4/17/2018				
Cash Payment	E 418-41970-351 Legal Notices Publishing	Advertisement for Bids: 2018 Pavement Improvement Project				$97.34
Invoice 6036158	3/15/2018					
Cash Payment	E 100-41970-351 Legal Notices Publishing	Ordinance 2018-02: Amending Charitable Gambling Reg.				$19.47
Invoice 6036245	3/22/2018					
Cash Payment	E 100-41970-351 Legal Notices Publishing	Ordinance 2018-03: Amending City Fee Schedule				$17.97
Invoice 6036246	3/22/2018					
Cash Payment	E 100-41970-351 Legal Notices Publishing	Property Assessments				$31.45
Invoice 6036251	3/22/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$166.23
Refer	2322 *XCEL ENERGY*	Ck# 033418 4/17/2018				

CITY OF HANOVER

Payments

Current Period: April 2018

Cash Payment	E 100-43160-381 Electric Utilities		Xcel Owned Street Lighting 03/03/18 - 04/02/18			$854.90
Invoice						
Cash Payment	E 100-43160-381 Electric Utilities		City Owned Street Lighting 03/05/18 - 04/02/18			$980.65
Invoice 586586150	4/3/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$1,835.55
Refer	2358 *ZAJICEK, JIM*		Ck# 033419 4/17/2018			
Cash Payment	E 100-45200-440 Programs		Easter Eggs			$11.17
Invoice	4/9/2018					
Cash Payment	E 100-45200-440 Programs		Easter Baskets for 2019			$96.65
Invoice	4/9/2018					
Cash Payment	E 100-45200-440 Programs		Easter Baskets for 2019			$38.59
Invoice	4/9/2018					
Transaction Date	4/12/2018	Due 0	Cash	10100	**Total**	$146.41
Refer	2347 *ZEE MEDICAL SERVICE*		Ck# 033420 4/17/2018			
Cash Payment	E 100-41940-310 Other Professional Servi		City Hall: Medical Supplies			$88.50
Invoice 54035286	4/3/2018					
Cash Payment	E 100-41940-310 Other Professional Servi		PW Building: Cabinet with Medical Supplies			$340.60
Invoice 54035286	4/3/2018					
Transaction Date	4/11/2018	Due 0	Cash	10100	**Total**	$429.10
Refer	2320 *ZEP SALES & SERVICE*		Ck# 033421 4/17/2018			
Cash Payment	E 100-41940-220 Repair/Maint Supply (GE		2 Cases of Toilet Paper			$168.47
Invoice 9003309155	3/13/2018					
Transaction Date	4/10/2018	Due 0	Cash	10100	**Total**	$168.47

Fund Summary

	10100 Cash
818 MISC ESCROWS FUND	$2,660.17
612 SEWER CAPITAL IMP FUND	$5,247.69
602 SEWER ENTERPRISE FUND	$8,960.50
601 WATER ENTERPRISE FUND	$5,077.50
418 STREET CAPITAL PROJ FUND	$97.34
314 2011A GO IMP CROSSOVER REF BD	$8,082.50
201 EDA SPECIAL REVENUE FUND	$1,046.00
100 GENERAL FUND	$44,604.82
	$75,776.52

Pre-Written Check	$75,776.52
Checks to be Generated by the Computer	$0.00
Total	$75,776.52

CITY OF HANOVER

*Check Summary Register©

Cks 4/17/2018 - 4/17/2018

		Name	Check Date	Check Amt	
10100 Cash					
Paid Chk#	002315E	WESTSIDE WHOLESALE TIRE &	4/17/2018	$636.64	Ford: 4 New Hankook Tires
Paid Chk#	002316E	BOYER TRUCKS	4/17/2018	$1,798.12	Freightliner: Repair Coolant L
Paid Chk#	002317E	CITY OF ST. MICHAEL	4/17/2018	$4,712.00	SAC Fee - 9808 Jasmine Avenue
Paid Chk#	002318E	QUILL CORPORATION	4/17/2018	$51.87	Clear Acrylic Base Sign - T. Z
Paid Chk#	002319E	PETERSON, ABBY	4/17/2018	$43.29	Easter Baskets Prizes for 2018
Paid Chk#	002320E	MN DEPT OF LABOR AND INDUS	4/17/2018	$206.93	Surcharge Fees - 1st Qtr. 2018
Paid Chk#	002321E	HEALTH PARTNERS	4/17/2018	$3,867.58	Medical & Dental Premiums - Ma
Paid Chk#	002322E	RUSSELL SECURITY RESOURC	4/17/2018	$111.15	City Hall: ISO Proximity Cards
Paid Chk#	033387	ALEX AIR APPARATUS, INC	4/17/2018	$905.00	3000 - 7500 PSI DIN Connector
Paid Chk#	033388	AMERICAN SOLUTIONS FOR BU	4/17/2018	$224.98	Reordered 1,000 Checks: 205.00
Paid Chk#	033389	CARDMEMBER SERVICE	4/17/2018	$147.60	Late Fee
Paid Chk#	033390	CARSON, CLELLAND & SCHRED	4/17/2018	$85.71	Legal Support / Work - March 2
Paid Chk#	033391	CENTERPOINT ENERGY	4/17/2018	$1,494.22	Fire Station Gas Utilities: 02
Paid Chk#	033392	CENTURY LINK	4/17/2018	$34.06	Fire Station Landline - 03/28/
Paid Chk#	033393	CITY OF CORCORAN	4/17/2018	$6,624.48	Ice Control Salt - 111 Ton @
Paid Chk#	033394	COMCAST	4/17/2018	$221.26	CH: Digital Voice & Internet -
Paid Chk#	033395	COTTENS, INC	4/17/2018	$614.35	E12; Battery, Cable Lug, Batte
Paid Chk#	033396	CROW RIVER FARM EQUIPMEN	4/17/2018	$748.84	Vise
Paid Chk#	033397	DEPT OF EMPLOYMENT & ECON	4/17/2018	$5,368.32	Unemployment Benefits 4th Qtr.
Paid Chk#	033398	DONALD SALVERDA & ASSOCIA	4/17/2018	$600.00	Enrollment for Brian in 2018 L
Paid Chk#	033399	FINKEN WATER SOLUTIONS	4/17/2018	$40.65	Solar Salt 40#
Paid Chk#	033400	FYCC	4/17/2018	$6,800.00	2018 Summer Parks Program
Paid Chk#	033401	GRUPP, JEFF	4/17/2018	$34.23	Easter Eggs
Paid Chk#	033402	HARDWARE HANK	4/17/2018	$111.01	AAA Batteries, 9 Volt Batterie
Paid Chk#	033403	INITIATIVE FOUNDATION	4/17/2018	$310.00	Endowment Pledge - 2018
Paid Chk#	033404	JOINT POWERS WATER BOARD	4/17/2018	$2,001.00	WAC Fees - 9808 Jasmine Avenue
Paid Chk#	033405	KENYON, TANEAL	4/17/2018	$200.00	Hall Damage Deposit Release -
Paid Chk#	033406	KRIS ENGINEERING INC.	4/17/2018	$121.98	Plow Blade
Paid Chk#	033407	MENARDS - BUFFALO	4/17/2018	$258.54	Lysol, Purple Primer Cleaner,
Paid Chk#	033408	Northland Trust Services	4/17/2018	$8,082.50	$1,225,000 GO Improvement Cros
Paid Chk#	033409	RAMTHUN, JASON	4/17/2018	$6.61	Cap CPVC CTS 1-1/2" Flow GLD,
Paid Chk#	033410	ROBERT J. HIIVALA	4/17/2018	$6,045.69	Crow River Hts West 3rd Add Ou
Paid Chk#	033411	Rupp Anderson Squires & Waldsp	4/17/2018	$3,886.31	City Council and Board / Commi
Paid Chk#	033412	SCHENDEL, KARLA	4/17/2018	$200.00	Hall Damage Deposit Release -
Paid Chk#	033413	SOUTH CENTRAL COLLEGE	4/17/2018	$300.00	A. Wychgram: 2018 Fire School,
Paid Chk#	033414	Veolia Water North America	4/17/2018	$7,325.00	Sewer Services - May 2018
Paid Chk#	033415	Verizon Wireless	4/17/2018	$50.84	iPad Data Plan - 03/03/18 - 04
Paid Chk#	033416	WRIGHT COUNTY AUDITOR-TRE	4/17/2018	$8,760.00	WC Patrol Services - April 201
Paid Chk#	033417	WRIGHT COUNTY JOURNAL PR	4/17/2018	$166.23	Ordinance 2018-03: Amending Ci
Paid Chk#	033418	XCEL ENERGY	4/17/2018	$1,835.55	Xcel Owned Street Lighting 03/
Paid Chk#	033419	ZAJICEK, JIM	4/17/2018	$146.41	Easter Baskets for 2019
Paid Chk#	033420	ZEE MEDICAL SERVICE	4/17/2018	$429.10	PW Building: Cabinet with Medi
Paid Chk#	033421	Acuity Specialty Products, Inc	4/17/2018	$168.47	2 Cases of Toilet Paper
			Total Checks	$75,776.52	

CITY OF HANOVER

*Check Summary Register©

Cks 4/17/2018 - 4/17/2018

Name	Check Date	Check Amt

FILTER: None

Carson, Clelland & Schreder
ATTORNEYS AT LAW
6300 SHINGLE CREEK PARKWAY STE 305
MINNEAPOLIS, MN 55430-2190
(763)-561-2800

March 30, 2018

CITY OF HANOVER
CITY ADMINISTRATOR
11250 5TH STREET NE
HANOVER, MN 55341

Professional Services

March 2018

		Amount
	Criminal	
3/27/2018	Prepare cases for court, review criminal histories, review driving records and probation status, note victim input, prepare offers; handle arraignments and pretrial hearings at Brookdale court	24.38
	Open criminal files, preparation of criminal complaints; preparation of cases for court calendars, including court and jury trials; contact and notice to witnesses for trial testimony, prepare outgoing discovery requests, complete incoming discovery requests for monthly period	46.88
	SUBTOTAL:	[71.26]
	For professional services rendered	**$71.26**
	Client Expense Charges :	
	Criminal Expenses:	
Monthly support fee for February		14.45
	SUBTOTAL:	[14.45]
	Total Client Expense Charges	**$14.45**
	Total amount of this bill	**$85.71**
	Previous balance	**$23.83**
3/23/2018	Payment - thank you	($23.83)
	Total payments and adjustments	**($23.83)**

E# 100-41610-304
City Attorney
↳ Legal Fees

APR 2 2018

	Amount
Balance due	**$85.71**

I hereby declare under the penalties of perjury that the foregoing statement for legal services is just and correct and that no part thereof has been paid.

John J. Thames, City Attorney

Rupp, Anderson, Squires & Waldspurger, P.A.

333 South Seventh Street, Suite 2800
Minneapolis, MN 55402
Office (612) 436-4300 Fax (612) 436-4340
www.raswlaw.com

Federal Tax ID 46-1641135

Statement as of: 2/28/2018
Statement Date: 4/4/2018
Statement No. 7093

City of Hanover
Mr. Brian Hagen
11250 5th St NE
Hanover, MN 55341

4011(1)-0001: Miscellaneous	2,131.08
4011(1)-0004: City Council and Board/Commission Meetings	337.06
Total Fees and Expenses:	$2,468.14
Previous Balance:	-
Total Now Due:	**$2,468.14**

APR 6 2018

Rupp, Anderson, Squires & Waldspurger, P.A.

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Statement Date: 4/4/2018
Statement No. 7093

City of Hanover
Mr. Brian Hagen
11250 5th St NE
Hanover, MN 55341

4011(1)-0001: Miscellaneous

		Hours	Rate	Amount
02/12/2018 JJK	Review and analyze City's personnel policy and electronic correspondence from City Administrator Brian Hagen regarding personnel policy issues; Office conference with Kevin Rupp regarding the same; Conduct legal research regarding the same; Draft interoffice memoranda regarding the same; Draft e-mail response regarding the same.	1.60	180.00	288.00
02/13/2018 JTS	Telephone conference with Brian regarding firefighter questions; EDA transfer of land.	0.60	180.00	108.00
02/13/2018 JJK	Finish drafting interoffice memoranda and correspondence regarding City's personnel policy issues; Finish legal research regarding the same.	1.00	180.00	180.00
02/13/2018 JTS	Review draft e-mail to client on labor questions; review question from Brian regarding EDA; reply to same.	0.40	180.00	72.00
02/14/2018 JTS	Office conference with associate regarding deeds; review same. - Church -	0.40	180.00	72.00
02/15/2018 JTS	Cindy e-mail; Office conference with associate regarding agreement drafting regarding road.	0.30	180.00	54.00
02/15/2018 ARK	Review and analyze electronic correspondences from client regarding drafting of agreement for private use of City right-of-way; Strategize and prepare for drafting of the same; Leave voice message for Cindy Nash; Telephone conference with Ms. Nash regarding the agreement;,	0.30	180.00	54.00
02/16/2018 ARK	Telephone conference with City Administrator Brian Hagen regarding 8th Street right-of-way agreement.	0.30	180.00	54.00
02/16/2018 JTS	Brian e-mail regarding gambling questions; reply.	0.10	180.00	18.00
02/19/2018 JTS	Review and analyze statutes regarding gambling proceeds in light of trade areas question; e-mail to Brian regarding same.	0.90	180.00	162.00
02/22/2018 JTS	Brian e-mail regarding draft of letter to fire department applicant; review and recommend change.	0.20	180.00	36.00
02/22/2018 JTS	Brian e-mail regarding driveway agreement; Office conference with associate regarding same; reply to Brian.	0.10	180.00	18.00

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Federal Tax ID 46-1641135

02/22/2018 ARK	Draft agreement for use of 8th Street right-of-way.	2.10	180.00	378.00
02/23/2018 ARK	Review and analyze Cindy Nash's proposed amendments to and concerns about the 8th Street driveway agreement.	0.40	180.00	72.00
02/26/2018 ARK	Review electronic correspondences with client regarding conference call to discuss private driveway agreement.	0.10	180.00	18.00
02/28/2018 ARK	Prepare for telephone conference with City Administrator Brian Hagen and Cindy Nash regarding private driveway agreement; Telephone conference with Mr. Hagen and Ms. Nash; Revise private driveway agreement.	1.80	180.00	324.00
02/28/2018 JTS	Review draft of driveway easement; review Cindy comments.	0.60	180.00	108.00
02/28/2018 JTS	Telephone conference with Cindy and Brian regarding driveway agreement.	0.50	180.00	90.00
	Sub-total Fees:			$2,106.00

4011(1)-0004: City Council and Board/Commission Meetings

		Hours	Rate	Amount
02/05/2018 JPE	Prepare for and participate in City Council meeting; Travel to and from Hanover for City Council meeting.	3.70	180.00	300.00
	Sub-total Fees:			$300.00

Rate Summary

Jacob J. Kimmes	2.60 hours at $180.00/hr	468.00
Jay T. Squires	4.10 hours at $180.00/hr	738.00
Abbi R. Kelzer	5.00 hours at $180.00/hr	900.00
John P. Edison	3.70 hours at $180.00/hr	300.00
Total hours:	15.40	2,406.00

Expenses

	Units	Price	Amount
02/05/2018 Mileage.	68.00	0.55	37.06
02/28/2018 Photocopies.	58.00	0.20	11.60
02/28/2018 Online Legal Research.	1.00	13.48	13.48
Sub-total Expenses:			$62.14

Total Fees and Expenses:	$2,468.14
Previous Balance:	-

Total Now Due: **$2,468.14**

I declare under the penalties of law that this account is just and correct and that no part of it has been paid.

Erica A. Anderson

Accounts Manager

62.14 = Expenses

E# 100-41610-304
City Attorney → Legal Fees

1,170.00 = Bob Ronning
G# 818-20200
Misc. Escrows

Project # 208243

72.00 = Methodist Church
G# 818-20200
Misc. Escrows

Project # 208238

864.00 = Miscellaneous
E# 100-41610-304

City Attorney
↳ Legal Fees

300.00 = City Council Mtg
E# 100-41610-304

City Attorney
↳ Legal Fees

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Federal Tax ID 46-1641135

Statement as of: 2/28/2018
Statement Date: 4/4/2018
Statement No. 7094

City of Hanover
11250 5th St NE
Hanover, MN 55341

4011(3)-0001: Developer Paid (Misc.)	205.00
4011(3)-0017: Transfer of Property From Church to City	1,213.17
Total Fees and Expenses:	$1,418.17
Previous Balance:	-
Total Now Due:	**$1,418.17**

Methodist Church

APR 6 2018

Rupp, Anderson, Squires & Waldspurger, P.A.

333 South Seventh Street, Suite 2800
Minneapolis, MN 55402
Office (612) 436-4300 Fax (612) 436-4340
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Federal Tax ID 46-1641135

Statement as of: 2/28/2018
Statement Date: 4/4/2018
Statement No. 7094

City of Hanover
11250 5th St NE
Hanover, MN 55341

4011(3)-0001: Developer Paid (Misc.)

		Hours	Rate	Amount
02/01/2018 JTS	Review and analyze lot split and survey; review resolution and propose recommendations; Brian e-mail; e-mail to Brian.	1.00	205.00	205.00
	Sub-total Fees:			$205.00

4011(3)-0017: Transfer of Property From Church to City

		Hours	Rate	Amount
02/06/2018 ZJC	Read and respond to e-mail from Brian Hagen regarding deeds; Continue drafting the same and reviewing legal descriptions for new property lines.	0.30	205.00	61.50
02/09/2018 ZJC	Finalize drafting deeds with new property lines; Review property maps regarding the same.	1.20	205.00	246.00
02/14/2018 ZJC	Read and respond to e-mail from title company attaching original deeds; Read and respond to e-mails from Brian Hagen attaching new legal descriptions of parcel and timing of when Council should pass resolution; Review and revise deeds with new parcel descriptions.	2.70	205.00	553.50
02/15/2018 ZJC	Telephone conference with Brian Hagen regarding questions related to cemetery; Read and respond to e-mails from Brian regarding development application; Read and respond to e-mails from title company regarding questions related to closing and exceptions in title company.	0.70	205.00	143.50
02/20/2018 ZJC	Review title commitment and necessary documents; leave voicemail message for seller.	0.20	205.00	41.00
02/21/2018 ZJC	Telephone conference with seller regarding transfer of property and necessary documents for closing; Telephone conference with Brian Hagen regarding the same.	0.50	205.00	102.50
02/26/2018 ZJC	Telephone conference with current property owner regarding transfer; Send update to Brian Hagen regarding the same.	0.30	205.00	61.50
	Sub-total Fees:			$1,209.50

Rate Summary

Zachary J. Cronen	5.90 hours at $205.00/hr	1,209.50
Jay T. Squires	1.00 hours at $205.00/hr	205.00
Total hours:	6.90	1,414.50

Expenses

	Units	Price	Amount
02/28/2018 Online Legal Research.	1.00	3.67	3.67
Sub-total Expenses:			$3.67

Total Fees and Expenses:	$1,418.17
Previous Balance:	-
Total Now Due:	**$1,418.17**

I declare under the penalties of law that this account is just and correct and that no part of it has been paid.

Erica A. Anderson

Accounts Manager

G # 818-20200
Misc. Escrow
↳ A/P

Project # 208238

CITY OF HANOVER
Cash Balances
April 2018

Fund	Begin Month	GL Debits Month	GL Credits Month	Balance
100 GENERAL FUND	$461,059.87	$4,655.17	$78,252.00	$387,463.04
107 FIRE DEPT DONATIONS FUND	$19,269.28	$0.00	$0.00	$19,269.28
201 EDA SPECIAL REVENUE FUND	$71,817.44	$0.00	$1,065.95	$70,751.49
205 EDA BUSINESS INCENTIVE FUND	$249,319.63	$449.23	$0.00	$249,768.86
311 2008A GO CIP REFUNDING BOND	$45,006.28	$0.00	$0.00	$45,006.28
312 2009A GO IMP REFUNDING BOND	$5,242.50	$0.00	$0.00	$5,242.50
313 2010 GO EQUIPMENT CERTIFICATES	$0.00	$0.00	$0.00	$0.00
314 2011A GO IMP CROSSOVER REF BD	$437,635.97	$0.00	$8,082.50	$429,553.47
315 2016A GO CIP BOND	$5,422.25	$0.00	$0.00	$5,422.25
401 GENERAL CAPITAL PROJECTS	$1,349,281.84	$0.00	$0.00	$1,349,281.84
402 PARKS CAPITAL PROJECTS	$64,362.14	$0.00	$901.70	$63,460.44
403 FIRE DEPT CAPITAL FUND	$238,558.96	$0.00	$0.00	$238,558.96
404 HISTORICAL CAPITAL PROJ FUND	$0.00	$0.00	$0.00	$0.00
405 PARK DEDICATION FEE	$2,740.00	$0.00	$0.00	$2,740.00
407 TIF REDEV DIST #1	$12,989.38	$0.00	$0.00	$12,989.38
409 MAHLER PIT - 15TH ST IMP FUND	$10,247.67	$0.00	$0.00	$10,247.67
411 FACILITIES CAPITAL PROJ FUND	-$183,267.80	$0.00	$102,528.91	-$285,796.71
417 EQUIPMENT CAPITAL FUND	$119,867.49	$0.00	$3,200.00	$116,667.49
418 STREET CAPITAL PROJ FUND	$734,576.72	$0.00	$8,195.84	$726,380.88
601 WATER ENTERPRISE FUND	$857,548.33	$2,866.00	$5,077.50	$855,336.83
602 SEWER ENTERPRISE FUND	$353,879.08	$5,337.00	$8,960.50	$350,255.58
603 STORM WATER ENTERPRISE FUND	$115,592.99	$0.00	$261.66	$115,331.33
611 WATER CAPITAL IMP FUND	$135,861.21	$0.00	$0.00	$135,861.21
612 SEWER CAPITAL IMP FUND	$1,859,679.72	$0.00	$5,247.69	$1,854,432.03
613 STORM WATER CAPITAL IMP FUND	$554,254.28	$0.00	$0.00	$554,254.28
804 SCHENDELS FIELD ESC FUND	$0.00	$0.00	$0.00	$0.00
809 BRIDGES AT HANOVER ESC FUND	$0.00	$0.00	$0.00	$0.00
811 EROSION CONTROL ESCROW FUND	$27,000.00	$2,000.00	$0.00	$29,000.00
815 LANDSCAPE ESCROW FUND	$26,000.00	$2,000.00	$0.00	$28,000.00
817 INFRASTRUCTURE ESCROW FUND	$16,000.00	$1,000.00	$0.00	$17,000.00
818 MISC ESCROWS FUND	$13,387.78	$138.00	$3,297.67	$10,228.11
820 BRIDGES TOWNHOMES ESC FUND	$3,615.07	$0.00	$0.00	$3,615.07
821 QUAIL PASS 2ND ADD ESCROW FD	$0.00	$0.00	$0.00	$0.00
823 CROW RVR HTS WEST 3RD / BACKES	$151,215.40	$0.00	$896.00	$150,319.40
824 CROW RVR HTS WEST 3RD PHASE 2	$9,570.75	$0.00	$0.00	$9,570.75
900 INTEREST	-$12,238.39	$0.00	$0.00	-$12,238.39
	$7,755,495.84	$18,445.40	$225,967.92	$7,547,973.32

CITY OF HANOVER
Revenue Budget by Source - General Fund

Source Alt Code	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
Fund 100 GENERAL FUND						
TAXES	R 100-31000 Property Taxes - General	$0.00	$6,238.65	$881,449.00	$875,210.35	0.71%
TAXES	R 100-31020 Property Taxes - Fire	$0.00	$0.00	$129,904.00	$129,904.00	0.00%
TAXES	R 100-31800 Franchise Fees	$0.00	$3,992.93	$15,000.00	$11,007.07	26.62%
Source Alt Code TAXES		$0.00	$10,231.58	$1,026,353.00	$1,016,121.42	1.00%
SERVICE	R 100-34000 Charges for Services	$0.00	$0.00	$0.00	$0.00	0.00%
SERVICE	R 100-34101 City Hall Rent Revenue	$0.00	$3,100.00	$10,000.00	$6,900.00	31.00%
SERVICE	R 100-34107 Assessment Search Fees	$25.00	$275.00	$400.00	$125.00	68.75%
SERVICE	R 100-34108 Administrative Fees	$0.00	$2,400.00	$2,000.00	-$400.00	120.00%
SERVICE	R 100-34109 Copies/Faxes	$0.00	$16.00	$75.00	$59.00	21.33%
SERVICE	R 100-34206 Other Public Safety Charges	$0.00	$0.00	$0.00	$0.00	0.00%
SERVICE	R 100-34207 Fire Protection Services	$0.00	$0.00	$140,661.00	$140,661.00	0.00%
SERVICE	R 100-34403 Recycling Rev/Reimb	$0.00	$1,191.40	$6,000.00	$4,808.60	19.86%
SERVICE	R 100-34780 Park Rental Fees	$0.00	$625.00	$3,000.00	$2,375.00	20.83%
SERVICE	R 100-34940 Cemetery Revenues	$0.00	$1,500.00	$2,000.00	$500.00	75.00%
Source Alt Code SERVICE		$25.00	$9,107.40	$164,136.00	$155,028.60	5.55%
MISC	R 100-36100 Special Assessments	$0.00	$0.00	$500.00	$500.00	0.00%
MISC	R 100-36200 Miscellaneous Revenues	$0.00	$312.53	$900.00	$587.47	34.73%
MISC	R 100-36210 Interest Earnings	$0.00	$0.00	$3,000.00	$3,000.00	0.00%
MISC	R 100-36215 Investment Income/Loss	$0.00	$0.00	$6,000.00	$6,000.00	0.00%
MISC	R 100-36230 Contributions and Donations	$0.00	$375.00	$2,000.00	$1,625.00	18.75%
MISC	R 100-36235 Insurance Dividends	$0.00	$0.00	$8,000.00	$8,000.00	0.00%
MISC	R 100-36250 Damage Deposits	$0.00	$0.00	$0.00	$0.00	0.00%
MISC	R 100-36260 Refunds or Reimbursements	$0.00	$29.38	$0.00	-$29.38	0.00%
MISC	R 100-36290 Sale of Vehicles/Equipment	$0.00	$0.00	$0.00	$0.00	0.00%
MISC	R 100-39101 Sales of General Fixed Asset	$0.00	$0.00	$0.00	$0.00	0.00%
MISC	R 100-39203 Transfer from Other Fund	$0.00	$0.00	$0.00	$0.00	0.00%
Source Alt Code MISC		$0.00	$716.91	$20,400.00	$19,683.09	3.51%
LIC PERM	R 100-32110 Alchoholic Beverages	$35.00	$35.00	$10,370.00	$10,335.00	0.34%
LIC PERM	R 100-32180 Other Bus. Licenses/Permits	$0.00	$965.00	$400.00	-$565.00	241.25%
LIC PERM	R 100-32210 Building Permits	$4,595.17	$16,227.38	$140,000.00	$123,772.62	11.59%
LIC PERM	R 100-32240 Animal Licenses	$0.00	$0.00	$100.00	$100.00	0.00%
LIC PERM	R 100-32260 Solid Waste Hauler Licenses	$0.00	$1,250.00	$1,500.00	$250.00	83.33%
LIC PERM	R 100-32270 Rental Dwelling Licenses	$0.00	$0.00	$800.00	$800.00	0.00%
LIC PERM	R 100-32280 Other Non-Business Lic/Per	$0.00	$1.00	$50.00	$49.00	2.00%
Source Alt Code LIC PERM		$4,630.17	$18,478.38	$153,220.00	$134,741.62	12.06%
INTGOVT	R 100-33400 State Grants and Aids	$0.00	$0.00	$0.00	$0.00	0.00%
INTGOVT	R 100-33401 Local Government Aid	$0.00	$0.00	$117,651.00	$117,651.00	0.00%
INTGOVT	R 100-33410 MV Credit	$0.00	$0.00	$0.00	$0.00	0.00%
INTGOVT	R 100-33420 PERA Aid	$0.00	$0.00	$339.00	$339.00	0.00%
INTGOVT	R 100-33422 State Fire Aid	$0.00	$0.00	$39,000.00	$39,000.00	0.00%
INTGOVT	R 100-33426 State Police Aid	$0.00	$0.00	$5,500.00	$5,500.00	0.00%
INTGOVT	R 100-33610 County Grants/Aid for Roads	$0.00	$0.00	$0.00	$0.00	0.00%
Source Alt Code INTGOVT		$0.00	$0.00	$162,490.00	$162,490.00	0.00%
FINES	R 100-35100 Court Fines	$0.00	$1,071.93	$2,000.00	$928.07	53.60%
Source Alt Code FINES		$0.00	$1,071.93	$2,000.00	$928.07	53.60%
Fund 100 GENERAL FUND		$4,655.17	$39,606.20	$1,528,599.00	$1,488,992.80	2.59%

CITY OF HANOVER

Revenue Budget by Source - General Fund

Source Alt Code	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
		$4,655.17	$39,606.20	$1,528,599.00	$1,488,992.80	2.59%

CITY OF HANOVER
Expenditure Budget Report - General Fund

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
Fund 100 GENERAL FUND						
Dept 41110 Council						
COUNCIL	E 100-41110-111 Committee Wages/Mee	$0.00	$0.00	$13,000.00	$13,000.00	0.00%
COUNCIL	E 100-41110-122 FICA	$0.00	$0.00	$806.00	$806.00	0.00%
COUNCIL	E 100-41110-123 Medicare	$0.00	$0.00	$189.00	$189.00	0.00%
COUNCIL	E 100-41110-208 Training and Instructio	$0.00	$0.00	$400.00	$400.00	0.00%
COUNCIL	E 100-41110-306 Dues & Subscriptions	$0.00	$1,098.90	$7,500.00	$6,401.10	14.65%
COUNCIL	E 100-41110-331 Travel Expenses	$0.00	$0.00	$500.00	$500.00	0.00%
COUNCIL	E 100-41110-437 Other Miscellaneous	$0.00	$25.00	$17,503.00	$17,478.00	0.14%
Dept 41110 Council		$0.00	$1,123.90	$39,898.00	$38,774.10	2.82%
Dept 41330 Boards and Commissions						
BRDCOMM	E 100-41330-111 Committee Wages/Mee	$0.00	$0.00	$4,000.00	$4,000.00	0.00%
BRDCOMM	E 100-41330-208 Training and Instructio	$0.00	$0.00	$500.00	$500.00	0.00%
BRDCOMM	E 100-41330-331 Travel Expenses	$0.00	$0.00	$100.00	$100.00	0.00%
Dept 41330 Boards and Commissions		$0.00	$0.00	$4,600.00	$4,600.00	0.00%
Dept 41400 City Administrator						
CITYADM	E 100-41400-101 Full-Time Employees R	$2,770.76	$19,348.16	$72,040.00	$52,691.84	26.86%
CITYADM	E 100-41400-121 PERA	$207.81	$1,451.13	$5,403.00	$3,951.87	26.86%
CITYADM	E 100-41400-122 FICA	$171.79	$1,199.60	$4,466.00	$3,266.40	26.86%
CITYADM	E 100-41400-123 Medicare	$40.18	$280.57	$1,045.00	$764.43	26.85%
CITYADM	E 100-41400-134 Employer Paid Life	$15.69	$109.83	$400.00	$290.17	27.46%
CITYADM	E 100-41400-151 Med/Dental Insurance	$345.70	$2,419.90	$8,400.00	$5,980.10	28.81%
CITYADM	E 100-41400-208 Training and Instructio	$1,120.00	$1,161.04	$1,500.00	$338.96	77.40%
CITYADM	E 100-41400-306 Dues & Subscriptions	$0.00	$25.00	$500.00	$475.00	5.00%
Dept 41400 City Administrator		$4,671.93	$25,995.23	$93,754.00	$67,758.77	27.73%
Dept 41410 Elections						
ELECTION	E 100-41410-200 Office Supplies (GENER	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
ELECTION	E 100-41410-310 Other Professional Serv	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
ELECTION	E 100-41410-351 Legal Notices Publishin	$0.00	$0.00	$300.00	$300.00	0.00%
ELECTION	E 100-41410-400 Repairs & Maint Cont (	$0.00	$0.00	$1,500.00	$1,500.00	0.00%
Dept 41410 Elections		$0.00	$0.00	$11,800.00	$11,800.00	0.00%
Dept 41430 Clerical Staff						
CLERICAL	E 100-41430-101 Full-Time Employees R	$1,758.40	$12,320.27	$45,718.00	$33,397.73	26.95%
CLERICAL	E 100-41430-121 PERA	$131.88	$924.02	$3,429.00	$2,504.98	26.95%
CLERICAL	E 100-41430-122 FICA	$109.02	$763.85	$2,835.00	$2,071.15	26.94%
CLERICAL	E 100-41430-123 Medicare	$25.50	$178.66	$663.00	$484.34	26.95%
CLERICAL	E 100-41430-134 Employer Paid Life	$62.95	$440.63	$1,600.00	$1,159.37	27.54%
CLERICAL	E 100-41430-142 Unemployment Benefit	$0.00	$0.00	$0.00	$0.00	0.00%
CLERICAL	E 100-41430-151 Med/Dental Insurance	$350.01	$2,450.07	$8,400.00	$5,949.93	29.17%
CLERICAL	E 100-41430-208 Training and Instructio	$0.00	$0.00	$500.00	$500.00	0.00%
CLERICAL	E 100-41430-306 Dues & Subscriptions	$0.00	$0.00	$250.00	$250.00	0.00%
Dept 41430 Clerical Staff		$2,437.76	$17,077.50	$63,395.00	$46,317.50	26.94%
Dept 41435 Staff Expenses						
STAFFEXP	E 100-41435-260 Uniforms	$0.00	$0.00	$300.00	$300.00	0.00%
STAFFEXP	E 100-41435-310 Other Professional Serv	$0.00	$150.00	$500.00	$350.00	30.00%
STAFFEXP	E 100-41435-331 Travel Expenses	$44.91	$44.91	$2,000.00	$1,955.09	2.25%
Dept 41435 Staff Expenses		$44.91	$194.91	$2,800.00	$2,605.09	6.96%
Dept 41530 Accounting						
ACCTING	E 100-41530-101 Full-Time Employees R	$2,040.00	$14,280.00	$53,040.00	$38,760.00	26.92%
ACCTING	E 100-41530-121 PERA	$153.00	$1,071.00	$3,978.00	$2,907.00	26.92%

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
ACCTING	E 100-41530-122 FICA	$125.82	$880.74	$3,288.00	$2,407.26	26.79%
ACCTING	E 100-41530-123 Medicare	$29.42	$205.94	$769.00	$563.06	26.78%
ACCTING	E 100-41530-134 Employer Paid Life	$43.18	$302.26	$1,100.00	$797.74	27.48%
ACCTING	E 100-41530-151 Med/Dental Insurance	$350.00	$2,450.00	$8,400.00	$5,950.00	29.17%
ACCTING	E 100-41530-208 Training and Instructio	$0.00	$0.00	$1,000.00	$1,000.00	0.00%
ACCTING	E 100-41530-306 Dues & Subscriptions	$0.00	$41.66	$250.00	$208.34	16.66%
ACCTING	E 100-41530-310 Other Professional Serv	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
Dept 41530 Accounting		$2,741.42	$19,231.60	$76,825.00	$57,593.40	25.03%
Dept 41540 Auditing						
AUDITING	E 100-41540-301 Auditing and Acctg Ser	$150.00	$150.00	$21,050.00	$20,900.00	0.71%
Dept 41540 Auditing		$150.00	$150.00	$21,050.00	$20,900.00	0.71%
Dept 41550 Assessing						
ASSESS G	E 100-41550-310 Other Professional Serv	$0.00	$0.00	$20,000.00	$20,000.00	0.00%
Dept 41550 Assessing		$0.00	$0.00	$20,000.00	$20,000.00	0.00%
Dept 41570 Purchasing						
PURCHASE	E 100-41570-200 Office Supplies (GENER	$438.81	$1,175.30	$3,500.00	$2,324.70	33.58%
PURCHASE	E 100-41570-205 Bank Fees	$37.13	-$109.87	$200.00	$309.87	-54.94%
PURCHASE	E 100-41570-207 Computer Supplies	$0.00	$1,774.99	$8,000.00	$6,225.01	22.19%
PURCHASE	E 100-41570-220 Repair/Maint Supply (G	$401.03	$1,544.38	$4,000.00	$2,455.62	38.61%
PURCHASE	E 100-41570-322 Postage	$251.85	$251.85	$2,500.00	$2,248.15	10.07%
PURCHASE	E 100-41570-570 Office Equip and Furnis	$0.00	$522.00	$6,000.00	$5,478.00	8.70%
Dept 41570 Purchasing		$1,128.82	$5,158.65	$24,200.00	$19,041.35	21.32%
Dept 41600 Computer						
COMPUTER	E 100-41600-310 Other Professional Serv	$171.50	$4,193.47	$8,500.00	$4,306.53	49.33%
Dept 41600 Computer		$171.50	$4,193.47	$8,500.00	$4,306.53	49.33%
Dept 41610 City Attorney						
CITYATNY	E 100-41610-304 Legal Fees	$1,311.85	$4,616.21	$23,500.00	$18,883.79	19.64%
Dept 41610 City Attorney		$1,311.85	$4,616.21	$23,500.00	$18,883.79	19.64%
Dept 41910 Planning and Zoning						
PLANZONG	E 100-41910-310 Other Professional Serv	$211.50	$3,319.00	$25,000.00	$21,681.00	13.28%
Dept 41910 Planning and Zoning		$211.50	$3,319.00	$25,000.00	$21,681.00	13.28%
Dept 41940 General Govt Buildings/Plant						
GOVTBLDG	E 100-41940-210 Operating Supplies (GE	$0.00	$0.00	$1,500.00	$1,500.00	0.00%
GOVTBLDG	E 100-41940-220 Repair/Maint Supply (G	$372.35	$855.34	$7,000.00	$6,144.66	12.22%
GOVTBLDG	E 100-41940-306 Dues & Subscriptions	$345.00	$620.00	$250.00	-$370.00	248.00%
GOVTBLDG	E 100-41940-310 Other Professional Serv	$956.00	$2,373.44	$9,000.00	$6,626.56	26.37%
GOVTBLDG	E 100-41940-321 Telephone	$693.82	$2,177.13	$4,200.00	$2,022.87	51.84%
GOVTBLDG	E 100-41940-325 Taxes	$62.00	$262.00	$300.00	$38.00	87.33%
GOVTBLDG	E 100-41940-381 Electric Utilities	$1,434.01	$2,917.63	$14,000.00	$11,082.37	20.84%
GOVTBLDG	E 100-41940-383 Gas Utilities	$1,110.18	$5,365.22	$8,000.00	$2,634.78	67.07%
GOVTBLDG	E 100-41940-384 Refuse/Garbage Dispos	$232.15	$927.74	$3,500.00	$2,572.26	26.51%
GOVTBLDG	E 100-41940-415 Other Equipment Renta	$0.00	$0.00	$500.00	$500.00	0.00%
GOVTBLDG	E 100-41940-520 Buildings and Structure	$111.15	$471.15	$4,500.00	$4,028.85	10.47%
GOVTBLDG	E 100-41940-560 Furniture and Fixtures	$0.00	$0.00	$2,500.00	$2,500.00	0.00%
GOVTBLDG	E 100-41940-580 Other Equipment	$0.00	$0.00	$500.00	$500.00	0.00%
Dept 41940 General Govt Buildings/Plant		$5,316.66	$15,969.65	$55,750.00	$39,780.35	28.65%
Dept 41950 Engineer						
ENGINEER	E 100-41950-303 Engineering Fees	$0.00	$0.00	$25,000.00	$25,000.00	0.00%
Dept 41950 Engineer		$0.00	$0.00	$25,000.00	$25,000.00	0.00%

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
Dept 41960 Insurance						
INSURANCE	E 100-41960-150 Worker s Comp (GENE	$0.00	$0.00	$9,500.00	$9,500.00	0.00%
INSURANCE	E 100-41960-152 Worker s Comp Benefit	$0.00	$0.00	$0.00	$0.00	0.00%
INSURANCE	E 100-41960-361 General Liability Ins	$0.00	$0.00	$22,000.00	$22,000.00	0.00%
Dept 41960 Insurance		$0.00	$0.00	$31,500.00	$31,500.00	0.00%
Dept 41970 Legal Publications						
LEGALPUB	E 100-41970-341 Employment	$0.00	$0.00	$300.00	$300.00	0.00%
LEGALPUB	E 100-41970-343 Other Advertising	$0.00	$0.00	$50.00	$50.00	0.00%
LEGALPUB	E 100-41970-351 Legal Notices Publishin	$68.89	$110.83	$2,000.00	$1,889.17	5.54%
LEGALPUB	E 100-41970-354 Recording Fees	$157.95	$165.95	$500.00	$334.05	33.19%
Dept 41970 Legal Publications		$226.84	$276.78	$2,850.00	$2,573.22	9.71%
Dept 42101 Hennepin County Sheriff						
HCSHERIFF	E 100-42101-310 Other Professional Serv	$0.00	$0.00	$81,096.00	$81,096.00	0.00%
Dept 42101 Hennepin County Sheriff		$0.00	$0.00	$81,096.00	$81,096.00	0.00%
Dept 42102 Wright County Sheriff						
WCSHERIFF	E 100-42102-310 Other Professional Serv	$8,760.00	$35,040.00	$105,120.00	$70,080.00	33.33%
Dept 42102 Wright County Sheriff		$8,760.00	$35,040.00	$105,120.00	$70,080.00	33.33%
Dept 42210 Fire Dept Administration						
FIREADMIN	E 100-42210-103 Part-Time Employees	$0.00	$21,289.18	$59,000.00	$37,710.82	36.08%
FIREADMIN	E 100-42210-122 FICA	$0.00	$1,319.96	$3,658.00	$2,338.04	36.08%
FIREADMIN	E 100-42210-123 Medicare	$0.00	$308.69	$856.00	$547.31	36.06%
FIREADMIN	E 100-42210-142 Unemployment Benefit	$167.88	$167.88	$0.00	-$167.88	0.00%
FIREADMIN	E 100-42210-150 Worker s Comp (GENE	$0.00	$0.00	$8,500.00	$8,500.00	0.00%
FIREADMIN	E 100-42210-200 Office Supplies (GENER	$0.00	$0.00	$350.00	$350.00	0.00%
FIREADMIN	E 100-42210-305 Medical and Dental Fee	$0.00	$575.00	$4,000.00	$3,425.00	14.38%
FIREADMIN	E 100-42210-306 Dues & Subscriptions	$0.00	$100.00	$1,000.00	$900.00	10.00%
FIREADMIN	E 100-42210-361 General Liability Ins	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
Dept 42210 Fire Dept Administration		$167.88	$23,760.71	$82,364.00	$58,603.29	28.85%
Dept 42220 Fire Dept Equipment						
FIREEQUIP	E 100-42220-221 Equipment Parts	$32.30	$3,206.79	$15,500.00	$12,293.21	20.69%
FIREEQUIP	E 100-42220-228 Medical Supplies	$0.00	$360.61	$1,500.00	$1,139.39	24.04%
FIREEQUIP	E 100-42220-240 Small Tools and Minor	$0.00	$34.07	$850.00	$815.93	4.01%
FIREEQUIP	E 100-42220-260 Uniforms	$618.00	$1,055.92	$28,500.00	$27,444.08	3.70%
FIREEQUIP	E 100-42220-580 Other Equipment	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
Dept 42220 Fire Dept Equipment		$650.30	$4,657.39	$51,350.00	$46,692.61	9.07%
Dept 42240 Fire Dept Training						
FIRETRNG	E 100-42240-208 Training and Instructio	$535.00	$974.00	$12,500.00	$11,526.00	7.79%
FIRETRNG	E 100-42240-310 Other Professional Serv	$32.25	$798.23	$3,210.00	$2,411.77	24.87%
FIRETRNG	E 100-42240-331 Travel Expenses	$606.68	$1,397.06	$1,500.00	$102.94	93.14%
Dept 42240 Fire Dept Training		$1,173.93	$3,169.29	$17,210.00	$14,040.71	18.42%
Dept 42260 Fire Vehicles						
FIREVEH	E 100-42260-212 Motor Fuels	$208.90	$616.93	$4,500.00	$3,883.07	13.71%
FIREVEH	E 100-42260-220 Repair/Maint Supply (G	$471.61	$645.08	$9,000.00	$8,354.92	7.17%
FIREVEH	E 100-42260-240 Small Tools and Minor	$122.01	$147.04	$2,000.00	$1,852.96	7.35%
FIREVEH	E 100-42260-323 Radio Units	$85.00	$3,307.25	$7,805.00	$4,497.75	42.37%
Dept 42260 Fire Vehicles		$887.52	$4,716.30	$23,305.00	$18,588.70	20.24%
Dept 42280 Fire Stations and Bldgs						
FIREBLDG	E 100-42280-215 Shop Supplies	$38.99	$113.31	$1,650.00	$1,536.69	6.87%
FIREBLDG	E 100-42280-220 Repair/Maint Supply (G	$1,195.41	$1,671.20	$7,500.00	$5,828.80	22.28%

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
FIREBLDG	E 100-42280-321 Telephone	$84.90	$288.69	$1,000.00	$711.31	28.87%
FIREBLDG	E 100-42280-325 Taxes	$0.00	$0.00	$175.00	$175.00	0.00%
FIREBLDG	E 100-42280-381 Electric Utilities	$320.80	$648.00	$4,500.00	$3,852.00	14.40%
FIREBLDG	E 100-42280-383 Gas Utilities	$384.04	$1,705.50	$3,000.00	$1,294.50	56.85%
FIREBLDG	E 100-42280-520 Buildings and Structure	$261.66	$785.42	$0.00	-$785.42	0.00%
Dept 42280 Fire Stations and Bldgs		$2,285.80	$5,212.12	$17,825.00	$12,612.88	29.24%
Dept 42290 Fire Relief Association						
FIRERELIEF	E 100-42290-124 Fire Pension Contributi	$0.00	$0.00	$39,000.00	$39,000.00	0.00%
FIRERELIEF	E 100-42290-125 Other Retirement Contr	$0.00	$0.00	$12,011.00	$12,011.00	0.00%
FIRERELIEF	E 100-42290-301 Auditing and Acctg Ser	$0.00	$0.00	$6,500.00	$6,500.00	0.00%
Dept 42290 Fire Relief Association		$0.00	$0.00	$57,511.00	$57,511.00	0.00%
Dept 42401 Building Inspection Admin						
INSPADMN	E 100-42401-310 Other Professional Serv	$3,430.61	$16,806.20	$50,000.00	$33,193.80	33.61%
Dept 42401 Building Inspection Admin		$3,430.61	$16,806.20	$50,000.00	$33,193.80	33.61%
Dept 42700 Animal Control						
ANIMCTRL	E 100-42700-310 Other Professional Serv	$0.00	$250.00	$500.00	$250.00	50.00%
Dept 42700 Animal Control		$0.00	$250.00	$500.00	$250.00	50.00%
Dept 42800 Cemetery						
CEMETERY	E 100-42800-310 Other Professional Serv	$0.00	$0.00	$0.00	$0.00	0.00%
Dept 42800 Cemetery		$0.00	$0.00	$0.00	$0.00	0.00%
Dept 43000 Public Works (GENERAL)						
PUBWRKS	E 100-43000-101 Full-Time Employees R	$5,857.02	$40,885.56	$131,192.00	$90,306.44	31.16%
PUBWRKS	E 100-43000-102 Full-Time Employees O	$0.00	$188.76	$2,000.00	$1,811.24	9.44%
PUBWRKS	E 100-43000-103 Part-Time Employees	$0.00	$945.00	$13,740.00	$12,795.00	6.88%
PUBWRKS	E 100-43000-121 PERA	$439.29	$3,080.60	$11,714.00	$8,633.40	26.30%
PUBWRKS	E 100-43000-122 FICA	$345.04	$2,476.71	$10,536.00	$8,059.29	23.51%
PUBWRKS	E 100-43000-123 Medicare	$80.70	$579.24	$2,464.00	$1,884.76	23.51%
PUBWRKS	E 100-43000-134 Employer Paid Life	$80.55	$620.40	$2,100.00	$1,479.60	29.54%
PUBWRKS	E 100-43000-142 Unemployment Benefit	$5,200.44	$5,200.44	$250.00	-$4,950.44	080.18%
PUBWRKS	E 100-43000-151 Med/Dental Insurance	$1,219.70	$8,654.24	$30,000.00	$21,345.76	28.85%
PUBWRKS	E 100-43000-208 Training and Instructio	$0.00	$1,449.00	$2,500.00	$1,051.00	57.96%
PUBWRKS	E 100-43000-212 Motor Fuels	$1,103.22	$3,221.39	$7,000.00	$3,778.61	46.02%
PUBWRKS	E 100-43000-215 Shop Supplies	$2,893.84	$5,151.13	$5,500.00	$348.87	93.66%
PUBWRKS	E 100-43000-220 Repair/Maint Supply (G	$2,803.33	$5,275.62	$9,000.00	$3,724.38	58.62%
PUBWRKS	E 100-43000-226 Sign Repair Materials	$0.00	$0.00	$1,500.00	$1,500.00	0.00%
PUBWRKS	E 100-43000-240 Small Tools and Minor	$318.33	$761.14	$5,000.00	$4,238.86	15.22%
PUBWRKS	E 100-43000-260 Uniforms	$0.00	$379.90	$3,000.00	$2,620.10	12.66%
PUBWRKS	E 100-43000-310 Other Professional Serv	$0.00	$1,250.00	$17,000.00	$15,750.00	7.35%
PUBWRKS	E 100-43000-321 Telephone	$258.89	$840.73	$2,800.00	$1,959.27	30.03%
PUBWRKS	E 100-43000-325 Taxes	$0.00	$118.00	$200.00	$82.00	59.00%
Dept 43000 Public Works (GENERAL)		$20,600.35	$81,077.86	$257,496.00	$176,418.14	31.49%
Dept 43121 Paved Streets						
PAVSTRTS	E 100-43121-224 Street Maint Materials	$0.00	$0.00	$100,000.00	$100,000.00	0.00%
Dept 43121 Paved Streets		$0.00	$0.00	$100,000.00	$100,000.00	0.00%
Dept 43122 Unpaved Streets						
UNPAVSTS	E 100-43122-224 Street Maint Materials	$0.00	$0.00	$15,000.00	$15,000.00	0.00%
Dept 43122 Unpaved Streets		$0.00	$0.00	$15,000.00	$15,000.00	0.00%
Dept 43125 Ice & Snow Removal						
SNOWREMO	E 100-43125-224 Street Maint Materials	$6,624.48	$6,624.48	$15,000.00	$8,375.52	44.16%

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
Dept 43125 Ice & Snow Removal		$6,624.48	$6,624.48	$15,000.00	$8,375.52	44.16%
Dept 43160 Street Lighting						
STLGHTG	E 100-43160-381 Electric Utilities	$1,958.28	$5,801.28	$25,000.00	$19,198.72	23.21%
Dept 43160 Street Lighting		$1,958.28	$5,801.28	$25,000.00	$19,198.72	23.21%
Dept 43240 Waste (refuse) Disposal						
REFDISPO	E 100-43240-384 Refuse/Garbage Dispos	$0.00	$0.00	$0.00	$0.00	0.00%
Dept 43240 Waste (refuse) Disposal		$0.00	$0.00	$0.00	$0.00	0.00%
Dept 43245 Recycling: Refuse						
RECYCLING	E 100-43245-384 Refuse/Garbage Dispos	$3,362.94	$10,088.82	$38,500.00	$28,411.18	26.20%
Dept 43245 Recycling: Refuse		$3,362.94	$10,088.82	$38,500.00	$28,411.18	26.20%
Dept 45186 Senior Center						
SRCENTER	E 100-45186-437 Other Miscellaneous	$0.00	$1,887.00	$8,700.00	$6,813.00	21.69%
Dept 45186 Senior Center		$0.00	$1,887.00	$8,700.00	$6,813.00	21.69%
Dept 45200 Parks (GENERAL)						
PARKS	E 100-45200-212 Motor Fuels	$0.00	$0.00	$2,000.00	$2,000.00	0.00%
PARKS	E 100-45200-220 Repair/Maint Supply (G	$0.00	$61.05	$5,000.00	$4,938.95	1.22%
PARKS	E 100-45200-225 Landscaping Materials	$0.00	$0.00	$8,000.00	$8,000.00	0.00%
PARKS	E 100-45200-310 Other Professional Serv	$6,800.00	$6,800.00	$6,800.00	$0.00	100.00%
PARKS	E 100-45200-381 Electric Utilities	$154.08	$427.75	$2,200.00	$1,772.25	19.44%
PARKS	E 100-45200-400 Repairs & Maint Cont (	$0.00	$0.00	$1,500.00	$1,500.00	0.00%
PARKS	E 100-45200-440 Programs	$304.49	$542.31	$2,200.00	$1,657.69	24.65%
PARKS	E 100-45200-580 Other Equipment	$0.00	$0.00	$8,000.00	$8,000.00	0.00%
Dept 45200 Parks (GENERAL)		$7,258.57	$7,831.11	$35,700.00	$27,868.89	21.94%
Dept 45500 Libraries (GENERAL)						
LIBRARY	E 100-45500-437 Other Miscellaneous	$0.00	$4,188.19	$11,500.00	$7,311.81	36.42%
Dept 45500 Libraries (GENERAL)		$0.00	$4,188.19	$11,500.00	$7,311.81	36.42%
Dept 48205 Damage Deposit Refunds						
DMGDEPRF	E 100-48205-810 Refunds & Reimbursem	$0.00	$0.00	$0.00	$0.00	0.00%
Dept 48205 Damage Deposit Refunds		$0.00	$0.00	$0.00	$0.00	0.00%
Dept 49360 Transfers Out						
TRNSFERS	E 100-49360-700 Transfers (GENERAL)	$0.00	$0.00	$0.00	$0.00	0.00%
Dept 49360 Transfers Out		$0.00	$0.00	$0.00	$0.00	0.00%
Dept 49800 Transit (GENERAL)						
TRANSIT	E 100-49800-310 Other Professional Serv	$0.00	$0.00	$5,000.00	$5,000.00	0.00%
Dept 49800 Transit (GENERAL)		$0.00	$0.00	$5,000.00	$5,000.00	0.00%
Fund 100 GENERAL FUND		$75,573.85	$308,417.65	$1,528,599.00	$1,220,181.35	20.18%

Dept Abbrev	Account Descr	April 2018 Amt	2018 YTD Amt	2018 YTD Budget	2018 YTD Balance	%YTD Budget
		$75,573.85	$308,417.65	$1,528,599.00	$1,220,181.35	20.18%

CITY OF HANOVER
COUNTIES OF WRIGHT AND HENNEPIN
STATE OF MINNESOTA

A regular meeting of the City Council of the City of Hanover, Minnesota, was called to order by Mayor Kauffman at 6:00 p.m. in the Council Chambers of the City Hall, in the City of Hanover, Minnesota, on the 17th day of April, 2018.

The following Council Members were present:

The following Council Members were absent:

A motion to adopt the following resolution was made by ____ and seconded by _____.

RESOLUTION NO 04-17-18-42

A RESOLUTION APPOINTING PROBATIONARY FIREFIGHTER

WHEREAS, the Hanover Fire Department currently has vacancies; and

WHEREAS, Fire Chief Dave Malewicki recommends appointing Stacy Thompson as a Probationary Firefighter, subject to passing of criminal background check, physical examination, and agility test.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Hanover, Minnesota, hereby approves the hiring of Stacy Thompson as a Probationary Firefighter, subject to the conditions listed above and applicable City policies.

Council members voting in favor:

Opposed or abstained:

Adopted by the city Council this 17th day of April, 2018.

APPROVED BY:

_____
Chris Kauffman, Mayor

ATTEST:

_____
Jackie Heinz, Deputy Clerk

CITY OF HANOVER
COUNTIES OF WRIGHT AND HENNEPIN
STATE OF MINNESOTA

A regular meeting of the City Council of the City of Hanover, Minnesota, was called to order by Mayor Kauffman at 6:00 p.m. in the Council Chambers of the City Hall, in the City of Hanover, Minnesota, on the 17th day of April, 2018.

The following Council Members were present:

The following Council Members were absent:

A motion to adopt the following resolution was made by ____ and seconded by ____.

RESOLUTION NO 04-17-18-43

A RESOLUTION APPROVING RENEWAL OF
CHOPS BAR & GRILL OPTIONAL 2 AM LIQUOR LICENSE

WHEREAS, Chops Bar & Grill has submitted a renewal application for an Optional Liquor 2 AM license and has provided the necessary application materials and fees for submission to the Minnesota Department of Public Safety; and

WHEREAS, staff discussions with the local sheriff's department elicited no concerns with the renewal of said license**.**

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hanover, Minnesota hereby approves the renewal application for Optional 2 AM liquor for Chops Bar & Grill for the licensing period of one year.

Council members voting in favor:

Opposed or abstained:

Adopted by the city Council this 17th day of April, 2018.

APPROVED BY:

_____
Chris Kauffman, Mayor

ATTEST:

_____
Jackie Heinz, Deputy Clerk

178 East 9th Street, Suite 200 | St. Paul, MN 55101 | (651) 286-8450

April 12, 2018

The Honorable Mayor, City Council and Staff
c/o Brian Hagen
City of Hanover
11250 5th Street NE
Hanover, MN 55341

Re: 2018 Surface Improvement Project
City of Hanover, MN
WSB Project No. 011186-000

Dear Honorable Mayor, City Council, and Staff:

Following this letter is a resolution for your consideration at the April 17, 2018 City Council Meeting.

The resolution for your consideration approves the bids for the 2018 Surface Improvement Project and awards the contract to the lowest bidder.

Bids were opened on April 5, 2018 and the lowest bidder is GMH Asphalt Corporation of Chaska, MN with a bid amount of $678,524.00. A tabulation of all bidders can be seen in the council packet.

If you have any questions, I will be present at the April 17, 2018 Council Meeting to discuss those with you or please call me at 651-286-8465.

Sincerely,

WSB & Associates, Inc.

Justin Messner
City Engineer

Attachments

CITY OF HANOVER
COUNTIES OF WRIGHT AND HENNEPIN
STATE OF MINNESOTA

A regular meeting of the City Council of the City of Hanover, Minnesota, was called to order by Mayor Kauffman at 6:00 p.m. in the Council Chambers of the City Hall, in the City of Hanover, Minnesota, on the 17th day of April, 2018.

The following Council Members were present:

The following Council Members were absent:

A motion to adopt the following resolution was made by _____ and seconded by _____.

RESOLUTION NO 04-17-18-45

A RESOLUTION AWARDING A BID FOR THE
2018 PAVEMENT IMPROVEMENT PROJECT

WHEREAS, pursuant to an advertisement for bids for the improvement as shown on the plan for the above-referenced project, bids were received, opened and tabulated according to law, and the following bids were received complying with the advertisement:

	Contractor	Alternate 1	Alternate 2	Alternate 3	Grand Total Bid
1	GMH Asphalt Corporation	$371,112.01	$217,485.89	$89,926.10	$678,524.00
2	ASTECH Corp.	$386,777.82	$214,521.50	$96,403.40	$697,702.72
3	North Valley, Inc.	$352,217.92	$246,762.25	$106,667.98	$705,648.15
4	Omann Contracting Companies	$395,229.75	$217,134.72	$100,187.78	$712,552.25
5	Knife River	$382,800.10	$231,851.25	$112,907.50	$727,558.85
6	Park Construction Company	$408,391.07	$222,513.95	$107,871.25	$738,776.27
7	Hardrives, Inc.	$394.109.40	$236.861.81	$118,057.37	$749,028.58
8	Midwest Asphalt Corporation	$468,343.80	$266,685.75	$131,494.00	$866,523.55

WHEREAS, it appears that GMH Asphalt Corporation of Chaska, MN is the lowest responsible bidder.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Hanover, Minnesota, hereby approves that:

1. The Mayor and City Administrator are hereby authorized and directed to enter into a contract with GMH Asphalt Corporation in the amount of $678,524.00 in the name of the City of Hanover, Minnesota for the improvement outlined in the above-referenced project according to the plans and specifications, therefore, approved by the City Council and on file in the office of the City Clerk.

2. The Engineer, WSB & Associates, Inc., is hereby authorized and directed to return forthwith to all bidders the deposits made with their bids, except that the deposits of the successful bidder and the next two lowest bidders shall be retained until a contract has been signed.

Council members voting in favor:

Opposed or abstained:

Adopted by the city Council this 17th day of April, 2018.

APPROVED BY:

_____

Chris Kauffman, Mayor

ATTEST:

_____

Jackie Heinz, Deputy Clerk

BID TABULATION SUMMARY

PROJECT:
2018 Pavement Improvement Project

OWNER:
City of Hanover, MN
City Project No. 2018-01

WSB Project No. R-011186-000

Bids Opened: Thursday, April 5, 2018, at 10:00 am

	Contractor	Bid Security (5%)	Grand Total Bid
1	GMH Asphalt Corporation	X	$678,524.00
2	Asphalt Surface Technologies Corp.	X	$697,702.72
3	North Valley, Inc.	X	$705,648.15
4	Omann Brothers Paving, Inc.	X	$712,552.25
5	Knife River Corporation	X	$727,558.85
6	Park Construction	X	$738,776.27
7	Hardrives, Inc.	X	$749,028.50
8	Midwest Asphalt Services	X	$866,523.55
	Engineer's Opinion of Cost		$842,209.35

I hereby certify that this is a true and correct tabulation of the bids as received on April 5, 2018.

Justin Messner, PE Project Manager

Denotes corrected figure

4/8/2018

WSB
Project Bid Abstract

Project Name: 2018 PAVEMENT IMPROVEMENT PROJECT
Client: City of Hanover
Bid Opening: 04/05/2018 10:00 AM

City Project No.: 2018-01
WSB Project No.: R-011186-000
Owner: City of Hanover, MN

Denotes Corrected Figure

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		GMH Asphalt Corporation		Asphalt Surface Technologies Corporation a/k/a ASTECH Corp		North Valley, Inc.	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS												
1	2021.501	MOBILIZATION	LS	1	$22,000.00	$22,000.00	$6,673.00	$6,673.00	$15,560.00	$15,560.00	$5,885.55	$5,885.55
2	2104.502	SALVAGE SIGN	EACH	14	$35.00	$490.00	$26.38	$369.32	$71.00	$994.00	$37.45	$524.30
3	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	660	$3.00	$1,980.00	$2.50	$1,650.00	$2.50	$1,650.00	$2.09	$1,379.40
4	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$8.45	$439.40	$5.00	$260.00	$16.05	$834.60
5	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$12.00	$3,300.00	$5.00	$1,375.00	$3.25	$893.75	$5.21	$1,432.75
6	2105.507	COMMON EXCAVATION	C Y	2034	$22.00	$44,748.00	$17.85	$36,306.90	$14.50	$29,493.00	$12.88	$26,197.92
7	2105.507	SUBGRADE EXCAVATION	C Y	200	$22.00	$4,400.00	$17.85	$3,570.00	$16.25	$3,250.00	$13.28	$2,656.00
8	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	20	$150.00	$3,000.00	$122.00	$2,440.00	$150.00	$3,000.00	$101.66	$2,033.20
9	2211.501	RECLAIMED AGGREGATE BASE PLACED	C Y	2100	$10.00	$21,000.00	$5.00	$10,500.00	$11.44	$24,024.00	$7.97	$16,737.00
10	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	515	$38.00	$19,570.00	$31.30	$16,119.50	$25.90	$13,338.50	$23.41	$12,056.15
11	2215.504	FULL DEPTH RECLAMATION	S Y	9350	$5.00	$46,750.00	$0.65	$6,077.50	$0.95	$8,882.50	$1.29	$12,061.50
12	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 5	C Y	95	$30.00	$2,850.00	$47.35	$4,498.25	$42.00	$3,990.00	$41.62	$3,953.90
13	2331.601	BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$40.00	$11,000.00	$19.91	$5,475.25	$25.00	$6,875.00	$18.86	$5,186.50
14	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	600	$4.00	$2,400.00	$3.00	$1,800.00	$2.95	$1,770.00	$3.05	$1,830.00
15	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;C)	TON	1410	$65.00	$91,650.00	$62.07	$87,518.70	$58.70	$82,767.00	$62.06	$87,504.60
16	2360.509	TYPE SP 12.5 WEARING COURSE MIX (2;C)	TON	2110	$65.00	$137,150.00	$56.31	$118,814.10	$51.60	$108,876.00	$56.90	$120,059.00
17	2501.502	18" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$1,318.75	$2,637.50	$1,053.00	$2,106.00	$1,177.11	$2,354.22
18	2501.503	18" RC PIPE CULVERT CLASS V	L F	40	$65.00	$2,600.00	$79.13	$3,165.20	$61.70	$2,468.00	$80.26	$3,210.40
19	2504.602	ADJUST GATE VALVE	EACH	2	$500.00	$1,000.00	$264.00	$528.00	$350.00	$700.00	$267.53	$535.06
20	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$700.00	$700.00	$731.50	$731.50	$711.62	$711.62
21	2563.601	TRAFFIC CONTROL	LS	1	$5,000.00	$5,000.00	$2,426.00	$2,426.00	$4,000.00	$4,000.00	$1,872.68	$1,872.68
22	2564.431	SIGN PANELS TYPE SPECIAL	EACH	8	$150.00	$1,200.00	$211.00	$1,688.00	$273.00	$2,184.00	$160.52	$1,284.16
23	2564.518	SIGN PANELS TYPE C	S F	93.83	$20.00	$1,876.60	$42.20	$3,959.63	$27.25	$2,556.87	$26.75	$2,509.95
24	2564.602	INSTALL SIGN	EACH	14	$150.00	$2,100.00	$10.55	$147.70	$75.00	$1,050.00	$80.26	$1,123.64

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		GMH Asphalt Corporation		Asphalt Surface Technologies Corporation a/k/a ASTECH Corp		North Valley, Inc.	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
25	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	L F	6740	$3.00	$20,220.00	$3.53	$23,792.20	$3.65	$24,601.00	$1.50	$10,110.00
26	2573.530	STORM DRAIN INLET PROTECTION	EACH	8	$150.00	$1,200.00	$159.57	$1,276.56	$160.00	$1,280.00	$101.66	$813.28
27	2573.604	STABILIZED CONSTRUCTION ENTRANCE	EACH	7	$1,500.00	$10,500.00	$500.00	$3,500.00	$1,900.00	$13,300.00	$374.54	$2,621.78
28	2574.507	BOULEVARD TOPSOIL BORROW	C Y	190	$30.00	$5,700.00	$35.00	$6,650.00	$46.10	$8,759.00	$37.45	$7,115.50
29	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	1690	$3.50	$5,915.00	$1.42	$2,399.80	$1.46	$2,467.40	$1.77	$2,991.30
30	2575.605	BLOWN COMPOST SEEDING	S Y	1690	$5.00	$8,450.00	$5.01	$8,466.90	$6.35	$10,731.50	$5.08	$8,585.20
31	2582.502	24" SOLID LINE EPOXY	L F	12	$20.00	$240.00	$8.88	$106.56	$9.25	$111.00	$13.34	$160.08
32	2582.502	4" DOUBLE SOLID LINE EPOXY	L F	3380	$3.20	$10,816.00	$0.84	$2,839.20	$0.55	$1,859.00	$0.79	$2,670.20
33	2582.503	4" SOLID LINE EPOXY	L F	6900	$1.60	$11,040.00	$0.42	$2,898.00	$0.28	$1,932.00	$0.40	$2,760.00
34	2582.518	CROSSWALK EPOXY	S F	72	$2.50	$180.00	$4.22	$303.84	$4.40	$316.80	$6.34	$456.48
		Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:				$503,345.60		$371,112.01		$386,777.82		$352,217.92
ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS												
35	2021.501	MOBILIZATION	LS	1	$10,000.00	$10,000.00	$3,350.00	$3,350.00	$7,100.00	$7,100.00	$5,885.55	$5,885.55
36	2104.502	SALVAGE SIGN	EACH	18	$35.00	$630.00	$26.38	$474.84	$71.00	$1,278.00	$37.45	$674.10
37	2104.503	REMOVE PIPE CULVERTS	L F	169	$10.00	$1,690.00	$8.45	$1,428.05	$5.00	$845.00	$16.05	$2,712.45
38	2105.507	COMMON EXCAVATION	C Y	185	$15.00	$2,775.00	$10.50	$1,942.50	$20.00	$3,700.00	$18.96	$3,507.60
39	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$122.00	$1,220.00	$150.00	$1,500.00	$101.66	$1,016.60
40	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	185	$45.00	$8,325.00	$47.35	$8,759.75	$40.00	$7,400.00	$64.21	$11,878.85
41	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	12150	$1.25	$15,187.50	$0.85	$10,327.50	$0.60	$7,290.00	$1.64	$19,926.00
42	2232.504	MILL BITUMINOUS SURFACE	S Y	8525	$1.50	$12,787.50	$0.62	$5,285.50	$0.58	$4,944.50	$1.44	$12,276.00
43	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	2275	$4.00	$9,100.00	$2.50	$5,687.50	$2.95	$6,711.25	$3.05	$6,938.75
44	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	2690	$55.00	$147,950.00	$56.05	$150,774.50	$52.10	$140,149.00	$57.17	$153,787.30
45	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$1,002.25	$2,004.50	$965.00	$1,930.00	$856.08	$1,712.16
46	2501.502	18" RC PIPE APRON	EACH	4	$1,000.00	$4,000.00	$896.75	$3,587.00	$1,053.00	$4,212.00	$909.59	$3,638.36
47	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$60.00	$2,400.00	$47.50	$1,900.00	$59.50	$2,380.00	$48.15	$1,926.00
48	2501.503	18" RC PIPE CULVERT CLASS V	L F	88	$65.00	$5,720.00	$51.70	$4,549.60	$61.50	$5,412.00	$52.44	$4,614.72
49	2504.602	ADJUST GATE VALVE	EACH	9	$500.00	$4,500.00	$264.00	$2,376.00	$350.00	$3,150.00	$267.53	$2,407.77
50	2506.602	ADJUST FRAME AND RING CASTING (SANITARY)	EACH	1	$500.00	$500.00	$1,025.00	$1,025.00	$650.00	$650.00	$802.58	$802.58
51	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$5,211.00	$5,211.00	$5,434.00	$5,434.00	$5,286.30	$5,286.30
52	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$158.25	$158.25	$750.00	$750.00	$481.55	$481.55
53	2564.431	SIGN PANELS TYPE SPECIAL	EACH	13	$150.00	$1,950.00	$211.00	$2,743.00	$272.50	$3,542.50	$160.52	$2,086.76
54	2564.518	SIGN PANELS TYPE C	S F	81	$20.00	$1,620.00	$42.20	$3,418.20	$27.25	$2,207.25	$26.75	$2,166.75
55	2564.602	INSTALL SIGN	EACH	20	$150.00	$3,000.00	$10.55	$211.00	$125.25	$2,505.00	$80.26	$1,605.20
56	2574.507	BOULEVARD TOPSOIL BORROW	C Y	15	$30.00	$450.00	$35.00	$525.00	$49.00	$735.00	$58.86	$882.90
57	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	80	$3.50	$280.00	$1.58	$126.40	$1.65	$132.00	$1.77	$141.60

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		GMH Asphalt Corporation		Asphalt Surface Technologies Corporation a/k/a ASTECH Corp		North Valley, Inc.	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
58	2575.605	BLOWN COMPOST SEEDING	S Y	80	$5.00	$400.00	$5.01	$400.80	$7.05	$564.00	$5.08	$406.40
		Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:				$240,265.00		$217,485.89		$214,521.50		$246,762.25
ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS												
59	2021.501	MOBILIZATION	LS	1	$5,000.00	$5,000.00	$4,100.00	$4,100.00	$7,475.00	$7,475.00	$2,675.25	$2,675.25
60	2104.502	SALVAGE SIGN	EACH	5	$35.00	$175.00	$26.38	$131.90	$71.00	$355.00	$37.45	$187.25
61	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	100	$3.00	$300.00	$2.50	$250.00	$2.50	$250.00	$2.51	$251.00
62	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$8.45	$439.40	$5.00	$260.00	$16.05	$834.60
63	2104.504	REMOVE BITUMINOUS PAVEMENT	S Y	850	$2.00	$1,700.00	$5.00	$4,250.00	$3.05	$2,592.50	$3.09	$2,626.50
64	2105.507	COMMON EXCAVATION	C Y	265	$15.00	$3,975.00	$21.00	$5,565.00	$20.00	$5,300.00	$13.50	$3,577.50
65	2105.507	SUBGRADE EXCAVATION	C Y	340	$15.00	$5,100.00	$14.80	$5,032.00	$22.00	$7,480.00	$20.78	$7,065.20
66	2105.507	SELECT GRANULAR BORROW (CV)	C Y	340	$22.00	$7,480.00	$10.00	$3,400.00	$16.00	$5,440.00	$21.08	$7,167.20
67	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$122.00	$1,220.00	$150.00	$1,500.00	$101.66	$1,016.60
68	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	215	$20.00	$4,300.00	$3.00	$645.00	$26.00	$5,590.00	$34.13	$7,337.95
69	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	50	$45.00	$2,250.00	$47.35	$2,367.50	$42.00	$2,100.00	$80.26	$4,013.00
70	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	2375	$1.25	$2,968.75	$0.85	$2,018.75	$0.72	$1,710.00	$1.69	$4,013.75
71	2232.504	MILL BITUMINOUS SURFACE	S Y	3460	$1.50	$5,190.00	$0.62	$2,145.20	$0.68	$2,352.80	$1.51	$5,224.60
72	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	735	$4.00	$2,940.00	$2.50	$1,837.50	$2.95	$2,168.25	$3.05	$2,241.75
73	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	830	$55.00	$45,650.00	$56.78	$47,127.40	$52.89	$43,898.70	$57.74	$47,924.20
74	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$1,107.75	$2,215.50	$71.25	$142.50	$963.09	$1,926.18
75	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$40.00	$1,600.00	$73.85	$2,954.00	$59.40	$2,376.00	$74.91	$2,996.40
76	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$1,405.00	$1,405.00	$1,465.00	$1,465.00	$1,423.23	$1,423.23
77	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$106.00	$106.00	$650.00	$650.00	$535.05	$535.05
78	2564.431	SIGN PANELS TYPE SPECIAL	EACH	3	$150.00	$450.00	$248.00	$744.00	$275.00	$825.00	$160.52	$481.56
79	2564.518	SIGN PANELS TYPE C	S F	23.5	$20.00	$470.00	$42.20	$991.70	$27.50	$646.25	$58.86	$1,383.21
80	2564.602	INSTALL SIGN	EACH	5	$150.00	$750.00	$10.55	$52.75	$125.50	$627.50	$80.26	$401.30
81	2574.507	BOULEVARD TOPSOIL BORROW	C Y	10	$30.00	$300.00	$35.00	$350.00	$54.25	$542.50	$58.86	$588.60
82	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	30	$3.50	$105.00	$1.58	$47.40	$1.63	$48.90	$1.77	$53.10
83	2575.605	BLOWN COMPOST SEEDING	S Y	30	$5.00	$150.00	$5.01	$150.30	$7.05	$211.50	$5.08	$152.40
84	2582.518	CROSSWALK EPOXY	S F	90	$2.50	$225.00	$4.22	$379.80	$4.40	$396.00	$6.34	$570.60
		Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:				$98,598.75		$89,926.10		$96,403.40		$106,667.98
	Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:					$503,345.60		$371,112.01		$386,777.82		$352,217.92
	Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:					$240,265.00		$217,485.89		$214,521.50		$246,762.25
	Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:					$98,598.75		$89,926.10		$96,403.40		$106,667.98
	Totals for Project 011186-00					$842,209.35		$678,524.00		$697,702.72		$705,648.15
	% of Estimate for Project 011186-00							-19.44%		-17.16%		-16.21%

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Omann Contracting Companies, Inc.		Knife River		Park Construction Company - Mpls	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS												
1	2021.501	MOBILIZATION	LS	1	$22,000.00	$22,000.00	$19,665.00	$19,665.00	$26,500.00	$26,500.00	$19,300.00	$19,300.00
2	2104.502	SALVAGE SIGN	EACH	14	$35.00	$490.00	$36.12	$505.68	$25.00	$350.00	$35.70	$499.80
3	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	660	$3.00	$1,980.00	$2.00	$1,320.00	$2.00	$1,320.00	$1.80	$1,188.00
4	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$15.48	$804.96	$10.00	$520.00	$31.10	$1,617.20
5	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$12.00	$3,300.00	$4.75	$1,306.25	$9.00	$2,475.00	$6.40	$1,760.00
6	2105.507	COMMON EXCAVATION	C Y	2034	$22.00	$44,748.00	$12.00	$24,408.00	$20.00	$40,680.00	$18.80	$38,239.20
7	2105.507	SUBGRADE EXCAVATION	C Y	200	$22.00	$4,400.00	$12.00	$2,400.00	$20.00	$4,000.00	$29.00	$5,800.00
8	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	20	$150.00	$3,000.00	$135.00	$2,700.00	$1.00	$20.00	$122.00	$2,440.00
9	2211.501	RECLAIMED AGGREGATE BASE PLACED	C Y	2100	$10.00	$21,000.00	$9.30	$19,530.00	$5.50	$11,550.00	$16.70	$35,070.00
10	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	515	$38.00	$19,570.00	$25.84	$13,307.60	$35.00	$18,025.00	$32.90	$16,943.50
11	2215.504	FULL DEPTH RECLAMATION	S Y	9350	$5.00	$46,750.00	$3.69	$34,501.50	$1.00	$9,350.00	$1.20	$11,220.00
12	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 5	C Y	95	$30.00	$2,850.00	$36.85	$3,500.75	$75.00	$7,125.00	$30.00	$2,850.00
13	2331.601	BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$40.00	$11,000.00	$22.36	$6,149.00	$14.90	$4,097.50	$21.90	$6,022.50
14	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	600	$4.00	$2,400.00	$2.50	$1,500.00	$2.00	$1,200.00	$1.80	$1,080.00
15	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;C)	TON	1410	$65.00	$91,650.00	$59.50	$83,895.00	$56.00	$78,960.00	$60.10	$84,741.00
16	2360.509	TYPE SP 12.5 WEARING COURSE MIX (2;C)	TON	2110	$65.00	$137,150.00	$56.99	$120,248.90	$55.00	$116,050.00	$57.50	$121,325.00
17	2501.502	18" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$1,135.20	$2,270.40	$950.00	$1,900.00	$976.00	$1,952.00
18	2501.503	18" RC PIPE CULVERT CLASS V	L F	40	$65.00	$2,600.00	$77.40	$3,096.00	$60.00	$2,400.00	$56.30	$2,252.00
19	2504.602	ADJUST GATE VALVE	EACH	2	$500.00	$1,000.00	$145.00	$290.00	$500.00	$1,000.00	$274.00	$548.00
20	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$686.28	$686.28	$665.00	$665.00	$678.00	$678.00
21	2563.601	TRAFFIC CONTROL	LS	1	$5,000.00	$5,000.00	$2,750.00	$2,750.00	$6,500.00	$6,500.00	$1,790.00	$1,790.00
22	2564.431	SIGN PANELS TYPE SPECIAL	EACH	8	$150.00	$1,200.00	$154.80	$1,238.40	$200.00	$1,600.00	$153.00	$1,224.00
23	2564.518	SIGN PANELS TYPE C	S F	93.83	$20.00	$1,876.60	$25.80	$2,420.81	$40.00	$3,753.20	$25.50	$2,392.67
24	2564.602	INSTALL SIGN	EACH	14	$150.00	$2,100.00	$77.40	$1,083.60	$10.00	$140.00	$76.50	$1,071.00
25	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	L F	6740	$3.00	$20,220.00	$2.58	$17,389.20	$2.75	$18,535.00	$3.40	$22,916.00
26	2573.530	STORM DRAIN INLET PROTECTION	EACH	8	$150.00	$1,200.00	$82.56	$660.48	$85.00	$680.00	$110.00	$880.00
27	2573.604	STABILIZED CONSTRUCTION ENTRANCE	EACH	7	$1,500.00	$10,500.00	$750.00	$5,250.00	$100.00	$700.00	$550.00	$3,850.00
28	2574.507	BOULEVARD TOPSOIL BORROW	C Y	190	$30.00	$5,700.00	$38.13	$7,244.70	$55.00	$10,450.00	$38.00	$7,220.00
29	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	1690	$3.50	$5,915.00	$1.70	$2,873.00	$2.00	$3,380.00	$1.70	$2,873.00
30	2575.605	BLOWN COMPOST SEEDING	S Y	1690	$5.00	$8,450.00	$4.90	$8,281.00	$3.00	$5,070.00	$2.80	$4,732.00
31	2582.502	24" SOLID LINE EPOXY	L F	12	$20.00	$240.00	$8.69	$104.28	$8.45	$101.40	$8.60	$103.20
32	2582.502	4" DOUBLE SOLID LINE EPOXY	L F	3380	$3.20	$10,816.00	$0.52	$1,757.60	$0.50	$1,690.00	$0.51	$1,723.80
33	2582.503	4" SOLID LINE EPOXY	L F	6900	$1.60	$11,040.00	$0.26	$1,794.00	$0.25	$1,725.00	$0.26	$1,794.00
34	2582.518	CROSSWALK EPOXY	S F	72	$2.50	$180.00	$4.13	$297.36	$4.00	$288.00	$4.10	$295.20

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Omann Contracting Companies, Inc.		Knife River		Park Construction Company - Mpls	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
	Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:					$503,345.60		$395,229.75		$382,800.10		$408,391.07
ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS												
35	2021.501	MOBILIZATION	LS	1	$10,000.00	$10,000.00	$3,500.00	$3,500.00	$13,000.00	$13,000.00	$10,000.00	$10,000.00
36	2104.502	SALVAGE SIGN	EACH	18	$35.00	$630.00	$36.12	$650.16	$25.00	$450.00	$35.70	$642.60
37	2104.503	REMOVE PIPE CULVERTS	L F	169	$10.00	$1,690.00	$15.48	$2,616.12	$10.00	$1,690.00	$13.50	$2,281.50
38	2105.507	COMMON EXCAVATION	C Y	185	$15.00	$2,775.00	$40.00	$7,400.00	$20.00	$3,700.00	$29.00	$5,365.00
39	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$135.00	$1,350.00	$1.00	$10.00	$122.00	$1,220.00
40	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	185	$45.00	$8,325.00	$84.39	$15,612.15	$75.00	$13,875.00	$44.70	$8,269.50
41	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	12150	$1.25	$15,187.50	$0.40	$4,860.00	$1.50	$18,225.00	$0.80	$9,720.00
42	2232.504	MILL BITUMINOUS SURFACE	S Y	8525	$1.50	$12,787.50	$0.59	$5,029.75	$1.50	$12,787.50	$0.57	$4,859.25
43	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	2275	$4.00	$9,100.00	$2.50	$5,687.50	$0.85	$1,933.75	$1.80	$4,095.00
44	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	2690	$55.00	$147,950.00	$53.50	$143,915.00	$50.00	$134,500.00	$55.40	$149,026.00
45	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$825.60	$1,651.20	$900.00	$1,800.00	$931.00	$1,862.00
46	2501.502	18" RC PIPE APRON	EACH	4	$1,000.00	$4,000.00	$877.20	$3,508.80	$950.00	$3,800.00	$976.00	$3,904.00
47	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$60.00	$2,400.00	$46.44	$1,857.60	$58.00	$2,320.00	$52.80	$2,112.00
48	2501.503	18" RC PIPE CULVERT CLASS V	L F	88	$65.00	$5,720.00	$50.57	$4,450.16	$60.00	$5,280.00	$56.30	$4,954.40
49	2504.602	ADJUST GATE VALVE	EACH	9	$500.00	$4,500.00	$145.00	$1,305.00	$500.00	$4,500.00	$47.30	$425.70
50	2506.602	ADJUST FRAME AND RING CASTING (SANITARY)	EACH	1	$500.00	$500.00	$260.00	$260.00	$1,000.00	$1,000.00	$172.00	$172.00
51	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$5,098.08	$5,098.08	$4,940.00	$4,940.00	$5,040.00	$5,040.00
52	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$975.00	$975.00	$1,000.00	$1,000.00	$1,740.00	$1,740.00
53	2564.431	SIGN PANELS TYPE SPECIAL	EACH	13	$150.00	$1,950.00	$154.80	$2,012.40	$200.00	$2,600.00	$153.00	$1,989.00
54	2564.518	SIGN PANELS TYPE C	S F	81	$20.00	$1,620.00	$25.80	$2,089.80	$40.00	$3,240.00	$25.50	$2,065.50
55	2564.602	INSTALL SIGN	EACH	20	$150.00	$3,000.00	$77.40	$1,548.00	$10.00	$200.00	$76.50	$1,530.00
56	2574.507	BOULEVARD TOPSOIL BORROW	C Y	15	$30.00	$450.00	$82.00	$1,230.00	$40.00	$600.00	$58.70	$880.50
57	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	80	$3.50	$280.00	$1.70	$136.00	$2.00	$160.00	$1.70	$136.00
58	2575.605	BLOWN COMPOST SEEDING	S Y	80	$5.00	$400.00	$4.90	$392.00	$3.00	$240.00	$2.80	$224.00
	Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:					$240,265.00		$217,134.72		$231,851.25		$222,513.95
ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS												
59	2021.501	MOBILIZATION	LS	1	$5,000.00	$5,000.00	$1,500.00	$1,500.00	$13,000.00	$13,000.00	$5,000.00	$5,000.00
60	2104.502	SALVAGE SIGN	EACH	5	$35.00	$175.00	$36.72	$183.60	$25.00	$125.00	$35.70	$178.50
61	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	100	$3.00	$300.00	$2.00	$200.00	$5.00	$500.00	$1.80	$180.00
62	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$15.48	$804.96	$10.00	$520.00	$13.50	$702.00
63	2104.504	REMOVE BITUMINOUS PAVEMENT	S Y	850	$2.00	$1,700.00	$2.00	$1,700.00	$9.00	$7,650.00	$3.75	$3,187.50
64	2105.507	COMMON EXCAVATION	C Y	265	$15.00	$3,975.00	$25.95	$6,876.75	$20.00	$5,300.00	$17.90	$4,743.50
65	2105.507	SUBGRADE EXCAVATION	C Y	340	$15.00	$5,100.00	$20.00	$6,800.00	$20.00	$6,800.00	$18.50	$6,290.00

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Omann Contracting Companies, Inc.		Knife River		Park Construction Company - Mpls	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
66	2105.507	SELECT GRANULAR BORROW (CV)	C Y	340	$22.00	$7,480.00	$20.00	$6,800.00	$20.00	$6,800.00	$24.90	$8,466.00
67	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$135.00	$1,350.00	$1.00	$10.00	$122.00	$1,220.00
68	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	215	$20.00	$4,300.00	$30.69	$6,598.35	$35.00	$7,525.00	$37.90	$8,148.50
69	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	50	$45.00	$2,250.00	$100.00	$5,000.00	$75.00	$3,750.00	$53.00	$2,650.00
70	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	2375	$1.25	$2,968.75	$0.40	$950.00	$1.50	$3,562.50	$0.84	$1,995.00
71	2232.504	MILL BITUMINOUS SURFACE	S Y	3460	$1.50	$5,190.00	$0.59	$2,041.40	$1.50	$5,190.00	$0.59	$2,041.40
72	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	735	$4.00	$2,940.00	$2.50	$1,837.50	$2.00	$1,470.00	$1.80	$1,323.00
73	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	830	$55.00	$45,650.00	$56.35	$46,770.50	$50.00	$41,500.00	$57.50	$47,725.00
74	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$928.80	$1,857.60	$900.00	$1,800.00	$931.00	$1,862.00
75	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$40.00	$1,600.00	$72.24	$2,889.60	$58.00	$2,320.00	$52.80	$2,112.00
76	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$1,372.56	$1,372.56	$1,330.00	$1,330.00	$1,360.00	$1,360.00
77	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$1,000.00	$1,000.00	$1,000.00	$1,000.00	$5,300.00	$5,300.00
78	2564.431	SIGN PANELS TYPE SPECIAL	EACH	3	$150.00	$450.00	$154.80	$464.40	$235.00	$705.00	$153.00	$459.00
79	2564.518	SIGN PANELS TYPE C	S F	23.5	$20.00	$470.00	$56.76	$1,333.86	$40.00	$940.00	$56.10	$1,318.35
80	2564.602	INSTALL SIGN	EACH	5	$150.00	$750.00	$77.40	$387.00	$10.00	$50.00	$76.50	$382.50
81	2574.507	BOULEVARD TOPSOIL BORROW	C Y	10	$30.00	$300.00	$90.00	$900.00	$55.00	$550.00	$72.30	$723.00
82	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	30	$3.50	$105.00	$1.70	$51.00	$2.00	$60.00	$1.70	$51.00
83	2575.605	BLOWN COMPOST SEEDING	S Y	30	$5.00	$150.00	$4.90	$147.00	$3.00	$90.00	$2.80	$84.00
84	2582.518	CROSSWALK EPOXY	S F	90	$2.50	$225.00	$4.13	$371.70	$4.00	$360.00	$4.10	$369.00
		Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:				$98,598.75		$100,187.78		$112,907.50		$107,871.25
	Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:					$503,345.60		$395,229.75		$382,800.10		$408,391.07
	Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:					$240,265.00		$217,134.72		$231,851.25		$222,513.95
	Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:					$98,598.75		$100,187.78		$112,907.50		$107,871.25
	Totals for Project 011186-00					$842,209.35		$712,552.25		$727,558.85		$738,776.27
	% of Estimate for Project 011186-00							-15.39%		-13.61%		-12.28%

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Hardrives, Inc. (Rogers)		Midwest Asphalt Corporation- Hopkins	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS										
1	2021.501	MOBILIZATION	LS	1	$22,000.00	$22,000.00	$16,569.60	$16,569.60	$10,000.00	$10,000.00
2	2104.502	SALVAGE SIGN	EACH	14	$35.00	$490.00	$35.80	$501.20	$40.00	$560.00
3	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	660	$3.00	$1,980.00	$2.05	$1,353.00	$4.00	$2,640.00
4	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$10.23	$531.96	$5.00	$260.00
5	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$12.00	$3,300.00	$9.21	$2,532.75	$10.00	$2,750.00
6	2105.507	COMMON EXCAVATION	C Y	2034	$22.00	$44,748.00	$20.46	$41,615.64	$26.00	$52,884.00
7	2105.507	SUBGRADE EXCAVATION	C Y	200	$22.00	$4,400.00	$20.46	$4,092.00	$28.00	$5,600.00
8	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	20	$150.00	$3,000.00	$1.02	$20.40	$150.00	$3,000.00
9	2211.501	RECLAIMED AGGREGATE BASE PLACED	C Y	2100	$10.00	$21,000.00	$10.23	$21,483.00	$23.00	$48,300.00
10	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	515	$38.00	$19,570.00	$35.80	$18,437.00	$38.00	$19,570.00
11	2215.504	FULL DEPTH RECLAMATION	S Y	9350	$5.00	$46,750.00	$1.02	$9,537.00	$1.00	$9,350.00
12	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 5	C Y	95	$30.00	$2,850.00	$76.71	$7,287.45	$68.00	$6,460.00
13	2331.601	BITUMINOUS DRIVEWAY PAVEMENT	S Y	275	$40.00	$11,000.00	$34.86	$9,586.50	$21.00	$5,775.00
14	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	600	$4.00	$2,400.00	$1.40	$840.00	$4.00	$2,400.00
15	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;C)	TON	1410	$65.00	$91,650.00	$56.50	$79,665.00	$61.50	$86,715.00
16	2360.509	TYPE SP 12.5 WEARING COURSE MIX (2;C)	TON	2110	$65.00	$137,150.00	$54.06	$114,066.60	$60.00	$126,600.00
17	2501.502	18" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$971.68	$1,943.36	$1,100.00	$2,200.00
18	2501.503	18" RC PIPE CULVERT CLASS V	L F	40	$65.00	$2,600.00	$61.37	$2,454.80	$63.00	$2,520.00
19	2504.602	ADJUST GATE VALVE	EACH	2	$500.00	$1,000.00	$511.41	$1,022.82	$265.00	$530.00
20	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$680.17	$680.17	$3,300.00	$3,300.00
21	2563.601	TRAFFIC CONTROL	LS	1	$5,000.00	$5,000.00	$13,360.72	$13,360.72	$4,100.00	$4,100.00
22	2564.431	SIGN PANELS TYPE SPECIAL	EACH	8	$150.00	$1,200.00	$153.42	$1,227.36	$165.00	$1,320.00
23	2564.518	SIGN PANELS TYPE C	S F	93.83	$20.00	$1,876.60	$25.57	$2,399.23	$60.00	$5,629.80
24	2564.602	INSTALL SIGN	EACH	14	$150.00	$2,100.00	$76.71	$1,073.94	$95.00	$1,330.00
25	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	L F	6740	$3.00	$20,220.00	$2.86	$19,276.40	$5.00	$33,700.00
26	2573.530	STORM DRAIN INLET PROTECTION	EACH	8	$150.00	$1,200.00	$102.28	$818.24	$275.00	$2,200.00
27	2573.604	STABILIZED CONSTRUCTION ENTRANCE	EACH	7	$1,500.00	$10,500.00	$102.28	$715.96	$1,200.00	$8,400.00
28	2574.507	BOULEVARD TOPSOIL BORROW	C Y	190	$30.00	$5,700.00	$40.91	$7,772.90	$37.00	$7,030.00
29	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	1690	$3.50	$5,915.00	$2.71	$4,579.90	$2.00	$3,380.00
30	2575.605	BLOWN COMPOST SEEDING	S Y	1690	$5.00	$8,450.00	$2.81	$4,748.90	$3.00	$5,070.00
31	2582.502	24" SOLID LINE EPOXY	L F	12	$20.00	$240.00	$8.61	$103.32	$14.00	$168.00
32	2582.502	4" DOUBLE SOLID LINE EPOXY	L F	3380	$3.20	$10,816.00	$0.51	$1,723.80	$0.60	$2,028.00
33	2582.503	4" SOLID LINE EPOXY	L F	6900	$1.60	$11,040.00	$0.26	$1,794.00	$0.30	$2,070.00
34	2582.518	CROSSWALK EPOXY	S F	72	$2.50	$180.00	$4.09	$294.48	$7.00	$504.00

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Hardrives, Inc. (Rogers)		Midwest Asphalt Corporation- Hopkins	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
		Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:				$503,345.60		$394,109.40		$468,343.80
ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS										
35	2021.501	MOBILIZATION	LS	1	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$6,000.00	$6,000.00
36	2104.502	SALVAGE SIGN	EACH	18	$35.00	$630.00	$35.80	$644.40	$40.00	$720.00
37	2104.503	REMOVE PIPE CULVERTS	L F	169	$10.00	$1,690.00	$10.23	$1,728.87	$7.00	$1,183.00
38	2105.507	COMMON EXCAVATION	C Y	185	$15.00	$2,775.00	$20.46	$3,785.10	$37.00	$6,845.00
39	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$1.02	$10.20	$130.00	$1,300.00
40	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	185	$45.00	$8,325.00	$76.71	$14,191.35	$68.00	$12,580.00
41	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	12150	$1.25	$15,187.50	$1.53	$18,589.50	$2.10	$25,515.00
42	2232.504	MILL BITUMINOUS SURFACE	S Y	8525	$1.50	$12,787.50	$1.53	$13,043.25	$1.15	$9,803.75
43	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	2275	$4.00	$9,100.00	$1.40	$3,185.00	$4.00	$9,100.00
44	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	2690	$55.00	$147,950.00	$50.13	$134,849.70	$60.00	$161,400.00
45	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$920.541	$1,841.08	$1,000.00	$2,000.00
46	2501.502	18" RC PIPE APRON	EACH	4	$1,000.00	$4,000.00	$971.68	$3,886.72	$1,100.00	$4,400.00
47	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$60.00	$2,400.00	$59.32	$2,372.80	$60.00	$2,400.00
48	2501.503	18" RC PIPE CULVERT CLASS V	L F	88	$65.00	$5,720.00	$61.37	$5,400.56	$63.00	$5,544.00
49	2504.602	ADJUST GATE VALVE	EACH	9	$500.00	$4,500.00	$511.41	$4,602.69	$265.00	$2,385.00
50	2506.602	ADJUST FRAME AND RING CASTING (SANITARY)	EACH	1	$500.00	$500.00	$1,022.81	$1,022.81	$1,350.00	$1,350.00
51	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$5,052.70	$5,052.70	$3,300.00	$3,300.00
52	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$6,000.00	$6,000.00	$1,000.00	$1,000.00
53	2564.431	SIGN PANELS TYPE SPECIAL	EACH	13	$150.00	$1,950.00	$153.42	$1,994.46	$165.00	$2,145.00
54	2564.518	SIGN PANELS TYPE C	S F	81	$20.00	$1,620.00	$25.57	$2,071.17	$60.00	$4,860.00
55	2564.602	INSTALL SIGN	EACH	20	$150.00	$3,000.00	$76.71	$1,534.20	$95.00	$1,900.00
56	2574.507	BOULEVARD TOPSOIL BORROW	C Y	15	$30.00	$450.00	$40.91	$613.65	$37.00	$555.00
57	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	80	$3.50	$280.00	$2.71	$216.80	$2.00	$160.00
58	2575.605	BLOWN COMPOST SEEDING	S Y	80	$5.00	$400.00	$2.81	$224.80	$3.00	$240.00
		Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:				$240,265.00		$236,861.81		$266,685.75
ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS										
59	2021.501	MOBILIZATION	LS	1	$5,000.00	$5,000.00	$2,983.37	$2,983.37	$5,000.00	$5,000.00
60	2104.502	SALVAGE SIGN	EACH	5	$35.00	$175.00	$35.80	$179.00	$40.00	$200.00
61	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	L F	100	$3.00	$300.00	$5.11	$511.00	$4.00	$400.00
62	2104.503	REMOVE PIPE CULVERTS	L F	52	$10.00	$520.00	$10.23	$531.96	$5.00	$260.00
63	2104.504	REMOVE BITUMINOUS PAVEMENT	S Y	850	$2.00	$1,700.00	$9.21	$7,828.50	$10.00	$8,500.00
64	2105.507	COMMON EXCAVATION	C Y	265	$15.00	$3,975.00	$20.46	$5,421.90	$37.00	$9,805.00
65	2105.507	SUBGRADE EXCAVATION	C Y	340	$15.00	$5,100.00	$20.46	$6,956.40	$36.00	$12,240.00

	Project: 011186-00 - HANO - 2018 PAVEMENT IMPROVEMENT PROJECT				Engineers Estimate		Hardrives, Inc. (Rogers)		Midwest Asphalt Corporation- Hopkins	
Line No.	Item		Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
66	2105.507	SELECT GRANULAR BORROW (CV)	C Y	340	$22.00	$7,480.00	$20.46	$6,956.40	$32.00	$10,880.00
67	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	10	$150.00	$1,500.00	$1.02	$10.20	$150.00	$1,500.00
68	2211.507	AGGREGATE BASE (CV) CLASS 5	C Y	215	$20.00	$4,300.00	$35.80	$7,697.00	$41.00	$8,815.00
69	2221.507	SHOULDER BASE AGGREGATE (CV) CLASS 2	C Y	50	$45.00	$2,250.00	$76.71	$3,835.50	$68.00	$3,400.00
70	2232.501	MILL BITUMINOUS SURFACE (EDGE)	S Y	2375	$1.25	$2,968.75	$1.53	$3,633.75	$2.40	$5,700.00
71	2232.504	MILL BITUMINOUS SURFACE	S Y	3460	$1.50	$5,190.00	$1.53	$5,293.80	$1.40	$4,844.00
72	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	735	$4.00	$2,940.00	$1.40	$1,029.00	$4.00	$2,940.00
73	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2;B)	TON	830	$55.00	$45,650.00	$50.13	$41,607.90	$56.00	$46,480.00
74	2501.502	15" RC PIPE APRON	EACH	2	$1,000.00	$2,000.00	$920.54	$1,841.08	$1,000.00	$2,000.00
75	2501.503	15" RC PIPE CULVERT CLASS V	L F	40	$40.00	$1,600.00	$59.32	$2,372.80	$60.00	$2,400.00
76	2540.601	MAILBOX (TEMPORARY)	L S	1	$500.00	$500.00	$1,360.34	$1,360.34	$1,600.00	$1,600.00
77	2563.601	TRAFFIC CONTROL	LS	1	$3,000.00	$3,000.00	$14,898.98	$14,898.98	$1,000.00	$1,000.00
78	2564.431	SIGN PANELS TYPE SPECIAL	EACH	3	$150.00	$450.00	$153.42	$460.26	$165.00	$495.00
79	2564.518	SIGN PANELS TYPE C	S F	23.5	$20.00	$470.00	$56.25	$1,321.88	$60.00	$1,410.00
80	2564.602	INSTALL SIGN	EACH	5	$150.00	$750.00	$76.71	$383.55	$95.00	$475.00
81	2574.507	BOULEVARD TOPSOIL BORROW	C Y	10	$30.00	$300.00	$40.91	$409.10	$37.00	$370.00
82	2575.504	EROSION CONTROL BLANKETS CATEGORY 3	S Y	30	$3.50	$105.00	$2.71	$81.30	$2.00	$60.00
83	2575.605	BLOWN COMPOST SEEDING	S Y	30	$5.00	$150.00	$2.81	$84.30	$3.00	$90.00
84	2582.518	CROSSWALK EPOXY	S F	90	$2.50	$225.00	$4.09	$368.10	$7.00	$630.00
		Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:				$98,598.75		$118,057.37		$131,494.00
	Total ALTERNATE BID 1 - RIVER ROAD IMPROVEMENTS:					$503,345.60		$394,109.40		$468,343.80
	Total ALTERNATE BID 2 - PHEASANT RUN IMPROVEMENTS:					$240,265.00		$236,861.81		$266,685.75
	Total ALTERNATE BID 3 - SCHENDELS WOODLAND HILLS IMPROVEMENTS:					$98,598.75		$118,057.37		$131,494.00
	Totals for Project 011186-00					$842,209.35		$749,028.58		$866,523.55
	% of Estimate for Project 011186-00							-11.06%		2.89%

I hereby certify that this is an exact reproduction of bids received.

Certified By: _____ **License No.** 45857
Date: April 5, 2018

CITY OF HANOVER
COUNTIES OF WRIGHT AND HENNEPIN
STATE OF MINNESOTA

A regular meeting of the City Council of the City of Hanover, Minnesota, was called to order by Vice Mayor Hammerseng at 6:00 p.m. in the Council Chambers of the City Hall, in the City of Hanover, Minnesota, on the 17th day of April, 2018.

The following Council Members were present:

The following Council Members were absent:

A motion to adopt the following resolution was made by ____ and seconded by ____.

RESOLUTION NO 04-03-18-40

A RESOLUTION APPROVING A SITE PLAN FOR HANOVER DENTAL

WHEREAS, Hanover Dental, PLLC ("Developer") is the applicant for an application related to property shown on the site plan attached hereto as Exhibit A; and

WHEREAS, the property is zoned B-2, Highway Commercial; and

WHEREAS, the Developer has applied for a Site Plan to construct a dental office building on the Subject Property; and

WHEREAS, the Planning Commission reviewed the plans at its meeting on March 26, 2018. The Planning Commission recommended approval of the request; and

NOW, THEREFORE, BE IT RESOLVED, that the City Council does hereby make the following findings of fact:

1. The proposed site plan is generally in conformance with the City Zoning Ordinance and other regulations, subject to conditions that need to be addressed as included herein and discussed more fully in the staff report and engineer memo.

BE IT FURTHER RESOLVED that the City Council hereby approves the application for a site plan subject to the following conditions:

1. Comments included in the letter from the City Engineer dated March 20, 2018 shall be addressed.

2. Development of the site must be in substantial conformance with the site plans prepared by Schultz Engineering and Site Design dated March 9, 2018, and the architectural plans prepared by Sjoquist Architects, Inc. dated _____, 2018, and the lighting plan prepared by Pulse dated March 16, 2018 as modified by addressing the comments in the City Engineers Memo and the conditions contained in the approval resolution.

3. Small utility service (electric, phone, etc.) to the property shall be underground.

4. A future addition consisting of not greater than 500 square feet may be added to the south side of the building without completing site plan review at the Planning Commission and City Council. Staff is authorized to review the site plan when/if submitted. Changes to the existing site plan may be required for the building addition if ordinance requirements have changed at the time the addition is proposed. A building permit is required for the addition.

5. No signage has been submitted. Staff is authorized to review and approve signage for the building.

Council members voting in favor:

Opposed or abstained:

Adopted by the city Council this 17th day of April, 2018.

APPROVED BY:

_____

Doug Hammerseng, Vice Mayor

ATTEST:

_____

Jackie Heinz, Deputy Clerk

Collaborative Planning, LLC

Memorandum

Date:	April 12, 2018
To:	Honorable Mayor and Council
From:	Cindy Nash, City Planner
RE:	Hanover Dental – Site Plan

An application has been received for a site plan to utilize an existing vacant lot for a dental office. A copy of the site plan and architectural plans are included in your packets.

The property is zoned B-2 Highway Commercial. The property is on the corner of CR 19 and 5th Street and consists of approximately 2.43 acres.

The exterior of the structure is subject to the requirements for exterior materials contained within the Zoning Ordinance. The exterior consists primarily of fiber cement board (HardiePlank and HardiePanel), which is being used on the exterior walls as a lap siding, and in the gables as a vertical siding. A concrete masonry feature is included adjacent to the primary entrance to the building. Finally, the columns supporting the entrance to the building consist of a decorative metal latticework design that drew its inspiration from the Hanover Bridge.

The proposed building consists of 2,335 square feet. The plans identify space on the southern side of the building (indicated with a dashed line) for a future addition of 491 square feet. The applicant is requesting approval of the site plan to include approval for the future addition so that a separate application is not required in the future.

Parking requirements are six (6) spaces for each dentist practicing in the building. Initially, there would only be one dentist on the site. In the future, an associate may be added. There is sufficient parking for two dentists, with a total of twelve (12) parking spaces. This is sufficient to meet the ordinance requirements today for the 2,335 square foot building. Parking will need to be re-reviewed in the future concurrent with a building permit for the addition to ensure parking still meets the ordinance requirements in effect at that time.

The City Engineer has reviewed the plans and has provided the attached comment letter of items to be addressed.

Planning Commission

The Planning Commission reviewed this project at their meeting on March 26, 2018. They recommended the project for approval subject to the conditions listed in the recommendation below as the project meets the ordinance requirements. They did have discussions regarding whether the project could be situated on the site differently to allow for additional building construction in the future, and regarding their encouragement to enhance the architecture of the building.

Update since last City Council meeting

The applicant submitted a rendering that proposed to add additional concrete masonry unit (Amcon Onyx Burnished) with matching sill block and top course to the front of part of the building.

The applicant applied for a grant to the EDA for façade assistance and attended the EDA meeting on April 12, 2018. The EDA awarded a grant of $7500 in assistance.

New architectural drawings are being prepared and will be brought to the meeting.

Recommendation

It is recommended that the site plan be approved subject to the following conditions:

1. Comments included in the letter from the City Engineer dated March 20, 2018 shall be addressed.

2. Development of the site must be in substantial conformance with the site plans prepared by Schultz Engineering and Site Design dated March 9, 2018, and the architectural plans prepared by Sjoquist Architects, Inc. dated _____, 2018, and the lighting plan prepared by Pulse dated March 16, 2018 as modified by addressing the comments in the City Engineers Memo and the conditions contained in the approval resolution.

3. Small utility service (electric, phone, etc.) to the property shall be underground.

4. A future addition consisting of not greater than 500 square feet may be added to the south side of the building without completing site plan review at the Planning Commission and City Council. Staff is authorized to review the site plan when/if submitted. Changes to the existing site plan may

be required for the building addition if ordinance requirements have changed at the time the addition is proposed. A building permit is required for the addition.

5. No signage has been submitted. Staff is authorized to review and approve signage for the building.

Memorandum

To: ***Cindy Nash – Hanover City Planner***

From: ***Justin Messner, PE – Hanover City Engineer***

Cc: ***Brian Hagen – Hanover City Administrator***

Date: ***March 20, 2017***

Re: ***Hanover Dental Plan Review***
WSB Project No. 011692

As requested, we have reviewed the Hanover Dental plan for compliance with the City of Hanover (City) City Code, Standard Construction Specifications and the MPCA Stormwater Engineering Guidelines. The following documents were submitted and reviewed:

- 18005HanoverDental Storm Calcs 031518; submitted by Schultz Engineering
- CVT Geotechnical Report for Hanover Dental Clinic; dated 01/25/18 and submitted by Chosen Valley Testing
- Hanover Dental-Arch Plans; dated 030918 and submitted by Schultz Engineering
- Hanover Dental-PLANNING COMMISION set; dated 030918 and submitted by Schultz Engineering

Stormwater Management

The applicant falls under the 'Large Site Projects' description due to the proposed construction of a commercial dental clinic and is required to meet rate control and water quality City requirements. The applicant has demonstrated that water quality requirements are being met but it is unclear at this time if rate control requirements are being met. The following comments should be addressed moving forward:

General

1. An operations and maintenance plan for the stormwater infiltration basin should be provided with future submittals.

Planset

1. The proposed culvert under the driveway will not fit under the pavement with the proposed grading. The proposed culvert and/or the proposed grading should be reconfigured to make sure the pipe will run under the driveway.
2. The low floor elevation needs to be at least 3 feet above the high water level of the infiltration basin per the City Code. Applicant should update the design to meet this requirement.

3. The use of MPCA Biofiltration Mix C or D instead of MPCA Biofiltration Mix B is recommended for the bottom and sides of the infiltration basin for better phosphorus removal.
4. Add a north arrow to planset.

HydroCAD Modeling

1. Submit an existing conditions model to determine if rate control requirements are being met.
2. Model the entire project site for both existing conditions and proposed conditions. For proposed conditions include nodes for area routed to culvert under driveway and area routed offsite.
3. Include the 1-year storm event and the 100-year, 10-hour snowmelt event with future models per the City Code.

Construction Plans

General Comments

1. All engineering notes, details and specifications should reference and utilize the most recent City General Specifications and Standard Detail Plates for Street and Utility Construction (see attached)

Grading Plan Comments

2. Install a commercial concrete driveway apron per City standard detail STR-08.

3. Extend the curb coming from Labeaux Avenue through the proposed driveway and tie in to the existing bituminous curb on the east side.

4. Install a 2'x3' catch basin in the curb line just to the west of the driveway apron per City standard detail STO-01.

5. Connect the 2'x3' catch basin to a 24" high beehive structure where the current FES inlet is located on the west side of the driveway is proposed.

6. Regrade the swale on the west side of the parking area to achieve the minimum grade (2%) requirements to the proposed beehive structure.

7. The areas up against the south and west sides of the building do not meet minimum grade requirements. Provide any additional gutters or drains being proposed to direct drainage.

8. The drainage swale from the garbage enclosure around the south side of the building does not meet minimum grade requirements.

9. The drainage at the southeast corner of the driveway area does not meet minimum grade requirements.

10. The drainage just north of the driveway/parking area is shown flowing to and along the west edge of the driveway and then transitions to flow across the driveway to the raingarden along the east edge. Provide how would this transition would work.

Utility Comments

11. The service connection to the watermain should occur at a point on the south side of 5th Street.

12. There is an existing 6” water service stub with shut off valve located on the south side of 5th Street in front of Parcel 2 to the east that can also be utilized.

13. Any other connection should be made per City standard detail WAT-04. Copper pipe should be used from the connection at the watermain to the curb stop.

14. The proposed storm manhole should be shifted to the east so as to not impact the existing sanitary sewer main.

15. Remove the word ‘manhole’ from the label for the existing invert elevation of the sanitary sewer service stub at the main on sheet C-102 which seems to imply a structure exists at the junction.

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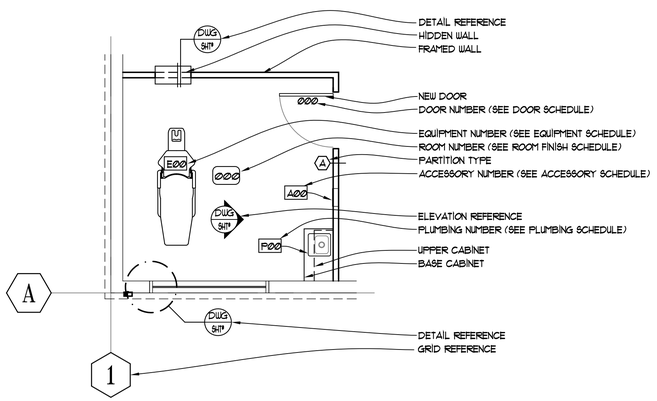
NEW BUILDING FOR
HANOVER DENTAL

KEY TO SYMBOLS



NOTE:

ALL CONTRACTORS / SUBCONTRACTORS ARE RESPONSIBLE FOR BEING FAMILIAR WITH THE INFORMATION ON ALL SHEETS IN THIS SET OF DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES BETWEEN INFORMATION FOUND IN DIFFERENT PLACES WITHIN THESE DRAWINGS AND SPECIFICATIONS ARE TO BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY, AND WORK BASED ON THAT INFORMATION IS TO NOT BE PERFORMED UNTIL THE ARCHITECT HAS CLARIFIED THE ISSUE.

GENERAL NOTES:

1. DO NOT SCALE THESE DRAWINGS. IF THERE IS A DIMENSIONAL QUESTION, CONTACT THE ARCHITECT FOR CLARIFICATION.
2. ALL DESIGN / BUILD DRAWINGS ARE TO BE REVIEWED WITH THE ARCHITECT PRIOR TO BEING SUBMITTED FOR PERMIT.
3. ALL SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH OTHER SUBCONTRACTORS TO ENSURE NO DELAYS.
4. ALL WORK FROM ALL TRADES SHALL CONFORM TO THE LATEST PROVISIONS OF ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES AND REGULATIONS.

OWNER

HANOVER DENTAL PLLC
1192 BICE AVENUE NW
BUFFALO, MINNESOTA 55313
763. 226. 7379

ARCHITECT

SJOQUIST ARCHITECTS INC (CARL ROBERTSON)
2800 UNIVERSITY AVENUE SE, SUITE 100
MINNEAPOLIS, MINNESOTA 55414
612. 379. 9233 / 612. 379. 9263 (FAX)
crobertson@sjoquist.com

STRUCTURAL ENGINEER

A M STRUCTURAL ENGINEERING (DAVE WAGNER)
112 EAST MAPLE STREET
RIVER FALLS , WISCONSIN 54022
715. 426. 4930 / 715. 426. 4899 (FAX)
davew@amstructural.net

CIVIL ENGINEER

SCHULTZ ENGINEERING (BRIAN SCHULTZ)
18 SOUTH RIVERSIDE AVENUE SUITE 230
SARTELL , MINNESOTA 56377
320. 339. 0669 / 866. 633. 1830 (FAX)
schultzeng@live.com

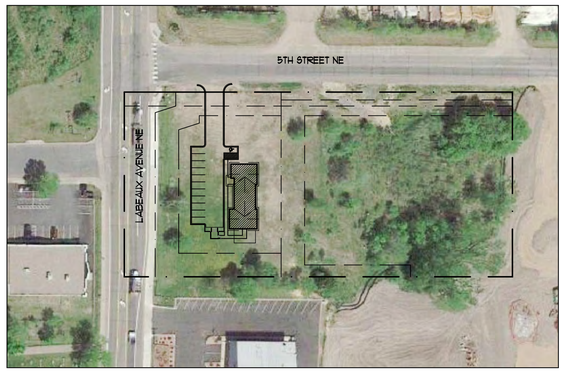
CONTRACTOR

KARKELA CONSTRUCTION (ROGER SWAGGER)
4806 PARK GLEN ROAD
ST LOUIS PARK, MINNESOTA 55416
952. 922. 5512 / 952. 922. 5906 (FAX)
roger@karkela.com

BUILDING STATISTICS - 2012 IBC

GROUP / DIVISION	B
DESCRIPTION OF OCCUPANCY	DENTAL
TYPE OF CONSTRUCTION	V B - NON-SPRINKLERED
AREA	2,335 SQ FT
BUILDING HEIGHT	18', 1 STORY
TOTAL OCCUPANTS	
DENTAL @ 100 SF/OCC	2,335 SQ FT / 100 SF/OCC = 23

LOCATION MAP: NOT TO SCALE



SHEET INDEX

G-001	TITLE SHEET	A-201	EXTERIOR ELEVATIONS / FINISH SCHEDULE / ROOF PLAN
G-002	EXIT PLAN	A-211	INTERIOR ELEVATIONS
C-100. 1	GENERAL NOTES & SPECIFICATIONS	A-212	INTERIOR ELEVATIONS
C-100. 2	STANDARD DETAILS	A-301	BUILDING SECTIONS
C-101. 1	GRADING PLAN	A-302	BUILDING SECTIONS
C-101. 2	SWPPP - NOTES	A-411	ENLARGED FLOOR PLANS
C-101. 3	SWPPP - PLAN VIEW	A-431	WALL SECTIONS
C-102	UTILITY & PAVING PLAN	A-432	WALL SECTIONS
L-101	LANDSCAPE PLAN / PLANT SCHEDULE	A-501	EXTERIOR DETAILS
S-100	FOOTING FOUNDATION PLAN	A-502	EXTERIOR DETAILS
S-120	ROOF FRAMING PLAN	A-503	EXTERIOR DETAILS
S-501	STRUCTURAL NOTES & DETAILS	A-504	EXTERIOR DETAILS
AS101	ARCHITECTURAL SITE PLAN	A-505	EXTERIOR DETAILS
AS102	ARCHITECTURAL SITE PLAN	A-506	EXTERIOR DETAILS
A-101	FLOOR PLAN / ROOM FINISH SCHEDULE	A-511	INTERIOR DETAILS
A-101a	FLOOR PLAN TAGS & ELEVATION TAGS	A-601	WALL & PARTITION TYPES
A-111	REFLECTED CEILING PLAN	A-602	DOORS , FRAMES , AND HARDWARE
A-131	FINISH PLAN / FINISH SCHEDULE	A-603	ACESSORIES/ PLUMBING & EQUIPMENT SCHEDULES
A-151	POWER PLAN	A-701	SPECIFICATIONS
A-161	LIGHTING PLAN	A-702	SPECIFICATIONS

Sjoquist Architects, Inc
2800 University Avenue SE, Suite 100
Minneapolis, Minnesota 55414
612.379.9233 Fax 612.379.9263
http://www.sjoquist.com

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of

MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK — Drawn
CLR — Checked

Revisions

1728
Project Number

NEW BUILDING
HANOVER
DENTAL

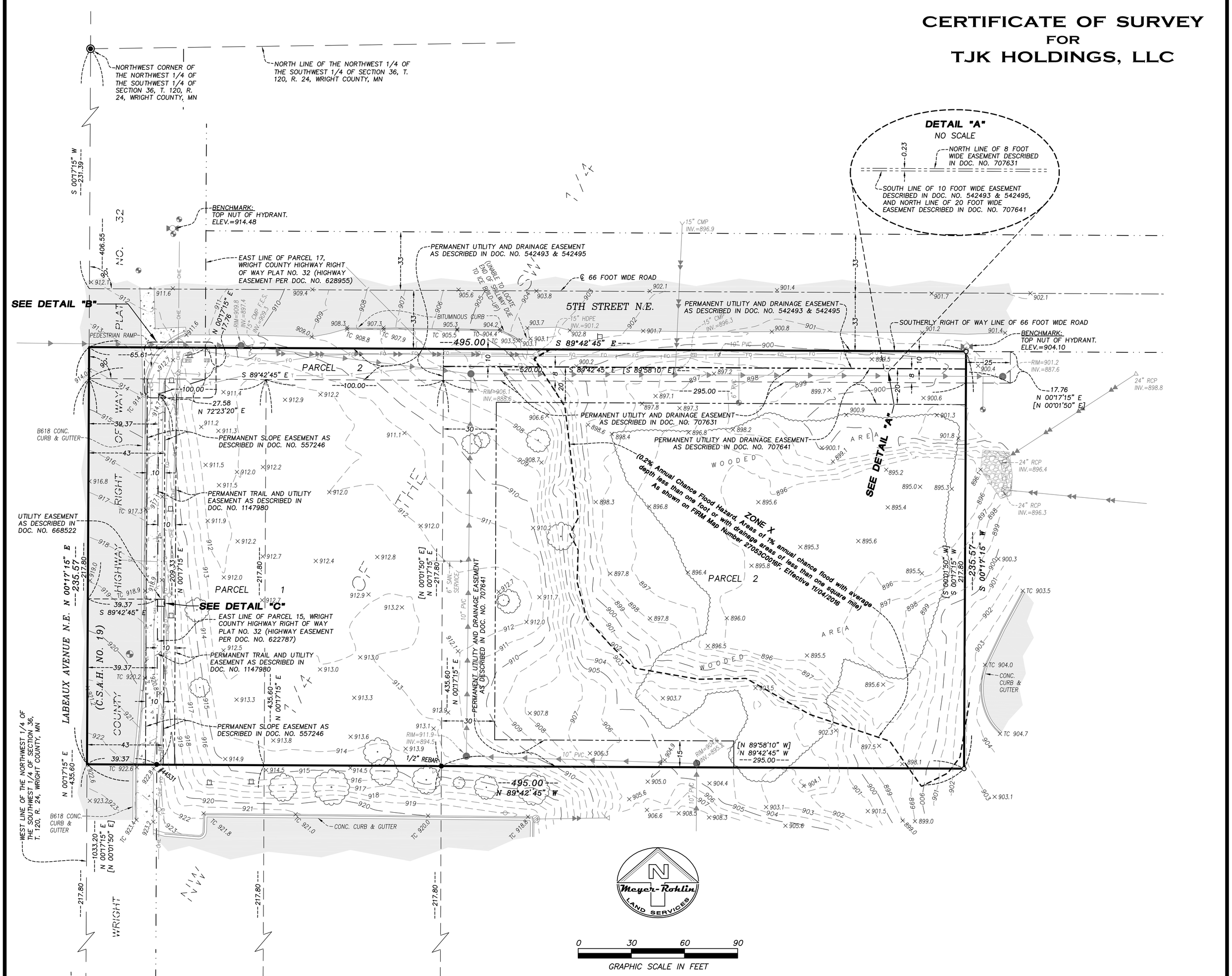
411 LABEAUX AVENUE NE

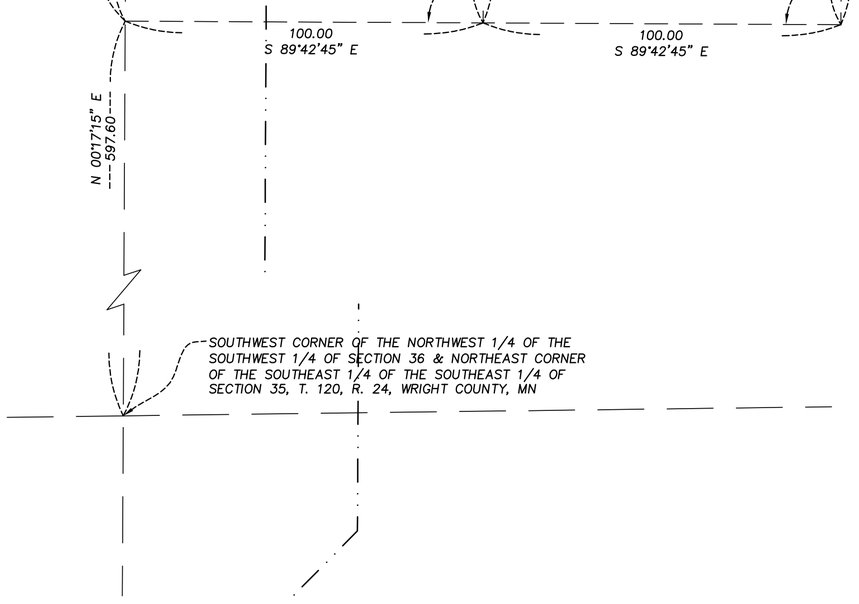
HANOVER
MINNESOTA

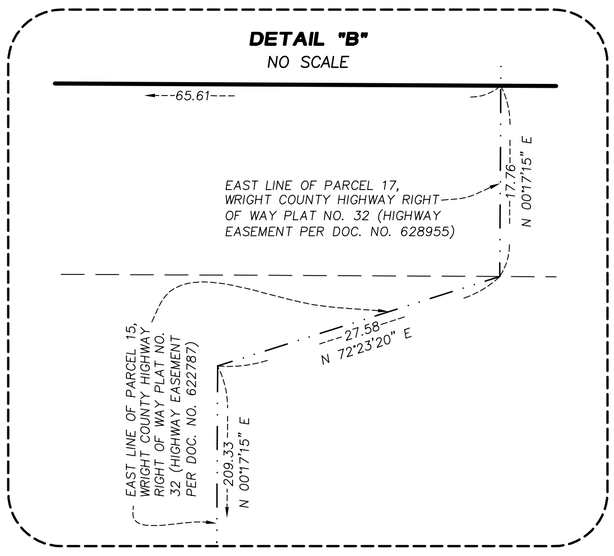
TITLE SHEET

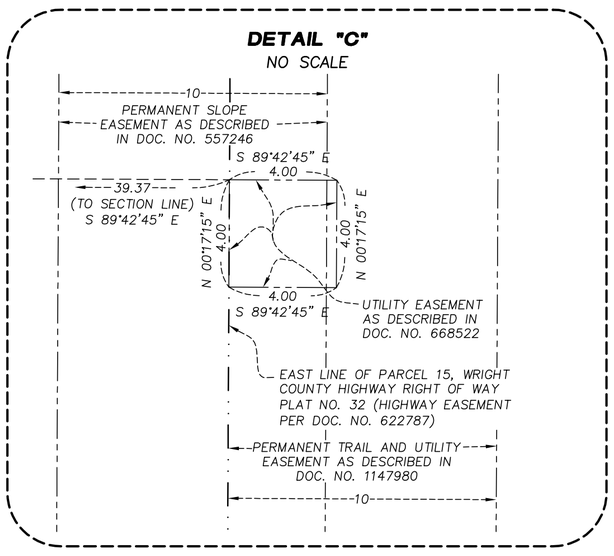
G-001

CERTIFICATE OF SURVEY
FOR
TJK HOLDINGS, LLC









LEGEND

●	IRON MONUMENT FOUND
○	IRON MONUMENT SET
—E—E—E—	UNDERGROUND ELECTRIC
—OHE—OHE—	OVERHEAD ELECTRIC
—T—T—T—	UNDERGROUND TEL./COMM.
—GAS—GAS—	UNDERGROUND GAS
—FO—FO—FO—	UNDERGROUND FIBER OPTIC
	SANITARY SEWER
	STORM SEWER
	WATERMAIN
●	SANITARY MANHOLE
	CATCH BASIN
	STORM MANHOLE
	HYDRANT
	GATE VALVE
	EDGE OF WOODED AREA
	DECIDUOUS TREE
—950—	INDEX CONTOUR
—952—	INTERMEDIATE CONTOUR
× 952.0	SPOT ELEVATION
	UTILITY POLE
	GUY WIRE
	TEL./COMM. RISER
	ELECTRIC MANHOLE
	SIGN
	BITUMINOUS SURFACE
	CONCRETE SURFACE
	BOULDER RIP-RAP

PROPERTY DESCRIPTION

Parcel 1:

The North Half of the following two tracts:

A tract of land in the Northwest Quarter of the Southwest Quarter of Section 36, Township 120, Range 24, Wright County, Minnesota, described as follows: Beginning at a point 597.6 feet North of the Northeast corner of the Southeast Quarter of the Southeast Quarter of Section 35, Township 120, Range 24; thence North and along the section line, 435.6 feet; thence East at right angles to the section line, 100 feet; thence South and parallel with said section line, 435.6 feet; thence West 100 feet to point of beginning, according to the United States Government Survey thereof and situate in Wright County. Minnesota.

A tract of land in the Northwest Quarter of the Southwest Quarter of Section 36, Township 120, Range 24, Wright County, Minnesota, described as follows: Beginning at a point 597.6 feet North of the Northeast corner of the Southeast Quarter of the Southeast Quarter of Section 35, Township 120, Range 24; thence North along the section line, 435.6 Feet; thence East at right angles in the section line, 100 feet for the point of beginning; thence continue East 100 feet; thence South and parallel with said section line, 435,6; thence West at right angles 100 Feet; thence North 435.6 feet to point of beginning, according to the United States Government Survey thereof and situate in Wright County. Minnesota,

Parcel 2:

That part of the Northwest Quarter of the Southwest Quarter of Section 36, Township 120, Range 24, Wright County, Minnesota described as follows:

Commencing at the Southwest corner of said Northwest Quarter of the Southwest Quarter; thence on an assumed bearing of North 00 degrees 01 minutes 50 seconds East, along the West line of the Northwest Quarter of the Southwest Quarter, a distance of 1,033.20 feet to the actual point of beginning of the land to be described; thence South 89 degrees 58 minutes 10 seconds East, a distance of 520.00 feet; thence North 00 degrees 01 minutes 50 seconds East, a distance of 17.76 feet to the intersection with the Southerly right of way line of a 66.00 foot wide road hereinafter described; thence Westerly, along said right of way line to the intersection with the West line of said Northwest Quarter of the Southwest Quarter; thence Southerly, along said West line, to the point of beginning, except the Easterly 25.00 feet.

The center line of said 66.00 foot wide road is described as follows: Beginning at a point on the West line of said Northwest Quarter of the Southwest Quarter, distant 231.39 feet Southerly of the Northwest corner of said Northwest Quarter of the Southwest Quarter; thence Easterly, at a right angle of said West line, a distance of 616.72 feet; thence on a tangential curve to the left for a distance of 327.02 feet, radius of said curve is 484.98 feet; thence North 51 degrees 23 minutes 48 seconds East, tangent to the last curve 134.22 feet; thence on a tangential curve to the right for a distance of 192.79 feet, radius of said curve is 294.22 feet and said centerline there terminating.

That part of the Northwest Quarter of the Southwest Quarter of Section 36, Township 120, Range 24, Wright County, Minnesota described as follows:

Commencing at the Southwest corner of said Northwest Quarter of the Southwest Quarter; thence on an assumed bearing of the North 00 degrees 01 minutes 50 seconds East, along the West line of the Northwest Quarter of the Southwest Quarter, a distance of 1,033.20 feet; thence South 89 degrees 58 minutes 10 seconds East, a distance of 200.00 feet to the actual point of beginning; thence continue South 89 degrees 58 minutes 10 seconds East, a distance of 295.00 feet; thence South 00 degrees 01 minutes 50 seconds West, a distance of 217.80 feet; thence North 89 degrees 58 minutes 10 seconds West, a distance of 295.00 feet; thence North 00 degrees 01 minutes 50 seconds East a distance of 217.80 feet to the actual point of beginning.

SURVEYOR'S NOTES:

1. Matters of record are shown according to Stewart Title Guaranty Company Commitment for Title Insurance, Issued by its Agent, Land Title, Inc., LT File No. 566207, Effective Date December 13, 2017 and information in our files.
2. Bearing orientation of this survey is based on the Wright County Coordinate System, NAD 83(86), which differs from the bearing orientation of the record description.
3. Existing utilities are shown according to markings provided pursuant to Gopher State One Call Ticket No. 180300744 (non-excavation request). Sanitary sewer and watermain are shown according to record drawings provided by City Engineer. Utilities must be field verified prior to any excavation by calling Gopher State One Call @ 651-454-0002.
4. Due to ice and snow cover at the time of this survey, features may exist on site which are not shown hereon.
5. We have a title information in our files provided to us for a survey of this property in 2015 that lists several easements of record that are not indicated on the commitment referred to in Note #1. These easements, including Document Numbers 668522, 707631, and 707641, are shown on this drawing.

[BEARING / DIST.] BEARINGS AND DISTANCES DENOTED THUS ARE ACCORDING TO RECORD PROPERTY DESCRIPTION FOR PARCEL 2. AS NOTED ABOVE, THE BEARING ORIENTATION FOR THIS SURVEY DIFFERS FROM THE RECORD DESCRIPTION.

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a Licensed Land Surveyor under the laws of the State of Minnesota.

Date 02/13/18

Abram A. Niemela
License No. 48664

Meyer-Rohlin LAND SERVICES
708 1ST AVENUE NE, #1
BUFFALO, MN 55313
PH. 763.682.1781 WWW.MEYERROHLIN.COM

REVISIONS

DATE 02/13/18

DRAWN BY	BOOK	PAGE	SHEET	OF	FILE NO.
AAN	392	14 & 15	1	1 SHEETS	18116

N:\Land Projects\18116 - TJK Holdings\dwg\Proj Dwg\18116 Topo.dwg

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STANDARDS AND REFERENCES

Materials and construction methods specified in the plans reference the Minnesota Department of Transportation (MNDOT) Standard Specifications for Construction. The Contractor shall obtain a current copy of MNDOT's Standard Specifications for Construction and review the specification sections applicable to the plans.

It is mandatory that the Contractor be knowledgable of the applicable MNDOT specification sections during construction. No additional compensation will be paid to the Contractor for additional work due to unfamiliarity with the applicable specification sections.

Contractor shall refer to the geotechnical report for additional requirements and recommendations.

EARTHWORK NOTES

PROTECTION

1) The Contractor shall maintain all benchmarks, monuments and other reference points. If any are disturbed or destroyed, they shall be replaced at the Contractor's expense.

2). The Contractor shall contact the Engineer immediately if any unknown functioning underground utilities are discovered during the course of the project, which may interfere with construction. The Contractor shall wait for instructions before proceeding.

3) The Contractor shall be responsible for any damage to functioning underground or overhead utility lines. Damaged utilities shall be repaired immediately and service restored at no additional cost to the Owner.

4) The Contractor shall provide barricades, shoring and other safety measures required by OSHA.

5) The Contractor shall protect all adjacent existing facilities from damage, including, but not limited to settlement due to excavations, erosion, etc. The Contractor shall be responsible for the repair of such damages.

PROJECT CONDITIONS

1) The Contractor shall become familiar with the project site, and compare actual conditions in the field with those shown on the project drawings. The Contractor shall contact the Engineer immediately if any inconsistencies are found between the existing conditions and the project drawings.

2) No extra compensation will be allowed due to unusual conditions which could have reasonably been determined or anticipated by examination of the project site and project drawings.

PLAN GRADES

1) Elevations shown on the project drawings are finished grade elevations, unless noted otherwise. Elevations not specifically indicated shall be determined by interpolation of uniform slope between spot elevations and/or contours, or between such points and existing elevations. Adequate slope shall be constructed to provide positive drainage away from structures.

2) If inconsistencies exist on the plans between contours and spot elevations, the spot elevations shall govern.

TOPSOIL

1) Adequate imported and/or stockpiled salvageable topsoil shall be utilized for this project.

2) Topsoil shall be free of clay lumps, roots, brush, large stones, and debris, and shall have a minimum organic content of 5 percent.

3) Remove topsoil to its entire depth from areas, which are to be disturbed by new construction work. Existing lawn areas, which are not in the proposed construction area(s) shall remain in place. The Contractor shall field verify topsoil depths between any soil borings, and remove to greater depths than indicated in the soils report if such conditions are encountered. Salvaged topsoil shall be maintained in stockpiles.

4) Stockpiled topsoil shall only be used for finish grading of new lawn areas. Excess topsoil shall be removed from the site by the Contractor.

5) Protect all existing lawn areas, plantings, and other landscaping to remain in place. Any damaged areas shall be replaced at the Contractor's expense.

UNFORESEEN OBSTACLES

1) The Engineer shall be contacted immediately if any unforeseen major obstacles are encountered during excavation, such as abandoned wells, abandoned or functioning utilities, subsurface streams or rock, etc., which would add significant expense to the Contractor.

2) The Contractor shall still be responsible for completing all work required for this project where encountered conditions may be reasonably determined from a soils/geotechnical report and review of the project site and contract documents.

DEWATERING

1) Surface drainage shall be provided during construction in a manner so as not to create a nuisance to adjacent areas.

2) All excavations shall be free of water during construction within the excavations. Dewatering shall be accomplished by pumping or trenching, and shall be conducted regardless of the cause, source, or nature of the water.

3) Berms, cofferdams, or piling shall be provided as necessary to protect excavations.

4) Excavations shall be sloped to drain, and necessary pumps, hoses and other equipment shall be provided to keep excavation free of water.

5) All temporary equipment used for dewatering shall be removed from the site when no longer necessary.

FILLING AND GRADING

1) Rough grading of all areas within the construction limits, including adjacent transition areas shall be reasonably smooth and compacted. The rough graded subgrade surface generally shall not be more than 6 inches above or below the established subgrade elevations. All ditches, swales, and gutters shall be graded to drain adequately. The subgrade shall be evenly sloped to provide drainage away from building walls in all directions at a minimum slope of 1%. The Contractor shall provide rounded transitions at top and bottom of banks and other breaks in grade.

2) Fill and backfill materials shall be inorganic soils free of roots, rocks, boulders, and debris.

3) Bedding material or granular backfill larger than 2" in its largest dimension shall not be allowed within 2 feet of new underground pipes. Material larger than 3" in its largest dimension shall not be allowed within 1 foot of subgrade elevation.

4) Imported compacted fill material shall have a maximum of 12 percent passing the #200 sieve, by weight. The proposed fill material shall be tested by an independent testing lab for suitability as compacted fill for this project. The Contractor shall pay for the testing services and provide a copy of the test results to the Engineer.

5) The Contractor shall fill and grade as necessary to bring surface to required elevations, and provide all materials necessary, whether obtained on or off the project site.

6) The Contractor shall place compacted material in uniform horizontal lifts not exceeding 8" in depth for clay soils, and 12" in depth for sandy soils, and compact as required to achieve specified density.

7) Compaction shall be obtained with the use of vibratory rollers or rammers. During compaction, fill material shall contain moisture content, as necessary, for the required compaction as indicated by an independent testing laboratory. The moisture shall be uniform throughout each lift. If the material is too dry, water shall be added with approved equipment and methods, which will not wash out fine material. If the material is too wet, it shall be dried by harrowing, disking, blading, or other approved methods recommended by the independent testing laboratory.

8) Areas designated for pavement in excavated (cut) areas shall be scarified to a depth of 1 foot. The Contractor shall bring the subgrade material to optimum moisture content as indicated by the independent testing laboratory, and compact the subgrade to the specified density listed below for soils underneath pavements.

9) The Contractor shall not place fill material when either the fill material, or the material on which it is to be placed, is frozen. Any soft or yielding areas appearing in the fill resulting from frost, rain, or any other reason whatsoever shall be scarified, removed, recompacted and/or otherwise rectified to the satisfaction of the Engineer before any new fill is placed.

COMPACTION TESTS

1) Utility Trench Backfill: The Contractor's independent soils technician and approved testing laboratory shall perform in-place density and moisture tests at random depths in trench backfill at 100 foot intervals, or fraction thereof. Compaction of trenches shall be a minimum of 95% of the maximum dry density (as determined by the independent testing laboratory) in lawn areas, and at depths greater than 3 feet below areas designated for pavement. Compaction of trenches at depths within 3 feet of paved surfaces shall be a minimum of 100% of the maximum dry density.

2) Compacted Fill Under Pavements: Compaction tests shall not be required beneath new pavements. Adequate compaction of materials under pavements shall be determined by test rolling the subgrade, and checking for excessive rutting. Test rolling shall be performed as per MNDOT Spec. 2111.

3) Areas exhibiting a failed compaction test shall be re-compacted and re-m tested to the satisfaction of the Engineer prior to acceptance of the project.

4) Copies of all compaction testing and test roll observation reports shall be provided to the Engineer.

5) Optimum moisture-density relationship will be determined by testing laboratory in accordance with ASTM D698 and maximum density determination made by Method D of ASTM D698 unless otherwise noted in these specifications.

SUBGRADE PREPARATION

1) Finished subgrade elevations shall be as follows:

a) Bituminous pavement: 9" below finish grade.

b) Concrete pavement/apron: 12" below finish grade.

c) Concrete sidewalk: 8" below finish grade (plus thickened edge).

d) Lawn areas: 4" below finish grade.

e) Planting areas: See Landscaping Plans/Details

2) The tolerance for areas to be paved shall not exceed 0.15 feet above or below plan subgrade.

3) The Contractor shall protect newly graded areas from erosion. Settlement or washing that occurs prior to acceptance of the Work shall be repaired and grades re-established.

DISPOSAL OF EXCESS WASTE MATERIALS

1) The Contractor shall remove excess excavated material, debris, and waste materials, from the Owner's property and legally dispose of it in accordance with all governing codes.

SPREADING TOPSOIL AND FINISH GRADING

1) Scarify subgrade to depth of 3" prior to placing topsoil. Spread topsoil evenly over complete subgrade as follows:

a) Lawn Areas on Private Property: Spread 4" lightly compacted layer of topsoil.

b) Lawn Areas in Public Right-of-way: Per City requirements

c) Planting Areas: See Landscape Plan/Details

2) Finish grade accurately within 0.15 feet of finish grades shown on the project drawings, less the thickness of any sod where it is to be installed. Slope all grades away from buildings to provide positive drainage.

3) Prepare topsoil suitable to receive seed and/or sod. Grading of areas designated for topsoil shall be reasonably smooth and even, and in accordance with MNDOT Spec. 2105.3G and 2574.3A4. All debris and stones exceeding 3" in diameter shall be removed from the soil surface of these areas prior to seeding. Areas compacted by vehicles or storage of materials shall be plowed, disked and harrowed to match texture of other finish graded areas.

4) Grass seed shall be in accordance with MnDOT Spec. 3876, seed mix No. 25-131, applied at the rate of 220 pounds per acre or as indicated on the landscape plans. Mulch shall be applied and discanchored to all seeded areas and shall meet the requirements of MnDOT Spec. 3882, Type 3 or as otherwise indicated by the Engineer.

UTILITY NOTES

STANDARD SPECIFICATIONS

1) The following standard specifications shall apply to this project:

a) Minnesota Plumbing Code - MN Rules Chapter 4714 (MN Dept. of Labor and Industry-MNDLI)
b) Uniform Plumbing Code, latest edition (UPC)
c) "What you need to know about utility service connections in the 2015 Minnesota Plumbing Code" http://www.dli.mn.gov/CCLD/PDF/pe_usc.pdf
d) City Engineers Association of Minnesota (CEAM) Standard Specifications
e) American Society for Testing Materials (ASTM)
f) American National Standards Institute (ANSI)
g) American Water Works Association (AWWA)
h) Minnesota Department of Transportation "Standard Specifications for Construction" (MN/DOT)

2) The Contractor shall comply with all local ordinances and codes

3) Certifications of all utility materials, as well as shop drawings, shall be submitted to the Engineer for review

POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS - SANITARY

1) Smooth walled polyvinyl chloride pipe and fittings shall consist of SDR 26 or SDR 35 pipe, unless noted otherwise, and meet the requirements of ASTM D3034 and Section 2621.2A5 of the CEAM Standard Specifications

2) All pipe and fittings shall be SDR 35 for depths of up to 20 feet, and SDR 26 for depths exceeding 20'.

3) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAM Standard Specifications.

DUCTILE IRON (DIP) PIPE AND FITTINGS - WATER

1) Ductile iron pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A1 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 605.5 of the UPC, and Section 2611.3B of the CEAM Standard Specifications. Stainless steel fasteners shall be prohibited.

3) 6" pipe shall be Class 52. 8" and larger pipe shall be Class 50.

POLYVINYL CHLORIDE (C900 PVC) PIPE AND FITTINGS - WATER

1) Polyvinyl chloride pressure pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A3 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 605.4 of the UPC, and Section 2611.3B of the CEAM Standard Specifications.

GATE VALVES - WATER

1) Gate valves shall meet the requirements of Sections 2611.2C and 2611.3D of the CEAM Standard Specifications

HYDRANTS - WATER

1) Hydrants shall meet the requirements of Sections 2611.2B and 2611.3D of the CEAM Standard Specifications

2) Hydrants shall be Waterous WB67, or approved equal

BLOCKING AND ANCHORING - WATER

1) Water main blocking and anchoring shall meet the requirements of Section 2611.3A4 of the CEAM Standard Specifications

2) Provide thrust reaction blocking consisting of concrete with a minimum 28 day compressive strength of 2000 psi.

3) Place between undisturbed ground and the fitting to be anchored. Place thrust blocking so that the pipe and fitting joints are accessible for repair.

4) Mega-Lugs may be used in lieu of thrust block if allowed by local utility.

WATER SERVICE PIPE AND CURB STOPS

1) Copper tubing for water services shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2D of the CEAM Standard Specifications

2) HDPE pressure pipe for water services shall meet the requirements of ASTM D2239, ASTM D2737, ASTM D3035, AWWA C901, CSA B137.1, and Section 2611.2D of the CEAM Standard Specifications

3) Curb stops for water services Section 2611.2D of the CEAM Standard Specifications

HIGH DENSITY POLYETHYLENE PIPE (HDPE) AND FITTINGS - STORM

1) HDPE pipe and fittings shall meet the requirements of ASTM F2306, and Section 2621.2A8 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements Section 2621.3A3 of the CEAM Standard Specifications

3) Minimum wall thickness shall be 0.035 inches for 12 and 15 inch diameter pipe, and shall be 0.05 inches for 18 and 24 inch diameter pipe.

4) HDPE storm sewer crossing above and within 10-ft of existing or proposed water main or services shall meet the following standards per the MN plumbing code:

4" - 10" Diameter:	AASHTO M252
12" - 60" Diameter:	ASTM F2306
Fittings:	ASTM D3212

REINFORCED CONCRETE SEWER PIPE (RCP) AND FITTINGS - STORM

1) RCP pipe and fittings shall meet the requirements of ASTM C76, and Section 2621.2A3 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAM Standard Specifications

3) The ASTM strength class of pipe shall be Class III unless otherwise shown on the Plans.

4) The pipe shall be drawn together by some approved method of jacking or winching. This pressure must be maintained until sufficient backfill is placed to keep the joint from opening.

END SECTIONS - STORM

1) End sections shall be provided at all pipe inlets and outlets.

2) The end sections shall consist of material matching the material of the pipe, which it is being connected to. Materials and joints shall be as per the specifications described above for the applicable pipe material.

3) The last 3 joints of RCP shall be tied, and the end section shall the be provided with an approved trash guard.

MANHOLES AND CATCH BASINS - SANITARY AND STORM

1) Unless otherwise noted, manhole and catch basin structures shall consist of precast concrete, and meet the requirements of Section 719.6 of the UPC (sanitary only), and Sections 2621.2C and 2621.3D of the CEAM Standard Specifications

2) Catch basins shall be provided with the following castings:

a) Along curbline: 27" Structure: Neenah R-3075-L, 48" (or larger) Structure: Neenah R-3067-L

b) Isolated (in paved area): Neenah R-2553

c) Isolated (in vegetated area): Neenah R-2560-EA w/ type "C" grate

3) Manholes shall be provided with the following castings:

a) Sanitary: Neenah R-1733 w/ concealed pick hole

b) Storm: Neenah R-1733 lettered "STORM", center pick hole

INSTALLATION

1) Unless otherwise noted, installation of all water and sewer pipe, fittings, and appurtenances shall be as per the CEAM Standard Specifications.

TESTING REQUIREMENTS

1) Water and sewer pipe, fittings, and appurtances shall be inspected and tested as per Sections 2611.3E-2611.3H and 2621.3F-2621.3H of the CEAM Standard Specifications.

2) In the event of discrepancies between the testing requirements of the MN Plumbing Code and the CEAM Standard Specifications, the most stringent will govern.

BITUMINOUS PAVEMENT NOTES

STANDARDS

1) Minnesota Standard Specifications for Highway Construction, most recent edition.

GRANULAR BASE COURSE

1) Compacted thickness of finished base course: 6"

2) Process material for aggregate base shall meet the requirements of MNDOT Spec. 3138, Class 5..

3) The subgrade shall be tested and observed to the satisfaction of the Engineer prior to placement of aggregate base material. Install base material as required to accommodate new plan grades.

4) Wet base material to approximate optimum moisture content either prior to delivery to job site or as soon as practical after being placed on subgrade.

5) Place in layers not exceeding 4" thickness (loose).

6) Compact with pneumatic or vibrating steel drum rollers.

7) After base course has been graded and compacted, thoroughly wet and slush roll with roller until all aggregates are thoroughly embedded.

8) Allow base course to cure for a minimum of 72 hours prior to bituminous course application.

BITUMINOUS BASE AND SURFACE COURSE

1) Mix Designation Numbers for the bituminous mixtures on this project are per MNDOT Spec. 2360

2) Pavement smoothness requirements will be waived for this project.

3) Density for the bituminous mixture on this project will be the ordinary compaction method (MNDOT 2360.6C).

4) Bituminous Base course shall conform to MnDOT 2360, Type SPNWB330B and shall be $1\frac{1}{2}$ inches thick after compaction. Bituminous Surface course shall conform to MnDOT 2360, Type SPWEA340B and shall be $1\frac{1}{2}$ inches thick after compaction.

5) Place no asphaltic mixture when the atmospheric temperature is below 45 degrees and falling, nor should pavement be placed under wet conditions.

6) Mixing

a) Paving mixture: Uniform mixture of course aggregate, fine aggregate, mineral filler and asphaltic material.

b) Grading and mixing: Conform to applicable sections of the Minnesota Standard Specifications for Highway Construction, Section 2360.

CONSTRUCTION METHODS

1) Properly clean base course and deliver hot mix asphaltic concrete in clean tight vehicles with covers if necessary.

2) Lay to a smooth surface without segregation of material and attain compaction as early as possible. Commence rolling while the material is hot, (minimum spread temperature 250 degrees F.) as soon as it will support the roller without undue displacement or hairline cracking and continue until a minimum of 96% of maximum has been attained, no further compression can be attained and all roller marks are eliminated.

3) The completed surface: Smooth, free of pockets that will retain water and shall not vary more than 1/16" per foot nor more than 1/4" under a 16' straight edge. Entire surface must drain. No flat areas are permitted.

4) Perform all Work in accordance with the applicable requirements of the Minnesota Standard Specifications for Highway Construction.

PAINTED LINES

1) Special marking paint compound especially for striping bituminous paving in one coat.

2) Manufacturers: Pratt & Lambert, Inc.; Sherwin Williams Co. or DuPont Co.

3) Colors: Use white paint for concrete and asphalt.

4) All surfaces to be painted must be thoroughly clean and dry.

5) Lay out painted lines with chalk on pavement in accordance with Project Drawings.

6) Accurately apply paint to the chalk marks, using striping machines, 4" wide stripes.

7) Apply paint in strict accordance with the manufacturer's directions.

8) Protect all paint from damage by traffic until dry.

9) Apply handicap logo at handicap stall.

FIELD QUALITY CONTROL

1) Aggregate Base Testing:

a) The granular base course shall be test rolled and observed by the Contractor's independent soils technician as per MNDOT 2211.3C2 (Quality Compaction Method). Once the base course has been tested to the satisfaction of the Engineer, pavement may be placed.

b) One mechanical analysis (ASTM D-422) per 500 cubic yards of base or fraction thereof.

2) Bituminous Testing:

a) Test temperature of first truck.

b) Ordinary compaction (MNDOT 2360.6C)

CONCRETE PAVEMENT, CURB & GUTTER, AND SIDEWALK

STANDARDS

1) ACI 318, ACI 315, CRSI, ACI 301, latest adoptions.

2) Minnesota Standard Specifications for Construction, most recent edition

GRANULAR BASE COURSE MATERIAL

1) Compacted thickness of finished base: 6" - Concrete Pavement/Aprons
4" - Concrete Sidewalk

2) Base material shall consist of MNDOT 3149.2B2 Select Granular Borrow.

AGGREGATES

1) Coarse: MnDOT Spec. 3137.

2) Fine: MnDOT Spec. 3126.

WATER

1) Clean, fresh and potable, MnDOT Spec. 3906.

AIR ENTRAINING ADMIXTURES

1) ASTM C260.

2) Provide entrainment of 4 - 7 percent by volume.

PORTLAND CEMENT

1) ASTM C150, Type I plus an approved air entraining agent, or Type IA air-entraining Portland cement.

OTHER ADMIXTURES

1) MnDOT Spec. 3113.

2) Calcium Chloride or materials containing chlorides or nitrates shall not be allowed.

PROPORTIONING AND DESIGN OF MIXES

1) Concrete Classifications

a) Curb and gutter, slip-formed concrete: MNDOT Spec. 2461, Mix Design 3F32

b) Sidewalk, aprons, incidental concrete, manual curb & gutter: MNDOT Spec. 2461, Mix Design 3F52

c) Concrete pavements: MNDOT Spec. 2301, Mix Design 3A41

d) Repair concrete, fast strength concrete: MNDOT Spec. 2301, Mix Design 3A41HE

2) Concrete Specifications:

a) 3F32: $\frac{3}{4}$ - 3" slump, 4500 psi, 5-8% air

b) 3F52: 2 - 5" slump, 4500 psi, 5-8% air

c) 3A41: 2 - 5" slump, 4500 psi, 5-8% air

d) Temperatures of all concrete during placement shall be 50-deg F to 90-deg F

CONCRETE PLACEMENT

1) Place concrete as soon as possible after mixing. Place before initial set has occurred, and in no event after it has contained its water content for more than one hour.

2) Avoid overworking concrete or allowing concrete to fall unrestricted for excessive vertical distances, and other situations which can cause segregation of the aggregates.

3) Concrete pavements shall be placed in accordance with applicable portions of MnDOT 2301.

4) Sidewalks shall be placed in accordance with MnDOT 2521.

5) Curb and gutter shall be placed in accordance with MnDOT 2531.

PROTECTION

1) Provide adequate protection against rain, sleet and snow before and during placement and finishing of concrete.

2) Protect concrete from premature drying. Provide temporary covering as required. Keep concrete continuously moist for 7 days.

3) Treat concrete with membrane curing compound in accordance with MnDOT 2531.3G.

COLD WEATHER CONCRETE

1) Do not place concrete when the atmospheric temperature is below 40 degrees F., or when the concrete is likely to be subjected to freezing temperatures within 24 hours after it has been deposited unless adequate temporary heating is provided.

2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from freezing for the following 5 days.

3) No frozen materials may be used in the concrete. Chemicals may not be used to prevent freezing unless approved by the Engineer.

4) Perform all cold weather concreting in accord with ACI 306.

HOT WEATHER CONCRETE

1) Do not place concrete when the atmospheric temperature is above 100 degrees F.

2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from temperatures over 90 degrees for the following 5 days.

3) Thoroughly wet dry porous surfaces before concreting.

4) Water reducing admixtures with retarding properties are required for all concrete placed when the temperature exceeds 80 degrees F.

5) Perform all hot weather concreting in accord with ACI 305.

FINISHING

1) Provide a broomed finish on exterior sidewalks and ramps unless noted otherwise.

QUALITY CONTROL

1) The Contractor shall hire an independent testing firm to provide the following tests:

a) The independent testing technician shall perform random field testing of the fresh concrete including slump, air content, and temperature. (ASTM C143, C173, C231 and C138). One series of the aforementioned tests shall be performed on the first load of concrete.

b) The independent testing technician shall cast a set of four compression test cylinders for the first load of concrete as well as 1 set for every 100 cubic yards, or fraction thereof, of concrete thereafter. Compression tests shall be performed on one test cylinder at 7 days and two test cylinders at 28 days. The fourth test cylinder shall be retained in the event of failing compression tests on the 28-day test cylinders.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018 — DATE
43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER MINNESOTA

GENERAL NOTES & SPECIFICATIONS

18005Specs.dwg

C-100.1

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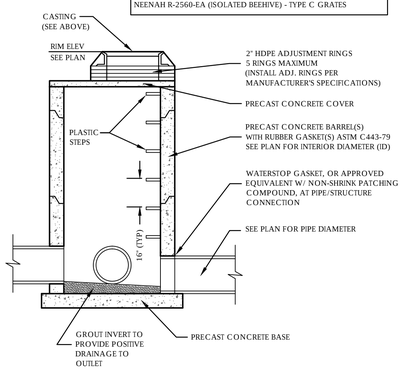
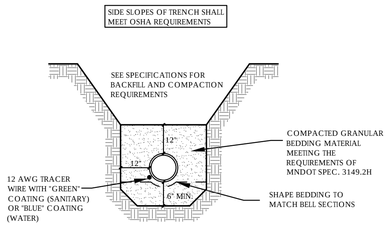


NOTES

1. SEE PLAN FOR INTERIOR DIAMETERS (ID) OF PRECAST CONCRETE BARREL SECTIONS
2. SEE PLAN FOR PIPE CUT-OUT SECTIONS
3. CONSTRUCT GROUTED FLOW LINES WITHIN STRUCTURE TO DIRECT FLOW TO OUTLET WITH NON-SHRINK GROUT
4. FILL ANNULAR SPACE BETWEEN PIPE AND BARREL WITH NON-SHRINK GROUT.
3. PRECAST CONCRETE COVERS, BARREL SECTIONS, AND BASES SHALL MEET THE REQUIREMENTS OF STANDARD MNDOT PLATES 4011 AND 4020
4. PLASTIC STEPS SHALL BE AS PER MNDOT STANDARD PLATE 4180 AND SHALL BE PLACED OVER THE OUTLET PIPE

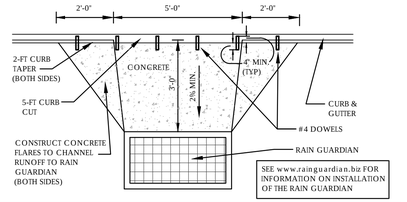
4 STORM MANHOLE OR CATCH BASIN

NTS



1 PIPE BEDDING DETAIL

NTS

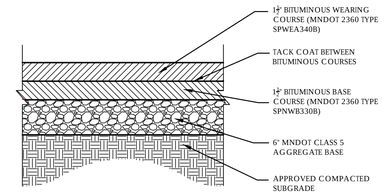


NOTES:

1. CONCRETE SHALL BE 6-IN THICK OVERLYING 6" CLEAN SAND (LESS THAN 5% PASSING THE #200 SIEVE.
2. PLACE EXPANSION JOINT BETWEEN CONCRETE AND ADJACENT CURB/GUTTER.
3. DOWEL SPACING: 18" O.C.
4. DOWELS SHALL BE PLACED AT THE CENTER OF THE SPILLWAY THICKNESS, AND SHALL HAVE A MINIMUM BAR COVER OF 3"
5. DOWELS SHALL BE PLACED ACROSS TOTAL WIDTH OF CONCRETE SPILLWAY

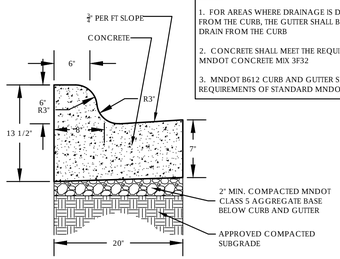
2 CURB AT RAIN GUARDIAN

NTS



3 BITUMINOUS PAVEMENT SECTION

NTS

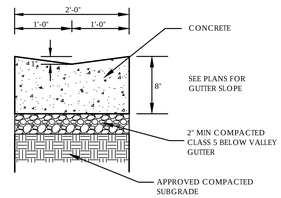


NOTES

1. FOR AREAS WHERE DRAINAGE IS DIRECTED AWAY FROM THE CURB, THE GUTTER SHALL BE TILTED TO DRAIN FROM THE CURB
2. CONCRETE SHALL MEET THE REQUIREMENTS OF MNDOT CONCRETE MIX 3F32
3. MNDOT B612 CURB AND GUTTER SHALL MEET THE REQUIREMENTS OF STANDARD MNDOT PLATE 7100

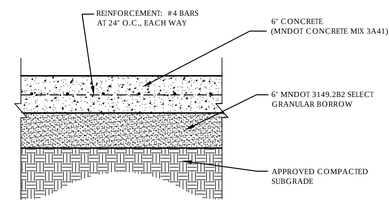
5 CURB & GUTTER (MNDOT B612)

NTS



6 VALLEY GUTTER

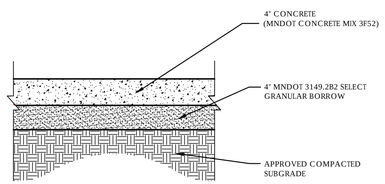
NTS



NOTE: PLACE CONCRETE REINFORCEMENT AT THE MIDDLE OF THE PAVEMENT THICKNESS

7 CONCRETE APRON/PAVEMENT SECTION

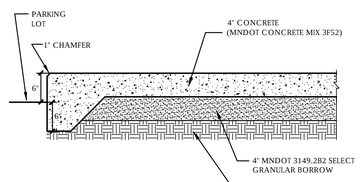
NTS



CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER MNDOT SPEC. 2521.3C2

8 CONCRETE SIDEWALK SECTION

NTS



CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER MNDOT SPEC. 2521.3C2

9 THICKENED EDGE SIDEWALK

NTS

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SCHULTZ ENGINEERING & SITE DESIGN
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Suite 230
Sartell, MN 56377
Ph: (320) 339-0669
Fx: (866) 633-1830
schultzeng@live.com
www.schultzengineeringdesign.com

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018	*43129*
DATE	*LICENSE NO.*

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING
HANOVER DENTAL

HANOVER
MINNESOTA

STANDARD DETAILS

18005Details.dwg

C-100.2

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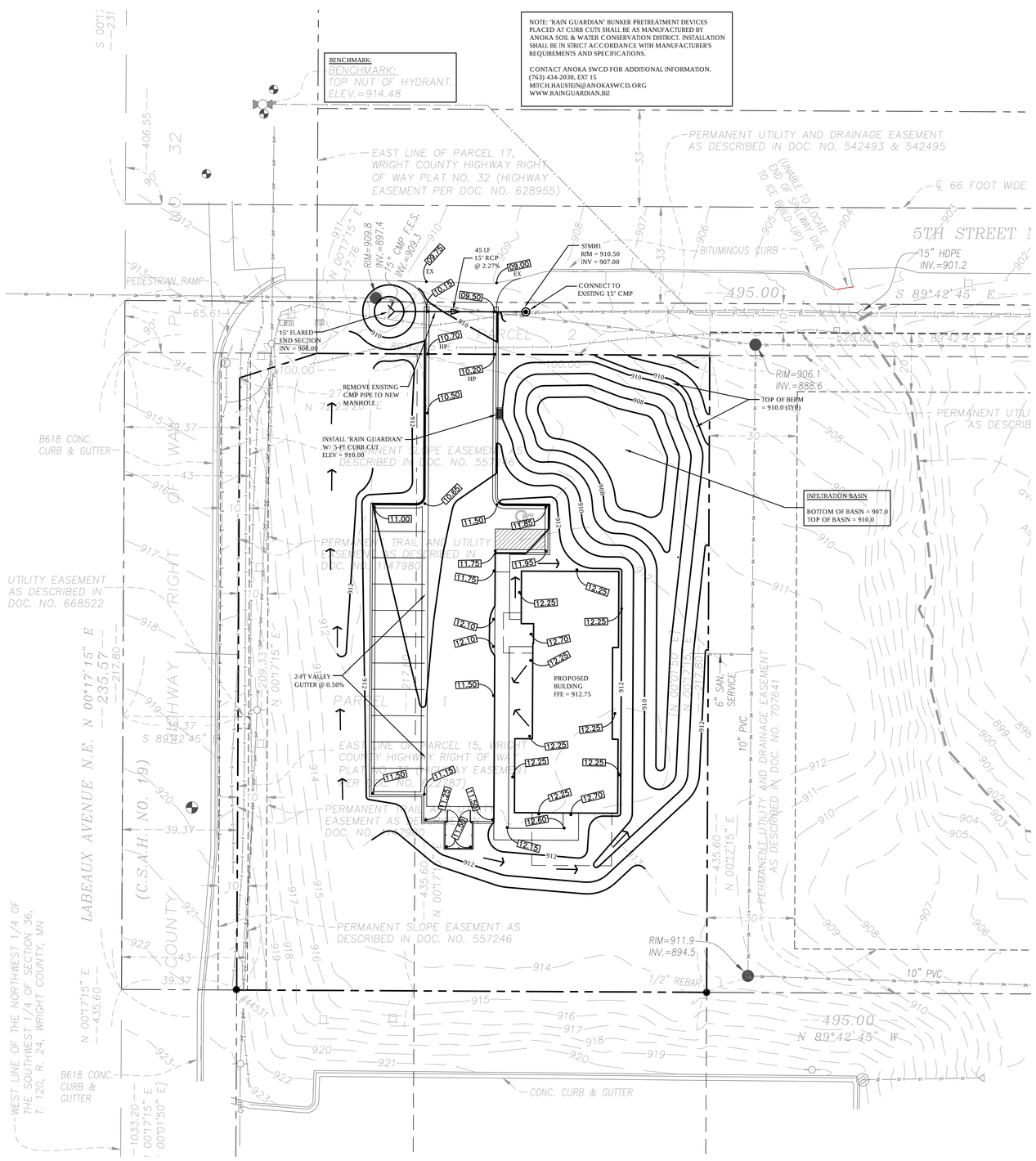


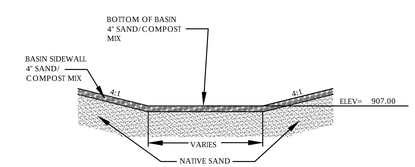
GRADING NOTES:

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS, AND RIM AND INVERT ELEVATIONS, OF EXISTING DRAINAGE AND SANITARY STRUCTURES. LOCATION AND SIZE OF EXISTING SANITARY, WATER, AND STORM SEWER STUBS, AND EXISTING GRADES SHALL ALSO BE VERIFIED.
2. EXISTING TOPOGRAPHICAL INFORMATION WAS OBTAINED FROM A TOPOGRAPHICAL SURVEY PROVIDED BY MEYER-ROHLIN LAND SERVICES, BUFFALO, MN. (763) 682-1781
3. BENCHMARK: TOP NUT OF HYDRANT LOCATED ON THE NORTHEAST CORNER OF 5TH STREET NE AND LABEAUX AVE NE (SEE PLAN). ELEV = 914.48
4. NOTIFY ENGINEER IMMEDIATELY IF ANY INCONSISTENCIES ARE DISCOVERED BETWEEN ACTUAL SITE CONDITIONS AND WHAT IS SHOWN ON THE PLANS, WHICH ARE SIGNIFICANT ENOUGH TO ALTER THE INTENT OF THE DRAWINGS.
5. IF REQUIRED BY THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY, THE OWNER OR CONTRACTOR SHALL OBTAIN A PLUMBING PERMIT PRIOR TO THE INSTALLATION OF ANY STORM SEWER UTILITIES.
6. THE CONTRACTOR SHALL CONTACT GOPHER ONE CALL AT (800) 252-1166 FOR A UTILITY LOCATE PRIOR TO THE START OF CONSTRUCTION AND VERIFY LOCATIONS OF UTILITIES BEFORE BEGINNING WORK.
7. SEE SHEET C2 FOR STANDARD DETAILS.
8. ALL LENGTHS OF STORM SEWER OR CULVERT PIPE SPECIFIED ON THIS PLAN INCLUDE THE LENGTHS OF ANY ASSOCIATED FLARED END SECTIONS.
9. TRASH GUARDS SHALL BE INSTALLED ON ALL STORM SEWER END SECTIONS.
10. FINISHED ELEVATIONS OF LAWN/GREEN AREAS ADJACENT TO BUILDINGS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR OR TOP-OF-BLOCK ELEVATION.
11. CONTRACTOR SHALL PERFORM CALCULATIONS TO VERIFY EARTHWORK QUANTITIES. CONTRACTOR'S BID SHALL BE BASED ON EARTHWORK CALCULATIONS COMPLETED BY THE CONTRACTOR
12. SPOT ELEVATIONS ARE FLOW LINE AND/OR FINISHED GRADES, UNLESS OTHERWISE INDICATED. TOP OF CURB ELEVATIONS ARE 6" ABOVE THE FLOW LINE SPOT ELEVATION SHOWN ON THE PLANS, UNLESS NOTED OTHERWISE.
13. "EX" DENOTES EXISTING SPOT ELEVATIONS. "HP" DENOTES HIGH POINTS.
14. ALL PROPOSED ELEVATIONS ARE TOP OF PAVING OR GUTTER, UNLESS NOTED OTHERWISE. PROPOSED ELEVATIONS ARE INTENDED TO PROVIDE POSITIVE DRAINAGE TOWARDS CATCH BASINS AND/OR OUTLETS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE REQUIRED ELEVATIONS, WHICH WILL PROMOTE POSITIVE DRAINAGE THROUGHOUT THE PROJECT SITE.

NOTE: CADD FILES FOR ESTIMATING EARTHWORK QUANTITIES ARE AVAILABLE TO CONTRACTORS FOR PREPARING BIDS. IN ORDER TO RECEIVE THE CADD FILES, THE CONTRACTOR WILL NEED TO SIGN A HOLD-HARMLESS AGREEMENT PROVIDED BY SCHULTZ ENGINEERING & SITE DESIGN, AND AGREE TO PAY A $50 PROCESSING FEE. THE CADD FILES WILL BE RELEASED UPON RECEIPT OF THE CHECK

INFILTRATION BASIN NOTES:

1. TRAFFIC FROM CONSTRUCTION EQUIPMENT SHALL BE LIMITED AS MUCH AS POSSIBLE ACROSS INFILTRATION BASIN AREAS, AND BE ONLY LOW IMPACT TRACK EQUIPMENT. BASIN AREAS SHALL BE EXCAVATED WITH A BACKHOE STATIONED OUTSIDE OF THE AREA AS MUCH AS POSSIBLE.
2. DURING CONSTRUCTION OF THE ADJACENT PARKING LOT AND BUILDING, THE INFILTRATION BASIN AREA SHALL BE PROTECTED FROM TRAFFIC AND SEDIMENT WITH SILT FENCE.
3. THE BOTTOM OF THE INFILTRATION BASIN SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 24 INCHES WITH THE USE OF APPROPRIATE EQUIPMENT (TILLER, RIPPER, ETC.). AFTER SCARIFICATION, THE BASIN SIDEWALLS AND BOTTOM SHALL BE LINED WITH A MINIMUM OF 4-INCHES OF SAND/COMPOST MIX. SAND/COMPOST MIX SHALL BE PLACED AS LOOSELY AS POSSIBLE.
4. ONCE EXCAVATED TO FINAL GRADE INFILTRATION AREAS SHALL BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA. ALL INFILTRATION AREAS SHALL BE INSPECTED TO ENSURE THAT UNAUTHORIZED EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREAS.
5. ONCE THE INFILTRATION BASINS ARE COMPLETED AND THE SITE HAS BEEN STABILIZED, THE CONTRACTOR SHALL ARRANGE AND PAY FOR TESTING THE INFILTRATION RATES OF THE BOTTOMS OF THE BASINS. THE TEST RESULTS SHALL BE SUBMITTED TO THE CITY AND THE ENGINEER.
6. FINAL STABILIZATION OF THE INFILTRATION BASINS SHALL NOT BE COMPLETED UNTIL THE UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.



NOTES: 1. BASIN BOTTOM SHALL BE SEEDED W/ NATIVE SEED MIX AND/ OR PLANTINGS

2. SAND/COMPOST MIX SHALL CONSIST OF 70% CLEAN SAND & 30% COMPOST (MN STORM WATER MANUAL MIX 'B'). SAND SHALL CONSIST OF CLEAN CONSTRUCTION SAND, FREE OF DELETERIOUS MATERIALS - AASHTO M-6 OR ASTM C-33 WASHED. COMPOST SHALL CONSIST OF MNDOT GRADE 2

1 INFILTRATION BASIN #1

NTS

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018 — DATE

43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING
HANOVER DENTAL

HANOVER
MINNESOTA

SCALE: 1" = 20'

0 20 40

GRADING PLAN

18005Grading.dwg

C-101.1

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PROJECT INFORMATION

Project Description

This project will consist of the construction of a new dental office building with an approximate footprint of 2,500 SF, as well as parking lot and concrete sidewalk. Storm water management for this project will consist of an infiltration basin.

Disturbed Area & Impervious Surface Tabulation
(within proposed construction area)

Anticipated Disturbed Area	0.60 acres
Existing Impervious Area	0.00 acres
Proposed Impervious Area	0.22 acres
Net Impervious Area Increase	0.22 acres

Permanent Site Drainage

The vast majority of the proposed impervious surfacing has been designed to be routed to a proposed infiltration basin. Due to the land-locked nature of the wetland in the adjacent property to the east, which the subject property naturally drains to, the proposed infiltration basin has been sized to collect and infiltrate the entire runoff volume directed to it from the 100-year storm event.

Receiving Surface Waters

The following surface waters could receive storm water runoff from this project, and are within 1 mile of the project site:

Surface Water	Type of Surface Water	Impaired Water?	Special Water?	USEPA Approved TMDL for Impaired Water?	Comments
Project not subject to					
NPDES Permit					

SEDIMENT AND OTHER POLLUTANTS

This SWPPP has been designed mainly to provide erosion and sediment control of naturally occurring soils at this site (ie: sands, loams, and clays). Although this SWPPP does address pollution prevention of other man-made materials, it is assumed that these materials will consist of debris from existing structures and pavements to be demolished, or debris and chemicals (ie: fuels, new paints, etc.) resulting from new construction.

There are no known solid wastes or hazardous materials buried below grade at this site. If such wastes or hazard materials are discovered during construction, the SWPPP Coordinator (described below) will be responsible for notifying the Engineer. This SWPPP will then be revised to address he presence and disposal of these additional pollutants

EROSION PREVENTION AND SEDIMENT CONTROL BMPS

Standards and References

Materials and construction methods of all BMPs included in this SWPPP shall be as per the Minnesota Department of Transportation (MNDOT) Standard Specifications for Construction, latest edition. The Contractor and SWPPP Coordinator shall obtain a current copy of MNDOT's Standard Specifications for Construction and familiarize themselves with the specification sections applicable to this SWPPP, as there are several BMPs that specifically reference these sections.

The Contractor and SWPPP Coordinator shall be expected to be familiar with the applicable MNDOT specification sections during construction. No additional compensation will be paid to the Contractor for additional work due to unfamiliarity with these specification sections.

Undisturbed Areas

If shown on the plan, the Contractor shall delineate areas that are not to be disturbed on the site. This may be done with flags, stakes, signs, silt fence, etc., and shall be completed prior to the start of any grading operations. Regardless of the delineation method the Contractor chooses to use, the Contractor must communicate to his/her personnel and subcontractors that these areas are not to be disturbed and construction equipment (including trucks and personal vehicles) shall not be allowed in these areas.

The Contractor shall minimize compaction and preserve topsoil as much as possible at the site. In pervious ("green") areas that are not essential to the construction of the project, the Contractor shall avoid construction traffic and maintain the existing condition of these areas.

Temporary and Permanent Stabilization

All exposed soil areas (including stockpiles) shall be provided with temporary or permanent cover within 14 days of construction activity temporarily or permanently ceasing in that portion of the site. Temporary or permanent drainage ditches or swales, which drain off-site or to a surface water, and are within 200 lineal feet of the property line or surface water shall be provided with temporary or permanent cover within 24 hours of construction. Placement of temporary or permanent cover shall be initiated immediately upon suspension or completion of excavation operations.

Temporary Cover:

If the Contractor chooses to halt grading operations in a portion of the site (or the whole site) for a period exceeding 14 days, and grading operations (rough or finish grading) in the affected areas has not yet been completed, temporary cover shall be placed. Affected areas consisting of drainage ditches or swales connected to, and within, 200 lineal feet of a property line or surface water shall be provided with temporary cover within 24 hours of connection. Depending on the Contractor's schedule, the temporary cover shall consist of one of the following BMPs:

1). Disc anchored Mulch

a). Disc anchored mulch may be used in an area of the site (or the whole site) if the Contractor is halting grading operations for a period that is relatively short, but exceeds 14 days.

b). The mulch shall be Type 3 per MNDOT Spec. 3882

c). An adequate quantity of mulch shall be evenly distributed to achieve 90% coverage of the exposed soils.

d). Mulch shall be placed as per MNDOT 2575.3F.

e). All mulch shall be disc anchored as per MNDOT 2575.3G. Prior to the placement and disc anchoring of the mulch, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

f). Any areas that are exposed as a result of wind action after the initial mulch placement shall be covered with additional mulch to maintain 90% coverage.

2). Temporary Seeding with Mulch

a). Temporary seeding with mulch may be used in areas of the site (or the whole site) if the Contractor is halting grading operations for a period that is relatively long. Although mulch still needs to be applied as described above, once the temporary seeding/turf is established, the mulch will no longer need to be maintained. The temporary seeding/turf will require very little maintenance.

b). Prior to the sowing of temporary seed, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

c). Contractor shall utilize Seed Mixes 100, 110, or 130 per MNDOT Spec. 3876 for temporary seeding.

d). Temporary seeding shall be sown per MNDOT Spec. 2575.3D.

e). Once temporary seeding has been sown, mulch shall be placed over the area as described above.

Permanent Cover:

Upon completion of finish grading and/or placement of topsoil, initiation of the placement of permanent cover shall begin immediately over all exposed areas. This includes areas designated for impervious surfacing (ie: buildings, pavements/gravel bases, sidewalks, etc.). Where the construction schedule will not allow for the placement of the permanent impervious surfacing within 14 days of the completion of finish grading, temporary cover shall be provided in these areas, as described above, until the permanent impervious surfacing can be constructed. Affected areas consisting of drainage ditches or swales connected to, and within, 200 lineal feet of a property line or surface water, shall be provided with permanent cover within 24 hours of connection.

Areas designated for permanent turf establishment shall be provided with one or more of the following BMPs (see plan):

1). Permanent Seeding with Mulch

a). Unless otherwise noted on the plans, all areas designated for turf establishment shall be provided with permanent seeding.

b). In addition to the plan included as part of this SWPPP, the Contractor shall verify if a Landscaping Plan has been included in the plans by the Architect. If a Landscape Architect has specified higher quality permanent cover (ie: sod, hydroseeding, etc.), the Contractor shall provide this permanent cover in lieu of the permanent seeding specified in this SWPPP.

c). Prior to the sowing of permanent seed, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

d). Contractor shall utilize Seed Mix 260 per MNDOT Spec. 3876 for permanent seeding.

e). Permanent seeding shall be sown per MNDOT Spec. 2575.3D.

f). Once permanent seeding has been sown, mulch shall be placed over the area as described above (under Temporary Cover), unless noted otherwise.

2). Erosion Control Blanket

a). Erosion control blanket shall be placed in areas as shown on the plan included in this SWPPP. These areas shall still be provided with permanent seeding, as described above, beneath the erosion control blanket.

b). Erosion control blanket shall meet the requirements indicated in MNDOT Spec. 3885. See plan for category(s) of erosion control blanket.

c). Erosion control blanket shall be installed as per MNDOT Spec. 2575.3J2.

d). Erosion control blanket specified in drainage ditches and swales connected to, and within 200 lineal feet, of a property line or surface water shall be installed within 24 hours of the completion of finish grading (including permanent seeding).

3). Riprap

a). Riprap shall be placed in areas as shown on the plan included in this SWPPP.

b). All riprap shall be underlain with Type 4 geotextile fabric. The fabric shall meet the requirements of MNDOT Spec. 3733 and shall be installed as per MNDOT Spec. 2511.3B2.

c). Riprap materials shall meet the requirements of MNDOT Spec. 3601, and shall be Class 3, unless noted otherwise on the plans.

d). Riprap shall be considered "Random Riprap" and shall be placed as per MNDOT Spec. 2511.

e). Although it is permitted for the riprap to be placed with machinery, it will be necessary for the Contractor to hand place some of the riprap in order to provide a dense, well-keyed layer of stones with the least practical quantity of void space.

f). The minimum thickness of the riprap shall be 18 inches, unless otherwise noted on the plans.

g). Riprap designated at the end of pipe outlets shall be placed within 24 hours of installation of the pipe outlet end section.

h). Riprap specified in drainage ditches and swales connected to, and within 200 lineal feet, of a property line or surface water shall be installed within 24 hours of the completion of finish grading.

Sediment Control

The following sediment control BMPs shall be implemented as part of this project:

1). Silt Fence

a). Silt fence shall be installed at the locations shown on the plan included in this SWPPP.

b). Silt fence shall be machine sliced and materials shall meet the requirements of MNDOT Spec. 3886.

c). Silt fence shall be installed as per MNDOT Spec. 2573.3C1.

d). Silt fence shall be installed prior to any upgradient grading operations, and shall remain in place and maintained adequately until upgradient areas achieve Final Stabilization (see below)

e). Silt fence shall be repaired or replaced if damaged during, or after, rain events, or if accumulated sediment on the upstream side of the fence reaches 1/3 of the height of the fence. Repair or replacement of silt fence shall be completed within 24 hours of discovery.

f). Portions of silt fence may be removed to accommodate short-term activities, such as vehicle passage. Short-term activities shall be completed as quickly as possible, and new silt fence installed immediately after completion of the short-term activity. If rainfall is imminent or forecasted in the near future, new silt shall be installed regardless of if the short term activity has been completed or not. The Contractor is advised to schedule short term activities during dry weather as much as practicable. No additional compensation will be paid due to additional silt fence associated with short-term activities.

g). Temporary soil stockpiles shall be placed on the site in areas upgradient from silt fence. Where the Contractor chooses to place temporary soil stockpiles outside designated silt fenced areas, the stockpiles shall be surrounded by additional silt fence. Under no circumstances shall temporary soil stockpiles be placed over surface waters, curb and gutter, catch basins, culvert inlets or outlets, or ditches.

2). Catch Basin Protection

a). WIMCO Road Drain protection devices, as manufactured by WIMCO, shall be used for catch basin protection on this project. WIMCO can be contacted at (952)-233-3055, and their web page is www.roaddrain.com.

b). "Road Drain Top Slab" devices shall be installed at all catch basin locations immediately after placement of the catch basin structures. "Road Drain Top Slab" devices shall remain in place and be adequately maintained until permanent surfacing is constructed (ie: curb and gutter, pavements, and/or gravel surfacing). In areas designated for turf establishment, "Road Drain Top Slab" devices shall remain in place until Final Stabilization of all upgradient areas is established.

c). Upon construction of the permanent surfacing, the "Road Drain Top Slab" devices shall be replaced with the WIMCO product specified on the plans. The WIMCO devices shall remain in place until Final Stabilization of all upgradient areas has been established.

d). The contractor shall install and maintain the catch basin protection devices as per the manufacturer's instructions and specifications.

3). Culvert Inlet Protection

a). Culvert inlet protection shall be provided at all culvert inlet locations immediately after construction of the culvert. See plan included in this SWPPP for culvert inlet locations.

b). Culvert inlet protection shall consist of geotextile fabric wrapped around, and completely covering the inlet end section. The geotextile fabric shall be the same fabric used in silt fence applications and meet the requirements of MNDOT Spec. 3886.

c). The culvert inlet protection shall remain in place and adequately maintained until Final Stabilization of all upgradient areas has been established.

d). Culvert inlet protection shall be repaired or replaced if damaged during, or after, rain events, or if accumulated sediment reaches 1/2 of the diameter of the culvert pipe. Repair or replacement of culvert inlet protection shall be completed within 24 hours of discovery.

4). Temporary Rock Construction Entrance

a). Temporary rock construction entrances shall be installed at the locations shown on the plan included in this SWPPP. See detail for temporary rock entrance design.

b). If the Contractor chooses to access the site from locations other than where temporary rock entrances are specified on the plans, additional temporary rock entrances shall be placed at these locations, as well.

c). Temporary rock entrance shall be constructed prior to the start of grading operations, and shall remain in place and be adequately maintained until Final Stabilization has been established.

d). Temporary rock entrances shall be maintained in such a manner that the entrances prevent sediment tracking onto adjacent streets. If a temporary rock entrance is found to be ineffective, it shall be replaced or improved within 24 hours of discovery.

e). The Contractor has the option to place Type 4 geotextile fabric beneath the temporary rock entrance. The fabric may extend the life of the entrance as it will reduce rock "sinking" into the underlying soils. If the Contractor chooses to use fabric, it should meet the requirements of MNDOT Spec. 3733 and shall be installed as per MNDOT Spec. 2511.3B2.

f). If sediment tracking from the site is discovered on adjacent streets, the sediment shall be removed with a street sweeper or other approved method within 24 hours of discovery. This shall be done throughout construction of the project. This sediment may be returned and graded over exposed areas of the site, or disposed of off site per MPCA requirements.

The City may order street sweeping to be performed at the Contractor's or Owner's expense if City staff find that construction activities are resulting in sediment or debris being tracked onto City streets.

5). Filter Logs

a). Filter logs shall be installed at the locations shown on the plan included in this SWPPP.

b). Filter logs shall consist of Type Wood Fiber biorolls and meet the requirements of MNDOT Spec. 3897.

c). Filter logs shall be installed as per MNDOT Spec. 2573.3J.

d). Filter logs shall be installed immediately after placement of erosion control blanket.

e). Filter logs shall remain in place for the life of the project, and shall be allowed to degrade naturally.

Dewatering

If dewatering of sandy subsoils is required for this project, the pump discharge shall be treated prior to discharge off-site or into a surface water. Treatment of discharge shall be achieved with the use of a "Dandy Dewatering Bag" (or approved equivalent), as manufactured by Dandy Products,Inc. Dandy Products, Inc. can be contacted at (877) 307-0141, and their web page is www.dandyproducts.com. The "Dandy Dewatering Bag" shall be installed, utilized, and maintained per the manufacturer's instructions and specifications.

Once dewatering water has been treated, it may be discharged off-site or to a surface water. The discharge shall be visually checked to ensure that it is relatively clean and not visibly different from any receiving waters. If discharge is noticeably "dirty", the Engineer shall be contacted as additional treatment methods may be necessary.

Adequate erosion control shall be provided at the point of discharge if it is located in an area with exposed soils or established turf. This erosion control may consist of temporarily placed rip rap, or other approved energy dissipation measures. The type of erosion control measure shall be at the Contractor's discretion, depending on the location of the dewatering discharge and the unique site characteristics. The erosion control measures shall be effective and shall be maintained adequately such that no erosion occurs at the point of discharge.

Pollution Prevention Management

Solid waste accumulated during construction, including collected sediment, construction materials, floating debris, construction debris, paper, plastics, and other solid wastes shall be disposed of in accordance with MPCA disposal requirements:

1). Building products that have the potential to leach pollutants shall be maintained under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with storm water.

2). Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials shall be maintained under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.

3). Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) shall be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas shall be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials shall be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.

4). Solid waste shall be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.

5). Portable toilets shall be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.

The Contractor shall take steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. The Contractor shall conduct fueling in a contained area unless infeasible. The Contractor shall ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. The Contractor shall report and clean up spills immediately as required by Minn. Stat. Å 115.061, using dry clean up measures where possible.

If the Contractor washes the exterior of vehicles or equipment on the project site, washing shall be limited to a defined area of the site. Runoff from the washing area shall be contained in a sediment basin or other similarly effective controls and waste from the washing activity shall be properly disposed of. The Contractor shall properly use and store soaps, detergents, or solvents. No engine degreasing shall be allowed on site.

The Contractor shall provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. The liquid and solid washout wastes shall not contact the ground, and the containment shall be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes shall be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

FINAL STABILIZATION

Final Stabilization shall be considered established once the following requirements have been achieved:

1). All soil disturbing activities at the site have been completed and all soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth density over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

2). The permanent storm water management system is constructed, and is operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.

3). All temporary synthetic and structural erosion prevention and sediment control BMPs have been removed from the project site. BMPs designed to decompose on site may be left in place.

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HANOVER MINNESOTA

SWPPP - NOTES

18005SWPPPNotes.dwg

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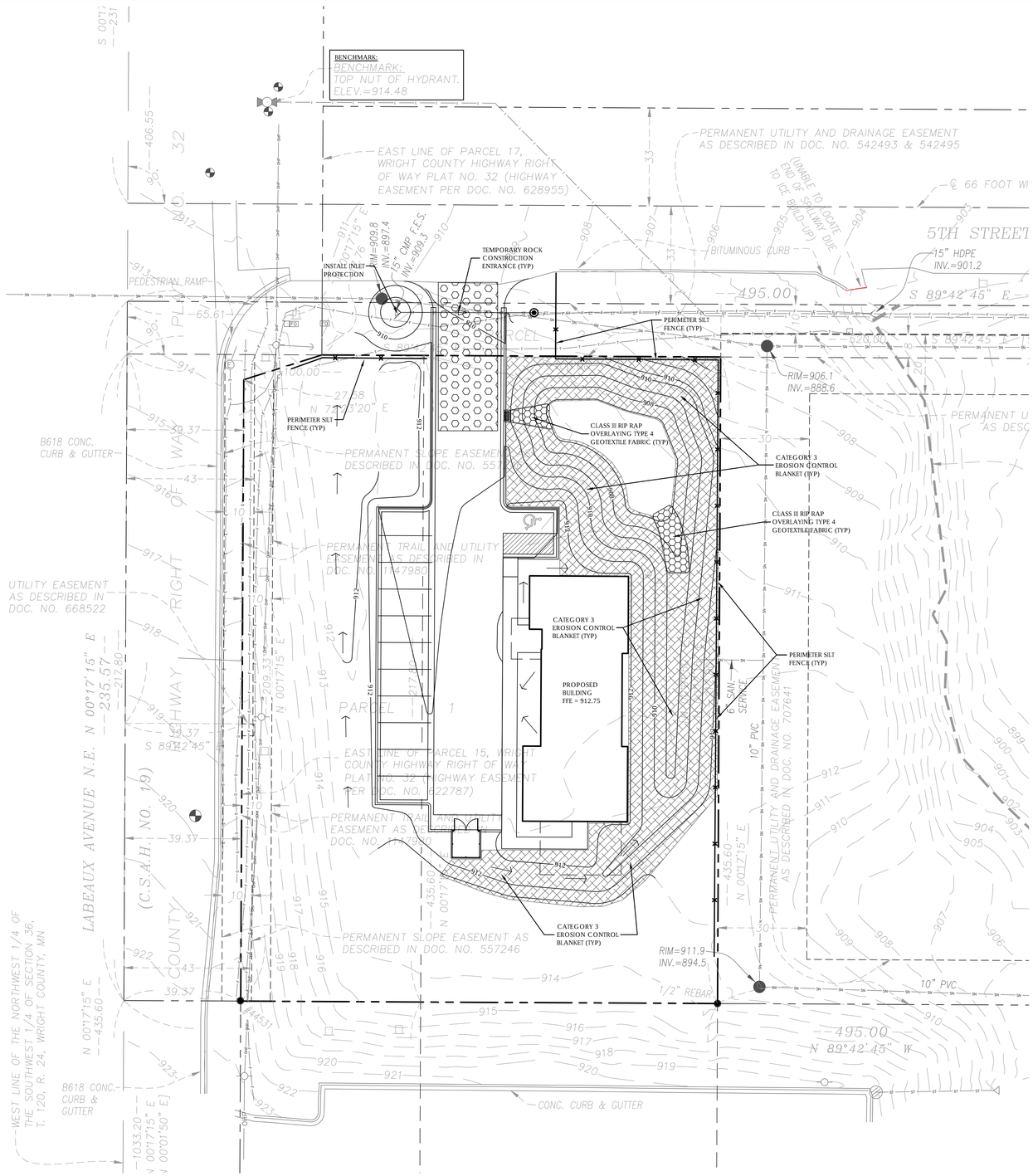
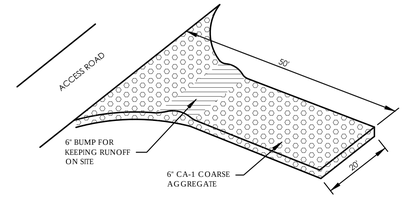


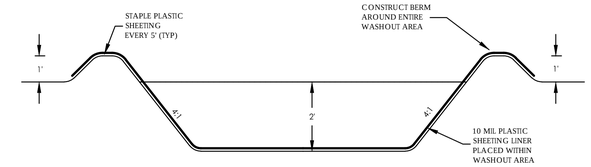


1. THE ROCK ENTRANCE SHALL BE CONSTRUCTED PRIOR TO THE START OF GRADING OPERATIONS.
2. THE ENTRANCE SHALL BE GRADED SUCH THAT POSITIVE DRAINAGE DURING CONSTRUCTION IS PROVIDED.
3. THE ENTRANCE SHALL BE MAINTAINED IN SUCH A CONDITION SUCH THAT IT PREVENTS MUD TRACKING OFF SITE. ADDITIONAL ROCK OR REPLACEMENT OF THE ENTRANCE MAY BE REQUIRED PERIODICALLY IF MUD STARTS TO TRACK OFF SITE.
4. THE ROCK ENTRANCE MAY BE REMOVED JUST PRIOR TO THE PLACEMENT OF AGGREGATE BASE.

NOTE: PLACING FILTER FABRIC UNDER THE ROCK ENTRANCE MAY REDUCE THE AMOUNT OF MAINTENANCE IT WOULD REQUIRE.

1 TEMPORARY ROCK CONSTRUCTION ENTRANCE

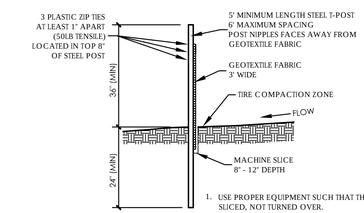
NTS



1. BOTTOM OF CONCRETE WASHOUT AREA SHALL BE 10'X10'
2. CONTRACTOR SHALL REMOVE WASH LIQUID FROM CONCRETE WASHOUT AREA AND DISPOSE OF PER MPCA REQUIREMENTS WHEN WASHOUT AREA BECOMES HALF FULL.
3. CONTRACTOR SHALL SELECT THE MOST OPTIMAL LOCATION FOR THE CONCRETE WASHOUT

2 CONCRETE WASHOUT

NTS

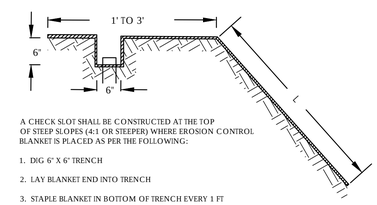


MATERIALS PER MNDOT 3886
INSTALLATION PER MNDOT 2573.3C1

1. USE PROPER EQUIPMENT SUCH THAT THE SOIL IS SLICED, NOT TURNED OVER.
2. AFTER SILT FENCE INSTALLATION, COMPACT THE SOIL IMMEDIATELY NEXT TO THE GEOTEXTILE BY DRIVING OVER IT WITH A TRACTOR TIRE AT LEAST TWICE

3 SILT FENCE (MACHINE SLICED)

NTS



A CHECK SLOT SHALL BE CONSTRUCTED AT THE TOP OF STEEP SLOPES (4:1 OR STEEPER) WHERE EROSION CONTROL BLANKET IS PLACED AS PER THE FOLLOWING:

1. DIG 6" X 6" TRENCH
2. LAY BLANKET END INTO TRENCH
3. STAPLE BLANKET IN BOTTOM OF TRENCH EVERY 1 FT
4. BACKFILL TRENCH WITH SOIL AND COMPACT
5. IF SLOPE LENGTH (L) IS GREATER THAN 100 FT DIG A CHECK SLOT 1/3 FROM THE BOTTOM OF THE SLOPE AND STAPLE THE BLANKET IN AS IN THE TOP TRENCH.

4 EROSION CONTROL BLANKET

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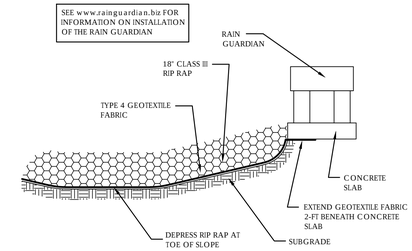
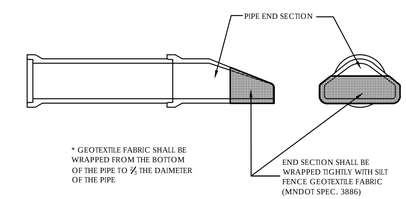
SEE www.rainguardian.biz FOR INFORMATION ON INSTALLATION OF THE RAIN GUARDIAN



5 RIP RAP AT RAIN GUARDIAN

NTS



6 CULVERT INLET PROTECTION

NTS

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BRIAN J. SCHULTZ, PE
03/09/2018 — DATE
43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER MINNESOTA

SCALE: 1" = 20'
0 20 40

SWPPP - PLAN VIEW

18005SWPPP-Plan.dwg

C-101.3

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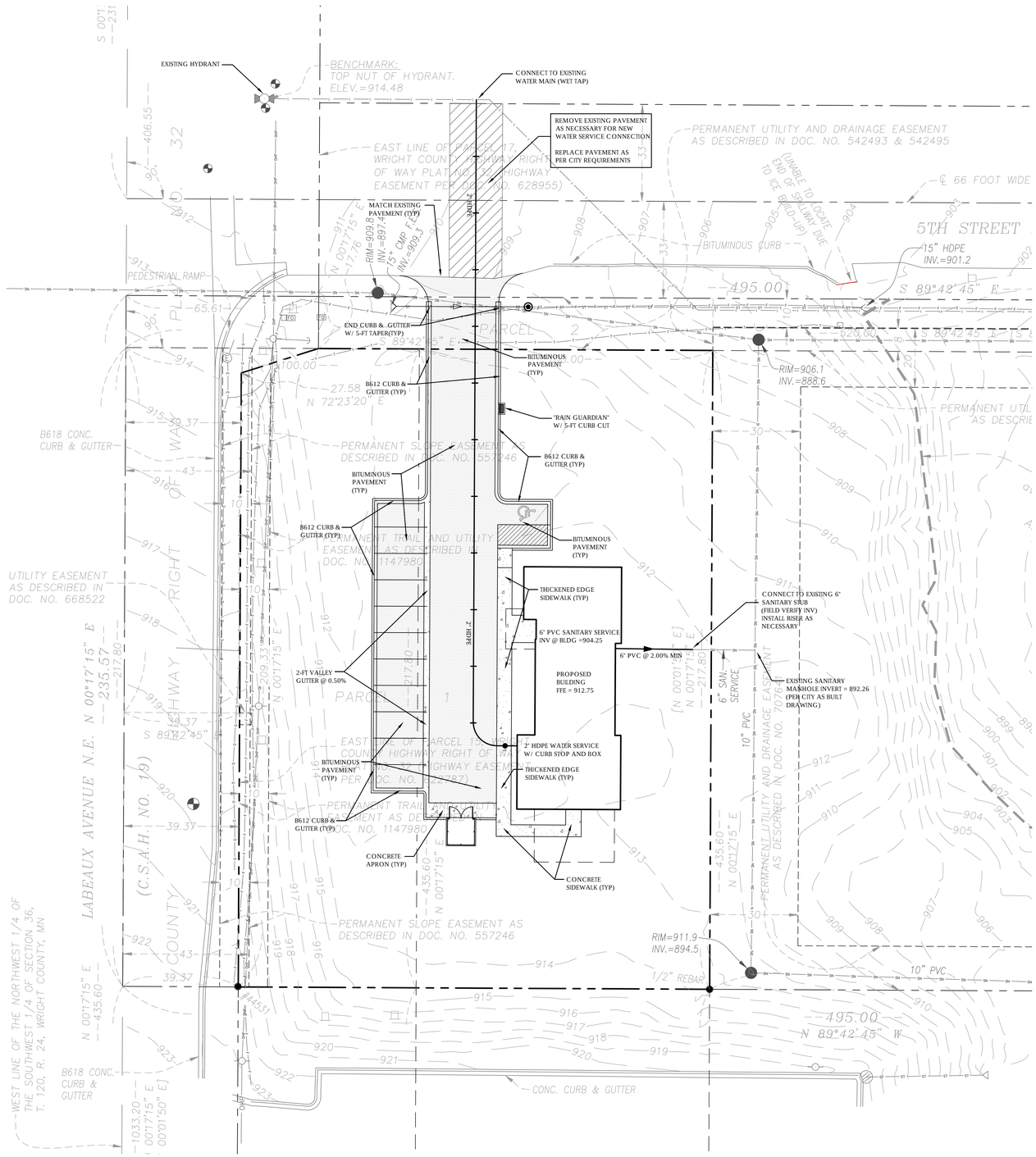

UTILITY AND SURFACING NOTES:

WATER AND SANITARY SEWER UTILITIES

1. WATER MAIN AND ANY WATER SERVICE LINES SHALL BE PLACED AT A MINIMUM DEPTH OF 8 FEET BELOW FINISHED GRADE.

2. IF CONFLICTS ARE DISCOVERED WHERE WATER MAIN CROSSES EXISTING SANITARY SEWER, SERVICE LINES, OR STORM SEWER, THE WATER MAIN SHALL BE RAISED OR LOWERED APPROPRIATELY WHILE STILL MAINTAINING A MINIMUM DEPTH OF 8 FEET BELOW FINISHED GRADE.

3. INSULATION SHALL BE PLACED AT ALL LOCATIONS WHERE STORM SEWER CROSSES SANITARY SEWER, WATER MAIN, OR ASSOCIATED SERVICES. INSULATION SHALL CONSIST OF AN 8-FT X 8-FT SQUARE OF 3"-THICK RIGID INSULATION. INSULATION SHALL BE PLACED BETWEEN THE STORM SEWER AND PIPE CROSSING WITH THE EDGES OF THE INSULATION PARALLEL TO THE PIPING AS MUCH AS POSSIBLE.

4. INSTALL SANITARY SEWER SERVICE LINE CLEANOUTS AS REQUIRED BY THE MINNESOTA PLUMBING CODE

5. SEE SHEET C3 FOR STORM SEWER GRADING, AND SHEET C2 FOR MISCELLANEOUS DETAILS RELATING TO THE PLACEMENT OF THE UTILITIES.

6. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

7. PRIOR TO CONSTRUCTION OF SANITARY SEWER, AND ORDERING ASSOCIATED MATERIALS, THE CONTRACTOR'S PLUMBING DESIGNER SHALL PROVIDE THE ENGINEER WITH THE TOTAL DRAINAGE FIXTURE UNITS (DFUs) FOR THE INTERIOR PLUMBING TO VERIFY THE CORRECT SIZING AND SLOPE OF THE SANITARY SEWER SERVICE

OWNER/CONTRACTOR SHALL OBTAIN A PLUMBING PERMIT FROM THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PRIOR TO THE INSTALLATION OF ANY SANITARY SEWER OR WATER UTILITIES. CONSTRUCTION OF SANITARY SEWER OR WATER UTILITIES SHALL NOT COMMENCE UNTIL AFTER THE PLUMBING PERMIT HAS BEEN OBTAINED, AND ANY AND ALL PERTINENT COMMENTS HAVE BEEN ADDRESSED ON THE PLAN AND IN THE PROJECT SPECIFICATIONS.

SURFACING

1. SUBGRADES SHALL BE SCARIFIED AND/OR COMPACTED AS NECESSARY TO ATTAIN THE REQUIRED COMPACTION DESCRIBED IN THE GENERAL NOTES (SHEET C1). TEST ROLLING OF THE SUBGRADE SHALL BE OBSERVED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN. LOCATIONS EXHIBITING EXCESSIVE RUTTING (PER MNDOT SPEC. 2111) SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER PRIOR TO THE PLACEMENT OF AGGREGATE BASE. COMPACTION TESTING IN UTILITY TRENCHES SHALL BE PERFORMED BY AN INDEPENDENT TESTING FIRM.

2. GRAVEL BASE COURSES SHALL BE ROLLED AND COMPACTED. TEST ROLLING OF THE GRAVEL BASE SHALL BE OBSERVED BY A SOILS ENGINEER TO VERIFY STABILITY.

3. ALL EXISTING BITUMINOUS OR CONCRETE EDGES, WHICH WILL ABUT NEW BITUMINOUS OR CONCRETE SURFACING SHALL BE SAWCUT TO OBTAIN A VERTICAL EDGE.

4. EXPANSION JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE NEW CONCRETE ABUTS EXISTING CONCRETE, AND AT ALL LOCATIONS WHERE SEPARATE CONCRETE POURS ABUT EACH OTHER.

5. SEE SHEET C1 FOR SPECIFICATIONS REGARDING THE CONSTRUCTION OF PAVEMENTS, AND CURB AND GUTTER.

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BRIAN J. SCHULTZ, PE

03/09/2018	*43129*
DATE	*LICENSE NO.*

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER
MINNESOTA

SCALE: 1" = 20'

0 20 40

UTILITY & PAVING PLAN

18005UtilityPaving.dwg

C-102

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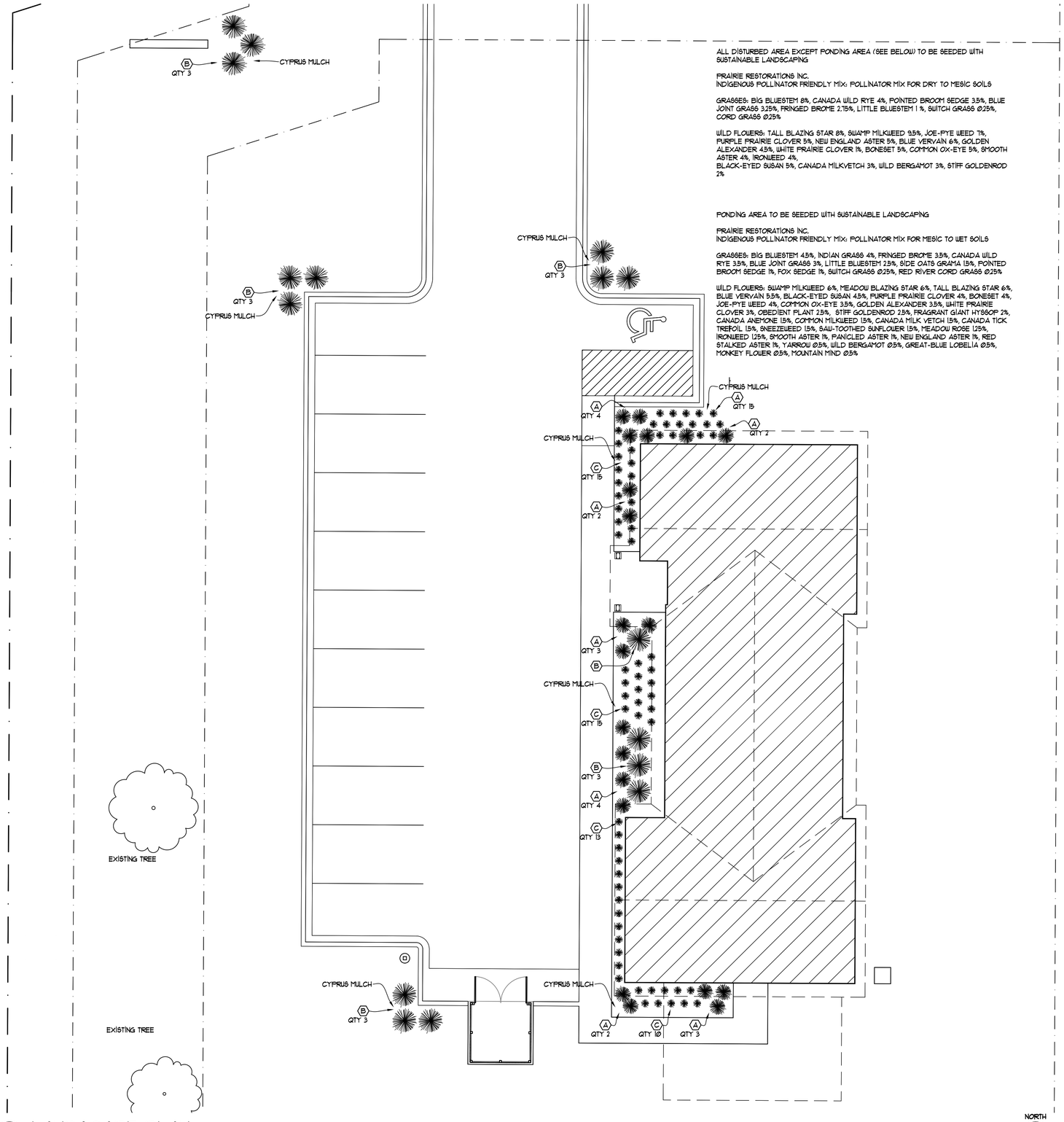

A1 L-101 LANDSCAPE PLAN
1" = 20'

ALL DISTURBED AREA EXCEPT PONDING AREA (SEE BELOW) TO BE SEEDED WITH SUSTAINABLE LANDSCAPING

PRAIRIE RESTORATIONS INC.
INDIGENOUS POLLINATOR FRIENDLY MIX: POLLINATOR MIX FOR DRY TO MESIC SOILS

GRASSES: BIG BLUESTEM 8%, CANADA WILD RYE 4%, POINTED BROOM SEDGE 3.5%, BLUE JOINT GRASS 3.25%, FRINGED BROME 2.75%, LITTLE BLUESTEM 1 %, SWITCH GRASS 0.25%, CORD GRASS 0.25%

WILD FLOWERS: TALL BLAZING STAR 8%, SWAMP MILKWEED 9.5%, JOE-PYE WEED 7%, PURPLE PRAIRIE CLOVER 5%, NEW ENGLAND ASTER 5%, BLUE VERVAIN 6%, GOLDEN ALEXANDER 4.5%, WHITE PRAIRIE CLOVER 1%, BONESET 5%, COMMON OX-EYE 5%, SMOOTH ASTER 4%, IRONWEED 4%,
BLACK-EYED SUSAN 5%, CANADA MILKVETCH 3%, WILD BERGAMOT 3%, STIFF GOLDENROD 2%

PONDING AREA TO BE SEEDED WITH SUSTAINABLE LANDSCAPING

PRAIRIE RESTORATIONS INC.
INDIGENOUS POLLINATOR FRIENDLY MIX: POLLINATOR MIX FOR MESIC TO WET SOILS

GRASSES: BIG BLUESTEM 4.5%, INDIAN GRASS 4%, FRINGED BROME 3.5%, CANADA WILD RYE 3.5%, BLUE JOINT GRASS 3%, LITTLE BLUESTEM 2.5%, SIDE OATS GRAMA 1.5%, POINTED BROOM SEDGE 1%, FOX SEDGE 1%, SWITCH GRASS 0.25%, RED RIVER CORD GRASS 0.25%

WILD FLOWERS: SWAMP MILKWEED 6%, MEADOW BLAZING STAR 6%, TALL BLAZING STAR 6%, BLUE VERVAIN 5.5%, BLACK-EYED SUSAN 4.5%, PURPLE PRAIRIE CLOVER 4%, BONESET 4%, JOE-PYE WEED 4%, COMMON OX-EYE 3.5%, GOLDEN ALEXANDER 3.5%, WHITE PRAIRIE CLOVER 3%, OBEDIENT PLANT 2.5%, STIFF GOLDENROD 2.5%, FRAGRANT GIANT HYSSOP 2%, CANADA ANEMONE 1.5%, COMMON MILKWEED 1.5%, CANADA MILK VETCH 1.5%, CANADA TICK TREFOIL 1.5%, SNEEZEWEED 1.5%, SAW-TOOTHED SUNFLOWER 1.5%, MEADOW ROSE 1.25%, IRONWEED 1.25%, SMOOTH ASTER 1%, PANICLED ASTER 1%, NEW ENGLAND ASTER 1%, RED STALKED ASTER 1%, YARROW 0.5%, WILD BERGAMOT 0.5%, GREAT-BLUE LOBELIA 0.5%, MONKEY FLOWER 0.5%, MOUNTAIN MIND 0.5%

PLANT SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE	METHOD	REMARK
A	KARL FOERSTER	CALAMAGROSTIS ACUTIFOLIA	20	#3	CONTAINER	1
B	CHINESE SILVER GRASS	MISCANTHUS SINENSIS	16	#3	CONTAINER	1
C	LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	68	#1	CONTAINER	2

REMARKS:

1 PLANT 4' OC
2 PLANT 2' OC

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C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

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CLR — Checked

Revisions

1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

1" = 20'- 0"

LANDSCAPE PLAN

L-101

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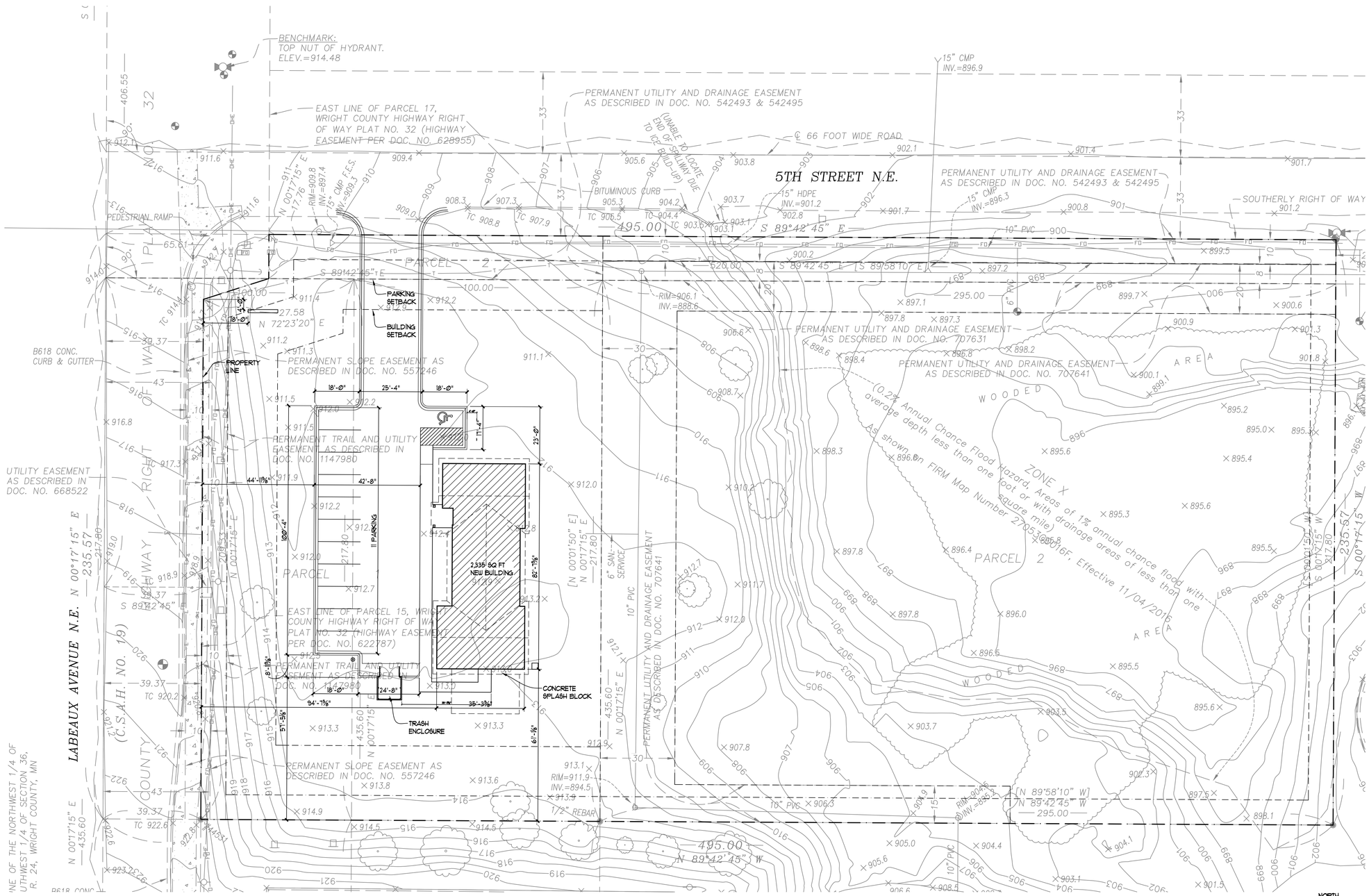
PARKING REQUIREMENTS 6 SPACES PER DR = 6 SPACES

PARKING PROVIDED = 12 SPACES

SEE AS1Ø2 FOR ENLARGED SITE PLAN



A1 AS1Ø1 SITE PLAN
1" = 20'

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1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

SITE PLAN

AS101

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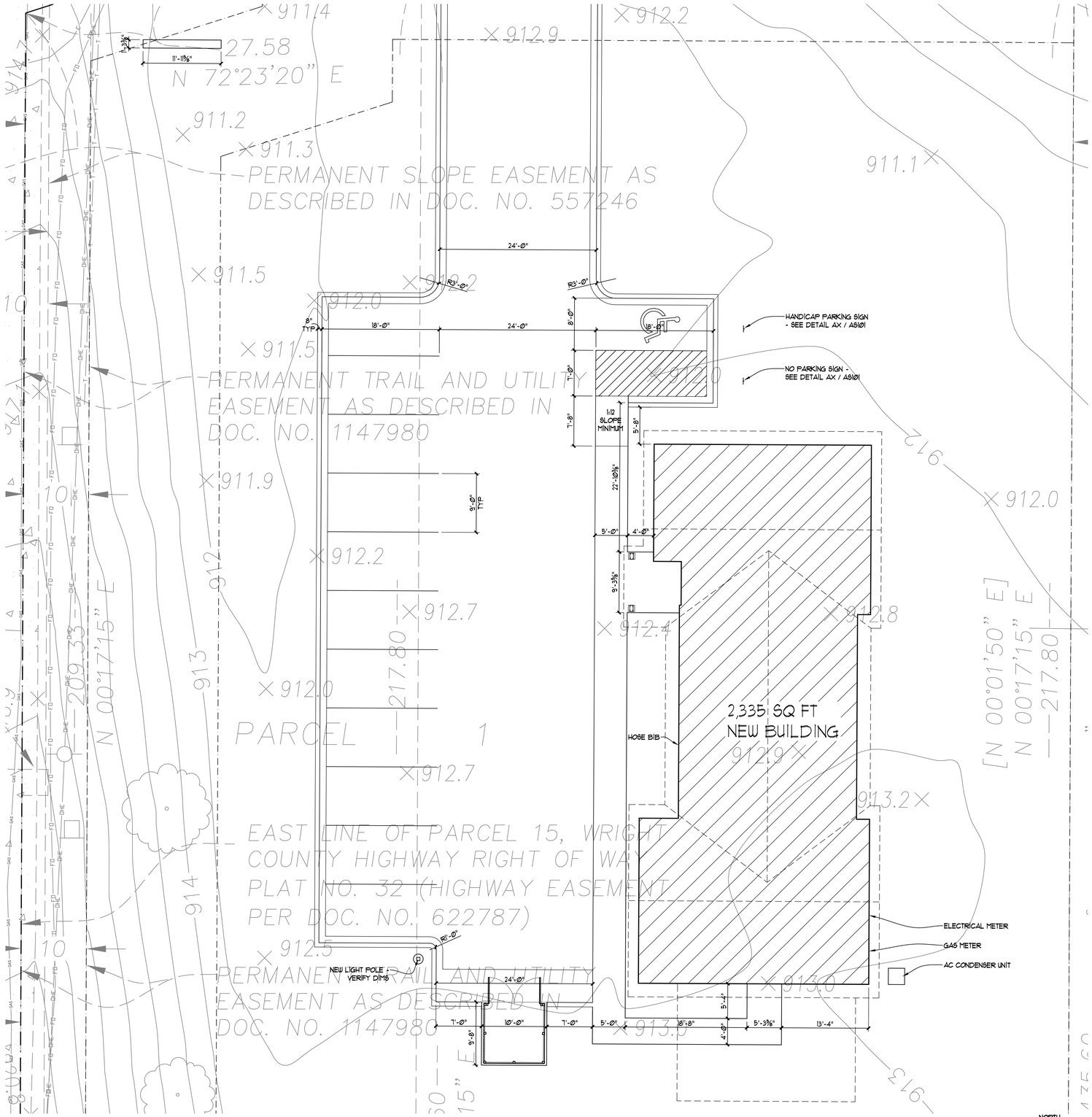

A1 / AS102 ENLARGED SITE PLAN
⅛" = 1'-0"

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NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

SITE PLAN

AS102

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PLAN NOTES:

1. DIMENSIONS ON FLOOR PLANS ARE FROM FACE OF FRAMING OR GRID LINE
2. DIMENSIONS TO WALLS WITH RESILIENT CHANNELS ARE TO STUDS, NOT CHANNELS
3. DIMENSION ON HINGE SIDE OF DOOR JAMB IS 6" UNLESS NOTED OTHERWISE, OPENING IS DRAWN 2" WIDER THAN DOOR, FINISHED DIMENSION IS 6⅜" FROM BUTT SIDE OF DOOR TO FACE OF ADJACENT WALL
4. PARTITIONS ARE TYPE "A" UNLESS NOTED OTHERWISE
5. DIMENSIONS NOTED AS "VERIFY" ARE THE LESS CRITICAL DIMENSIONS AND IDENTIFY THE LOCATION WHERE ADJUSTMENTS CAN BE MADE TO MATCH ACTUAL CONDITIONS
6. ANY ADJUSTMENTS TO DIMENSIONS SHALL BE APPROVED BY THE ARCHITECT
7. ALL ANGLED WALLS ARE 45° UNLESS NOTED OTHERWISE
8. BACKING FOR LARGE EQUIPMENT TO BE FASTENED TO 18 GA STUDS
9. ALL BACKING TO BE INSTALLED PRIOR TO INSTALLATION OF PLUMBING AND ELECTRICAL

SEE SHEET A-101a FOR ELEVATION TAGS
SEE SHEET A-101a FOR ACCESSORY, EQUIPMENT, AND PLUMBING TAGS
SEE SHEET A-601 FOR WALL & PARTITION TYPES
SEE SHEET A-411 FOR ENLARGED PLANS

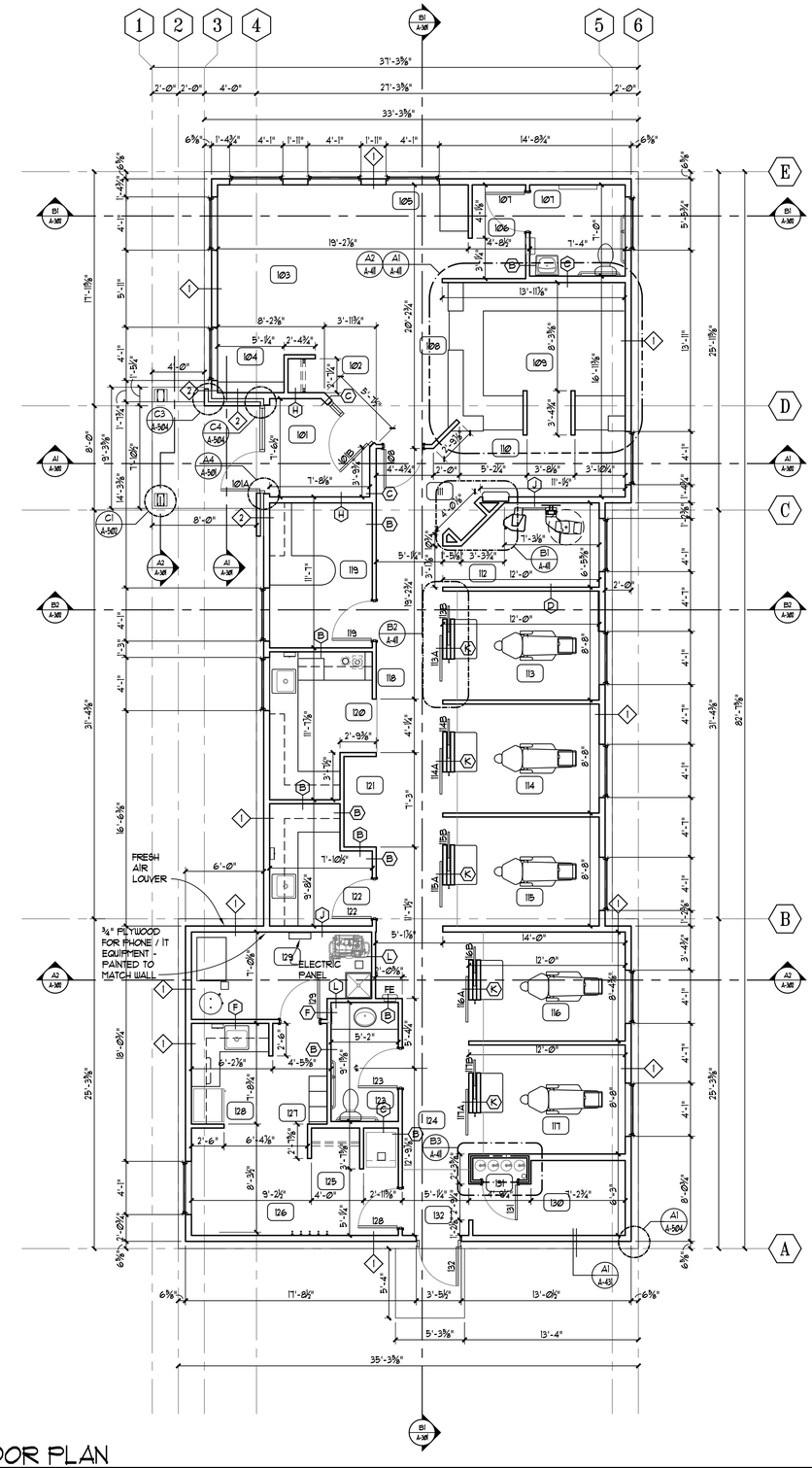
ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CEILING HT	REMARKS
101	VESTIBULE	PT1	PT2	PNT 1	GYP BD	10' - 0"	
102	COATS	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
103	PATIENT LOUNGE	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
104	KIDS AREA	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
105	HOSPITALITY	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
106	HALL	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
107	TOILET ROOM	PT 1	PT 4	PT 1 & 2 , PNT 1	ACT 1	9' - 0"	
108	RECEPTION	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
109	RECEPTIONIST	CPT 1	CPT 2	PNT 1 & 2	ACT 1	9' - 0"	
110	REAPPOINT	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
111	GOODBYE MIRROR / TOYS	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
112	PAN	CPT 1	CPT 2	PNT 1	ACT 1	8' - 0"	
113	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
114	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
115	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
116	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
117	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
118	HALL	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
119	DOCTOR OFFICE	CPT 1	CPT 2	PNT 1	ACT	9' - 0"	
120	STERILE	VCT 1	VB 1	PNT 1 & 2	ACT 1	9' - 0"	
121	CART STORAGE	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
122	LAB	VCT 1	VB 1	PNT 1	ACT 1	8' - 0"	
123	TOILET ROOM	PT 1	PT 4	PT 1 & 2 , PNT 1	ACT 1	8' - 0"	
124	HALL	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
125	LAUNDRY / GOWNS	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
126	COAT HANING	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
127	STAFF LOCKERS	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
128	STAFF LOUNGE	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
129	MECHANICAL / UTILITY ROOM	CONC	VB 1	PNT 1	GYP BD	12' - 0"	
130	STORAGE	VCT 1	VB 1	PNT 1	ACT 1	8' - 0"	
131	GAS CLOSET	VCT 1	VB 1	PNT 1	GYP BD	12' - 0"	
132	STAFF ENTRY	VCT 1	VB 1	PNT 1	ACT 1	10' - 0"	

KEY:

ACT	ACOUSTIC CEILING TILE	GYP BD	GYPSUM BOARD
CONC	FINISHED CONCRETE	PNT	PAINT
CPT	CARPET	VCT	VINYL COMPOSITION TILE
CT	CERAMIC TILE	VB	VINYL BASE

SEE FINISH MATERIALS SCHEDULE (SHEET A-131) FOR MORE INFORMATION ON FINISHES



A1 / A-101 FLOOR PLAN
3/16" = 1'-0"

NORTH

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Date

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Revisions

1728
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HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

3/16" = 1'- 0"

FLOOR PLAN
ROOM FINISH SCHEDULE

A-101

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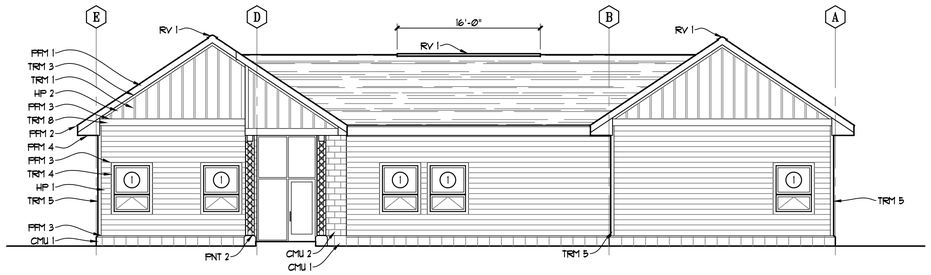
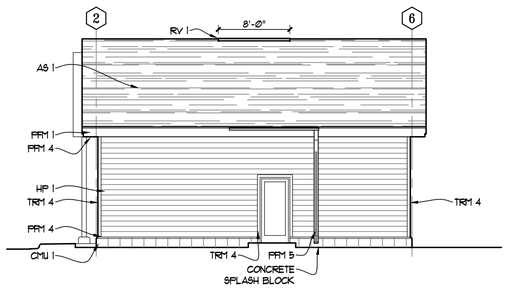
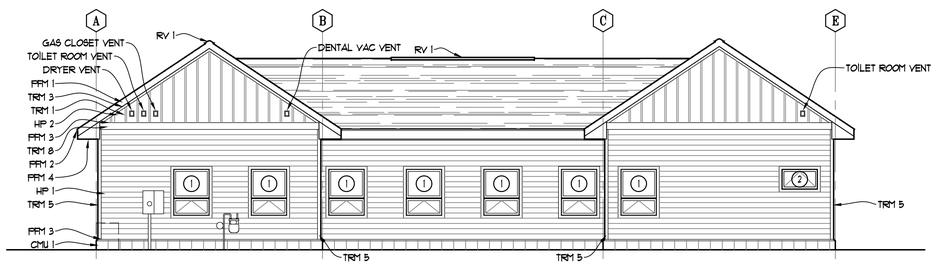


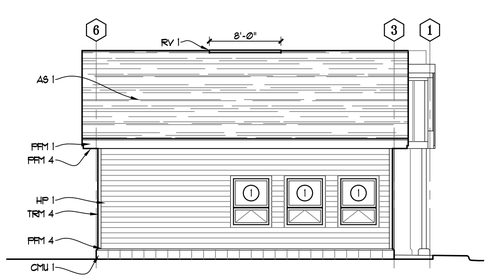
D1 / A-201 EXTERIOR ELEVATION - WEST
1/8" = 1'- 0"



C1 / A-201 EXTERIOR ELEVATION - SOUTH
1/8" = 1'- 0"



B1 / A-201 EXTERIOR ELEVATION - EAST
1/8" = 1'- 0"



A1 / A-201 EXTERIOR ELEVATION - NORTH
1/8" = 1'- 0"

EXTERIOR FINISH SCHEDULE

FINISH	ITEM	MANUFACTURER	COLOR	REMARKS
AS 1	ASPHALT SHINGLES HERITAGE PREMIUM	TAMKO	RUSTIC BLACK	
CMU 1	4" CONCRETE MASONRY SILL UNIT 12512000000001	AMCON BLOCK	ONYX	
CMU 2	4" CONCRETE MASONRY UNIT BURNISHED	AMCON BLOCK	ONXY	
GRT 1	GROUT PRISM PIGMENTS	PRISM CORPORATION	PRISM PS140 SLATE GREY	
HP 1	HARDIEPLANK LAP SIDING SELECT CEDARMILL	JAMES HARDIE	BOOTHBAY BLUE	
HP 2	HARDIEPANEL VERTICAL SIDING SELECT CEDARMILL	JAMES HARDIE	LIGHT MIST	
FFM 1	FASCIA CLADDING	FIRESTONE UNA - CLAD	BONE WHITE	
FFM 2	DRIP EDGE	FIRESTONE UNA - CLAD	BONE WHITE	
FFM 4	FLASHING	FIRESTONE UNA - CLAD	BONE WHITE	
FFM 5	SOFFIT 8" UC-500 AND UC-500V	FIRESTONE UNA - CLAD	BONE WHITE	1
FFM 4	GUTTER 4"x3" BEVELED GUTTER	FIRESTONE UNA - CLAD	BONE WHITE	
PTX 1	EXTERIOR PAINT	SHERWIN WILLIAMS	SW 7007	
PTX 2	EXTERIOR PAINT	SHERWIN WILLIAMS	SW 7593	
RV 1	RIDGE VENT SHINGLEVENT II	AIR VENT INC	CHARCOAL	
TRE 1	1x6 TREX PLANK 6' LENGTHS	TREX	WINCHESTER GREY	
TRM 1	EXTERIOR COMPOSITE TRIM WOOD TEXTURE ⅝" x 2" ACTUAL	MIRATEC	PRIMED TO PAINT	2
TRM 2	EXTERIOR COMPOSITE TRIM SMOOTH ⅝" x 2" ACTUAL	MIRATEC	PTX 1	
TRM 3	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 4 NOMINAL	MIRATEC	PTX 1	
TRM 4	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 4 NOMINAL	MIRATEC	PTX 1	
TRM 5	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 5 NOMINAL	MIRATEC	PTX 1	
TRM 6	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 5 NOMINAL	MIRATEC	PTX 1	
TRM 7	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 6 NOMINAL	MIRATEC	PTX 1	
TRM 8	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 10 NOMINAL	MIRATEC	PTX 1	
TRM 9	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 2 NOMINAL	MIRATEC	PTX 1	
WIN 1	WINDOW ALUMINUM CLAD	MARVIN	STONE WHITE	

NOTE:

CONTRACTOR SHALL SUBMIT SAMPLES OF THESE ITEMS FOR THE ARCHITECT'S REVIEW

REMARKS:

1 SEE REFLECTED CEILING PLAN A-111 FOR LOCATION OF VENTED SOFFITS

2 TO BE PAINTED TO MATCH HARDIEPANEL VERTICAL SIDING LIGHT MIST

WINDOW SCHEDULE

WINDOW	MANUFACTURER	UNIT NUMBER	FRAME SIZE	ROUGH OPENING	REMARKS
1	MARVIN	CWUN4840 / CWUN4824	4'-0" X 5'-2¼"	4'-1" X 5'-3½"	1 , 3
2	MARVIN	CWUN4828	4'-0" X 2'-4"	4'-1" X 2'-5¼"	2 , 3

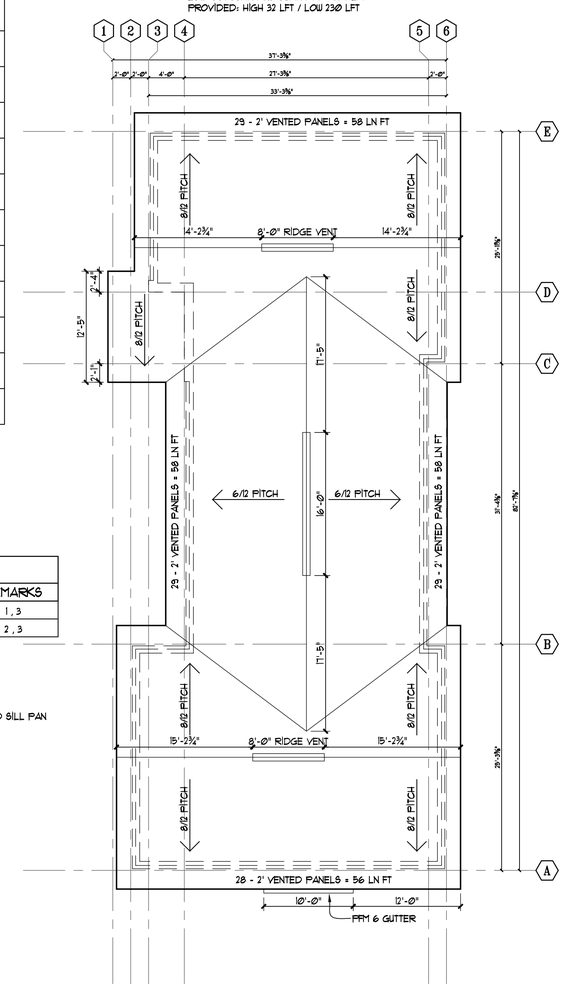
REMARKS:

1 STATIONARY UPPER AND OPERATING LOWER, GRAY TINTED LOW E II GLASS, CLADDING COLOR IS STONE WHITE

2 OPERATING WINDOW, GRAY TINTED LOW E II GLASS, CLADDING COLOR IS STONE WHITE

3 RO DIMENSIONS REFER TO STUD FRAMING AND ARE ADJUSTED FROM MANUFACTURER'S SUGGESTION TO ACCOMMODATE SLOPED SILL PAN DETAIL AS SHOWN

ATTIC VENTING
REQUIRED: 2336 SQ FT / 300 = 7.79 SQ FT = 1121 SQ IN
HIGH: 561 SQ IN / 18 SQ IN / LFT = 32 LFT
LOW: 561 SQ IN / 25 SQ IN / FT = 224 LFT
PROVIDED: HIGH 32 LFT / LOW 230 LFT



A2 / A-201 ROOF PLAN
1/8" = 1'- 0"

NORTH

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of

MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK CLR
Drawn Checked

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NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

1/8" = 1'- 0"

EXTERIOR ELEVATIONS
EXTERIOR FINISH SCHEDULE

A-201

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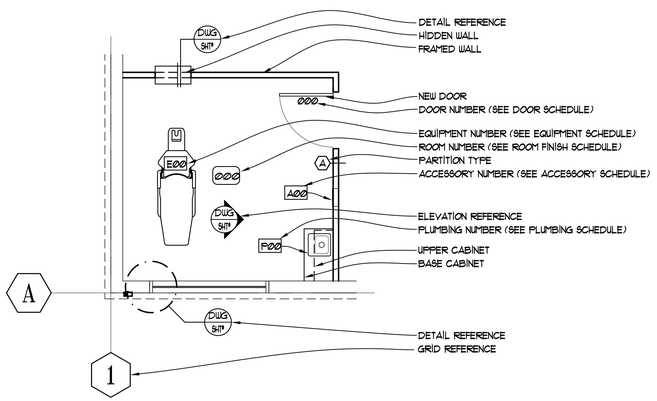
NEW BUILDING FOR
HANOVER DENTAL

KEY TO SYMBOLS



NOTE:

ALL CONTRACTORS / SUBCONTRACTORS ARE RESPONSIBLE FOR BEING FAMILIAR WITH THE INFORMATION ON ALL SHEETS IN THIS SET OF DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES BETWEEN INFORMATION FOUND IN DIFFERENT PLACES WITHIN THESE DRAWINGS AND SPECIFICATIONS ARE TO BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY, AND WORK BASED ON THAT INFORMATION IS TO NOT BE PERFORMED UNTIL THE ARCHITECT HAS CLARIFIED THE ISSUE.

GENERAL NOTES:

1. DO NOT SCALE THESE DRAWINGS. IF THERE IS A DIMENSIONAL QUESTION, CONTACT THE ARCHITECT FOR CLARIFICATION.
2. ALL DESIGN / BUILD DRAWINGS ARE TO BE REVIEWED WITH THE ARCHITECT PRIOR TO BEING SUBMITTED FOR PERMIT.
3. ALL SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH OTHER SUBCONTRACTORS TO ENSURE NO DELAYS.
4. ALL WORK FROM ALL TRADES SHALL CONFORM TO THE LATEST PROVISIONS OF ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES AND REGULATIONS.

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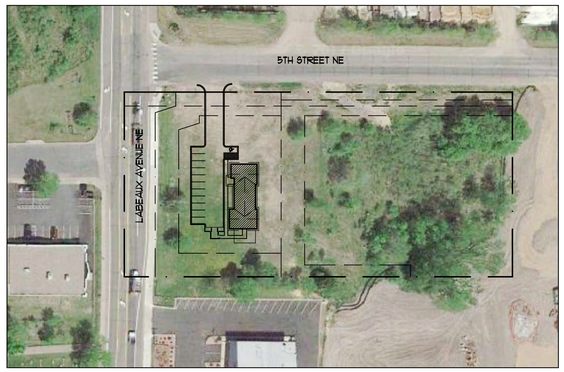
roger@karkela.com

BUILDING STATISTICS - 2012 IBC

GROUP / DIVISION	B
DESCRIPTION OF OCCUPANCY	DENTAL
TYPE OF CONSTRUCTION	V B - NON-SPRINKLERED
AREA	2,335 SQ FT
BUILDING HEIGHT	18', 1 STORY
TOTAL OCCUPANTS	
DENTAL @ 100 SF/OCC	2,335 SQ FT / 100 SF/OCC = 23

LOCATION MAP: NOT TO SCALE



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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of

MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

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Date

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HANOVER
DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

TITLE SHEET

G-001

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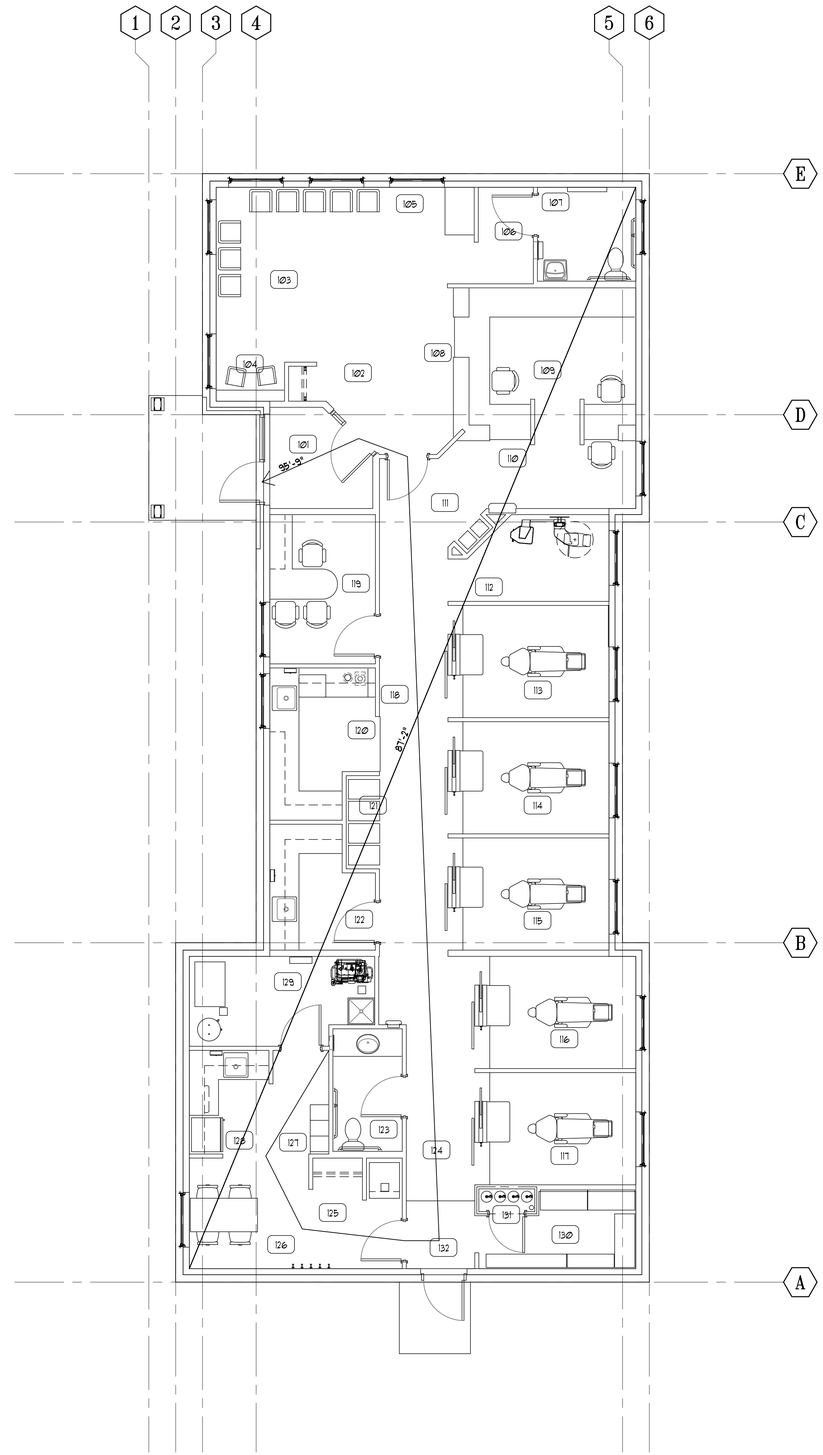
CODE ANALYSIS - 2012 IBC

OCCUPANCY	23
SPRINKLERED	NO
EXITING	
OCCUPANT LOAD GREATER THAN 49	NO
COMMON PATH OF TRAVEL GREATER THAN 100'	NO
NUMBER OF EXITS REQUIRED	1
MAXIMUM OVERALL DIAGONAL DIMENSION	N/A
½ DIAGONAL DIMENSION	N/A
DISTANCE BETWEEN REQUIRED EXITS	N/A
EXIT SIGNS REQUIRED	NO
EMERGENCY LIGHTING REQUIRED	NO
PLUMBING FIXTURES	
WATER CLOSETS	
FEMALE	1
MALE	1
LAVATORIES	
FEMALE	1
MALE	1
DRINKING FOUNTAINS	0
SERVICE SINK	1



A1 G-001 EXIT PLAN
3/16" = 1'-0"

NORTH

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HANOVER
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411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

1/8" = 1'- 0"

EXIT PLAN

G-002

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STANDARDS AND REFERENCES

Materials and construction methods specified in the plans reference the Minnesota Department of Transportation (MNDOT) Standard Specifications for Construction. The Contractor shall obtain a current copy of MNDOT's Standard Specifications for Construction and review the specification sections applicable to the plans.

It is mandatory that the Contractor be knowledgable of the applicable MNDOT specification sections during construction. No additional compensation will be paid to the Contractor for additional work due to unfamiliarity with the applicable specification sections.

Contractor shall refer to the geotechnical report for additional requirements and recommendations.

EARTHWORK NOTES

PROTECTION

1) The Contractor shall maintain all benchmarks, monuments and other reference points. If any are disturbed or destroyed, they shall be replaced at the Contractor's expense.

2). The Contractor shall contact the Engineer immediately if any unknown functioning underground utilities are discovered during the course of the project, which may interfere with construction. The Contractor shall wait for instructions before proceeding.

3) The Contractor shall be responsible for any damage to functioning underground or overhead utility lines. Damaged utilities shall be repaired immediately and service restored at no additional cost to the Owner.

4) The Contractor shall provide barricades, shoring and other safety measures required by OSHA.

5) The Contractor shall protect all adjacent existing facilities from damage, including, but not limited to settlement due to excavations, erosion, etc. The Contractor shall be responsible for the repair of such damages.

PROJECT CONDITIONS

1) The Contractor shall become familiar with the project site, and compare actual conditions in the field with those shown on the project drawings. The Contractor shall contact the Engineer immediately if any inconsistencies are found between the existing conditions and the project drawings.

2) No extra compensation will be allowed due to unusual conditions which could have reasonably been determined or anticipated by examination of the project site and project drawings.

PLAN GRADES

1) Elevations shown on the project drawings are finished grade elevations, unless noted otherwise. Elevations not specifically indicated shall be determined by interpolation of uniform slope between spot elevations and/or contours, or between such points and existing elevations. Adequate slope shall be constructed to provide positive drainage away from structures.

2) If inconsistencies exist on the plans between contours and spot elevations, the spot elevations shall govern.

TOPSOIL

1) Adequate imported and/or stockpiled salvageable topsoil shall be utilized for this project.

2) Topsoil shall be free of clay lumps, roots, brush, large stones, and debris, and shall have a minimum organic content of 5 percent.

3) Remove topsoil to its entire depth from areas, which are to be disturbed by new construction work. Existing lawn areas, which are not in the proposed construction area(s) shall remain in place. The Contractor shall field verify topsoil depths between any soil borings, and remove to greater depths than indicated in the soils report if such conditions are encountered. Salvaged topsoil shall be maintained in stockpiles.

4) Stockpiled topsoil shall only be used for finish grading of new lawn areas. Excess topsoil shall be removed from the site by the Contractor.

5) Protect all existing lawn areas, plantings, and other landscaping to remain in place. Any damaged areas shall be replaced at the Contractor's expense.

UNFORESEEN OBSTACLES

1) The Engineer shall be contacted immediately if any unforeseen major obstacles are encountered during excavation, such as abandoned wells, abandoned or functioning utilities, subsurface streams or rock, etc., which would add significant expense to the Contractor.

2) The Contractor shall still be responsible for completing all work required for this project where encountered conditions may be reasonably determined from a soils/geotechnical report and review of the project site and contract documents.

DEWATERING

1) Surface drainage shall be provided during construction in a manner so as not to create a nuisance to adjacent areas.

2) All excavations shall be free of water during construction within the excavations. Dewatering shall be accomplished by pumping or trenching, and shall be conducted regardless of the cause, source, or nature of the water.

3) Berms, cofferdams, or piling shall be provided as necessary to protect excavations.

4) Excavations shall be sloped to drain, and necessary pumps, hoses and other equipment shall be provided to keep excavation free of water.

5) All temporary equipment used for dewatering shall be removed from the site when no longer necessary.

FILLING AND GRADING

1) Rough grading of all areas within the construction limits, including adjacent transition areas shall be reasonably smooth and compacted. The rough graded subgrade surface generally shall not be more than 6 inches above or below the established subgrade elevations. All ditches, swales, and gutters shall be graded to drain adequately. The subgrade shall be evenly sloped to provide drainage away from building walls in all directions at a minimum slope of 1%. The Contractor shall provide rounded transitions at top and bottom of banks and other breaks in grade.

2) Fill and backfill materials shall be inorganic soils free of roots, rocks, boulders, and debris.

3) Bedding material or granular backfill larger than 2" in its largest dimension shall not be allowed within 2 feet of new underground pipes. Material larger than 3" in its largest dimension shall not be allowed within 1 foot of subgrade elevation.

4) Imported compacted fill material shall have a maximum of 12 percent passing the #200 sieve, by weight. The proposed fill material shall be tested by an independent testing lab for suitability as compacted fill for this project. The Contractor shall pay for the testing services and provide a copy of the test results to the Engineer.

5) The Contractor shall fill and grade as necessary to bring surface to required elevations, and provide all materials necessary, whether obtained on or off the project site.

6) The Contractor shall place compacted material in uniform horizontal lifts not exceeding 8" in depth for clay soils, and 12" in depth for sandy soils, and compact as required to achieve specified density.

7) Compaction shall be obtained with the use of vibratory rollers or rammers. During compaction, fill material shall contain moisture content, as necessary, for the required compaction as indicated by an independent testing laboratory. The moisture shall be uniform throughout each lift. If the material is too dry, water shall be added with approved equipment and methods, which will not wash out fine material. If the material is too wet, it shall be dried by harrowing, disking, blading, or other approved methods recommended by the independent testing laboratory.

8) Areas designated for pavement in excavated (cut) areas shall be scarified to a depth of 1 foot. The Contractor shall bring the subgrade material to optimum moisture content as indicated by the independent testing laboratory, and compact the subgrade to the specified density listed below for soils underneath pavements.

9) The Contractor shall not place fill material when either the fill material, or the material on which it is to be placed, is frozen. Any soft or yielding areas appearing in the fill resulting from frost, rain, or any other reason whatsoever shall be scarified, removed, recompacted and/or otherwise rectified to the satisfaction of the Engineer before any new fill is placed.

COMPACTION TESTS

1) Utility Trench Backfill: The Contractor's independent soils technician and approved testing laboratory shall perform in-place density and moisture tests at random depths in trench backfill at 100 foot intervals, or fraction thereof. Compaction of trenches shall be a minimum of 95% of the maximum dry density (as determined by the independent testing laboratory) in lawn areas, and at depths greater than 3 feet below areas designated for pavement. Compaction of trenches at depths within 3 feet of paved surfaces shall be a minimum of 100% of the maximum dry density.

2) Compacted Fill Under Pavements: Compaction tests shall not be required beneath new pavements. Adequate compaction of materials under pavements shall be determined by test rolling the subgrade, and checking for excessive rutting. Test rolling shall be performed as per MNDOT Spec. 2111.

3) Areas exhibiting a failed compaction test shall be re-compacted and re-m tested to the satisfaction of the Engineer prior to acceptance of the project.

4) Copies of all compaction testing and test roll observation reports shall be provided to the Engineer.

5) Optimum moisture-density relationship will be determined by testing laboratory in accordance with ASTM D698 and maximum density determination made by Method D of ASTM D698 unless otherwise noted in these specifications.

SUBGRADE PREPARATION

1) Finished subgrade elevations shall be as follows:

a) Bituminous pavement: 9" below finish grade.

b) Concrete pavement/apron: 12" below finish grade.

c) Concrete sidewalk: 8" below finish grade (plus thickened edge).

d) Lawn areas: 4" below finish grade.

e) Planting areas: See Landscaping Plans/Details

2) The tolerance for areas to be paved shall not exceed 0.15 feet above or below plan subgrade.

3) The Contractor shall protect newly graded areas from erosion. Settlement or washing that occurs prior to acceptance of the Work shall be repaired and grades re-established.

DISPOSAL OF EXCESS WASTE MATERIALS

1) The Contractor shall remove excess excavated material, debris, and waste materials, from the Owner's property and legally dispose of it in accordance with all governing codes.

SPREADING TOPSOIL AND FINISH GRADING

1) Scarify subgrade to depth of 3" prior to placing topsoil. Spread topsoil evenly over complete subgrade as follows:

a) Lawn Areas on Private Property: Spread 4" lightly compacted layer of topsoil.

b) Lawn Areas in Public Right-of-way: Per City requirements

c) Planting Areas: See Landscape Plan/Details

2) Finish grade accurately within 0.15 feet of finish grades shown on the project drawings, less the thickness of any sod where it is to be installed. Slope all grades away from buildings to provide positive drainage.

3) Prepare topsoil suitable to receive seed and/or sod. Grading of areas designated for topsoil shall be reasonably smooth and even, and in accordance with MNDOT Spec. 2105.3G and 2574.3A4. All debris and stones exceeding 3" in diameter shall be removed from the soil surface of these areas prior to seeding. Areas compacted by vehicles or storage of materials shall be plowed, disked and harrowed to match texture of other finish graded areas.

4) Grass seed shall be in accordance with MnDOT Spec. 3876, seed mix No. 25-131, applied at the rate of 220 pounds per acre or as indicated on the landscape plans. Mulch shall be applied and discanchored to all seeded areas and shall meet the requirements of MnDOT Spec. 3882, Type 3 or as otherwise indicated by the Engineer.

UTILITY NOTES

STANDARD SPECIFICATIONS

1) The following standard specifications shall apply to this project:

a) Minnesota Plumbing Code - MN Rules Chapter 4714 (MN Dept. of Labor and Industry-MNDLI)
b) Uniform Plumbing Code, latest edition (UPC)
c) "What you need to know about utility service connections in the 2015 Minnesota Plumbing Code" http://www.dli.mn.gov/CCLD/PDF/pe_usc.pdf
d) City Engineers Association of Minnesota (CEAM) Standard Specifications
e) American Society for Testing Materials (ASTM)
f) American National Standards Institute (ANSI)
g) American Water Works Association (AWWA)
h) Minnesota Department of Transportation "Standard Specifications for Construction" (MN/DOT)

2) The Contractor shall comply with all local ordinances and codes

3) Certifications of all utility materials, as well as shop drawings, shall be submitted to the Engineer for review

POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS - SANITARY

1) Smooth walled polyvinyl chloride pipe and fittings shall consist of SDR 26 or SDR 35 pipe, unless noted otherwise, and meet the requirements of ASTM D3034 and Section 2621.2A5 of the CEAM Standard Specifications

2) All pipe and fittings shall be SDR 35 for depths of up to 20 feet, and SDR 26 for depths exceeding 20'.

3) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAM Standard Specifications.

DUCTILE IRON (DIP) PIPE AND FITTINGS - WATER

1) Ductile iron pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A1 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 605.5 of the UPC, and Section 2611.3B of the CEAM Standard Specifications. Stainless steel fasteners shall be prohibited.

3) 6" pipe shall be Class 52. 8" and larger pipe shall be Class 50.

POLYVINYL CHLORIDE (C900 PVC) PIPE AND FITTINGS - WATER

1) Polyvinyl chloride pressure pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A3 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 605.4 of the UPC, and Section 2611.3B of the CEAM Standard Specifications.

GATE VALVES - WATER

1) Gate valves shall meet the requirements of Sections 2611.2C and 2611.3D of the CEAM Standard Specifications

HYDRANTS - WATER

1) Hydrants shall meet the requirements of Sections 2611.2B and 2611.3D of the CEAM Standard Specifications

2) Hydrants shall be Waterous WB67, or approved equal

BLOCKING AND ANCHORING - WATER

1) Water main blocking and anchoring shall meet the requirements of Section 2611.3A4 of the CEAM Standard Specifications

2) Provide thrust reaction blocking consisting of concrete with a minimum 28 day compressive strength of 2000 psi.

3) Place between undisturbed ground and the fitting to be anchored. Place thrust blocking so that the pipe and fitting joints are accessible for repair.

4) Mega-Lugs may be used in lieu of thrust block if allowed by local utility.

WATER SERVICE PIPE AND CURB STOPS

1) Copper tubing for water services shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2D of the CEAM Standard Specifications

2) HDPE pressure pipe for water services shall meet the requirements of ASTM D2239, ASTM D2737, ASTM D3035, AWWA C901, CSA B137.1, and Section 2611.2D of the CEAM Standard Specifications

3) Curb stops for water services Section 2611.2D of the CEAM Standard Specifications

HIGH DENSITY POLYETHYLENE PIPE (HDPE) AND FITTINGS - STORM

1) HDPE pipe and fittings shall meet the requirements of ASTM F2306, and Section 2621.2A8 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements Section 2621.3A3 of the CEAM Standard Specifications

3) Minimum wall thickness shall be 0.035 inches for 12 and 15 inch diameter pipe, and shall be 0.05 inches for 18 and 24 inch diameter pipe.

4) HDPE storm sewer crossing above and within 10-ft of existing or proposed water main or services shall meet the following standards per the MN plumbing code:

4" - 10" Diameter:	AASHTO M252
12" - 60" Diameter:	ASTM F2306
Fittings:	ASTM D3212

REINFORCED CONCRETE SEWER PIPE (RCP) AND FITTINGS - STORM

1) RCP pipe and fittings shall meet the requirements of ASTM C76, and Section 2621.2A3 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAM Standard Specifications

3) The ASTM strength class of pipe shall be Class III unless otherwise shown on the Plans.

4) The pipe shall be drawn together by some approved method of jacking or winching. This pressure must be maintained until sufficient backfill is placed to keep the joint from opening.

END SECTIONS - STORM

1) End sections shall be provided at all pipe inlets and outlets.

2) The end sections shall consist of material matching the material of the pipe, which it is being connected to. Materials and joints shall be as per the specifications described above for the applicable pipe material.

3) The last 3 joints of RCP shall be tied, and the end section shall the be provided with an approved trash guard.

MANHOLES AND CATCH BASINS - SANITARY AND STORM

1) Unless otherwise noted, manhole and catch basin structures shall consist of precast concrete, and meet the requirements of Section 719.6 of the UPC (sanitary only), and Sections 2621.2C and 2621.3D of the CEAM Standard Specifications

2) Catch basins shall be provided with the following castings:

a) Along curbline: 27" Structure: Neenah R-3075-L, 48" (or larger) Structure: Neenah R-3067-L

b) Isolated (in paved area): Neenah R-2553

c) Isolated (in vegetated area): Neenah R-2560-EA w/ type "C" grate

3) Manholes shall be provided with the following castings:

a) Sanitary: Neenah R-1733 w/ concealed pick hole

b) Storm: Neenah R-1733 lettered "STORM", center pick hole

INSTALLATION

1) Unless otherwise noted, installation of all water and sewer pipe, fittings, and appurtenances shall be as per the CEAM Standard Specifications.

TESTING REQUIREMENTS

1) Water and sewer pipe, fittings, and appurtances shall be inspected and tested as per Sections 2611.3E-2611.3H and 2621.3F-2621.3H of the CEAM Standard Specifications.

2) In the event of discrepancies between the testing requirements of the MN Plumbing Code and the CEAM Standard Specifications, the most stringent will govern.

BITUMINOUS PAVEMENT NOTES

STANDARDS

1) Minnesota Standard Specifications for Highway Construction, most recent edition.

GRANULAR BASE COURSE

1) Compacted thickness of finished base course: 6"

2) Process material for aggregate base shall meet the requirements of MNDOT Spec. 3138, Class 5..

3) The subgrade shall be tested and observed to the satisfaction of the Engineer prior to placement of aggregate base material. Install base material as required to accommodate new plan grades.

4) Wet base material to approximate optimum moisture content either prior to delivery to job site or as soon as practical after being placed on subgrade.

5) Place in layers not exceeding 4" thickness (loose).

6) Compact with pneumatic or vibrating steel drum rollers.

7) After base course has been graded and compacted, thoroughly wet and slush roll with roller until all aggregates are thoroughly embedded.

8) Allow base course to cure for a minimum of 72 hours prior to bituminous course application.

BITUMINOUS BASE AND SURFACE COURSE

1) Mix Designation Numbers for the bituminous mixtures on this project are per MNDOT Spec. 2360

2) Pavement smoothness requirements will be waived for this project.

3) Density for the bituminous mixture on this project will be the ordinary compaction method (MNDOT 2360.6C).

4) Bituminous Base course shall conform to MnDOT 2360, Type SPNWB330B and shall be $1\frac{1}{2}$ inches thick after compaction. Bituminous Surface course shall conform to MnDOT 2360, Type SPWEA340B and shall be $1\frac{1}{2}$ inches thick after compaction.

5) Place no asphaltic mixture when the atmospheric temperature is below 45 degrees and falling, nor should pavement be placed under wet conditions.

6) Mixing

a) Paving mixture: Uniform mixture of course aggregate, fine aggregate, mineral filler and asphaltic material.

b) Grading and mixing: Conform to applicable sections of the Minnesota Standard Specifications for Highway Construction, Section 2360.

CONSTRUCTION METHODS

1) Properly clean base course and deliver hot mix asphaltic concrete in clean tight vehicles with covers if necessary.

2) Lay to a smooth surface without segregation of material and attain compaction as early as possible. Commence rolling while the material is hot, (minimum spread temperature 250 degrees F.) as soon as it will support the roller without undue displacement or hairline cracking and continue until a minimum of 96% of maximum has been attained, no further compression can be attained and all roller marks are eliminated.

3) The completed surface: Smooth, free of pockets that will retain water and shall not vary more than 1/16" per foot nor more than 1/4" under a 16' straight edge. Entire surface must drain. No flat areas are permitted.

4) Perform all Work in accordance with the applicable requirements of the Minnesota Standard Specifications for Highway Construction.

PAINTED LINES

1) Special marking paint compound especially for striping bituminous paving in one coat.

2) Manufacturers: Pratt & Lambert, Inc.; Sherwin Williams Co. or DuPont Co.

3) Colors: Use white paint for concrete and asphalt.

4) All surfaces to be painted must be thoroughly clean and dry.

5) Lay out painted lines with chalk on pavement in accordance with Project Drawings.

6) Accurately apply paint to the chalk marks, using striping machines, 4" wide stripes.

7) Apply paint in strict accordance with the manufacturer's directions.

8) Protect all paint from damage by traffic until dry.

9) Apply handicap logo at handicap stall.

FIELD QUALITY CONTROL

1) Aggregate Base Testing:

a) The granular base course shall be test rolled and observed by the Contractor's independent soils technician as per MNDOT 2211.3C2 (Quality Compaction Method). Once the base course has been tested to the satisfaction of the Engineer, pavement may be placed.

b) One mechanical analysis (ASTM D-422) per 500 cubic yards of base or fraction thereof.

2) Bituminous Testing:

a) Test temperature of first truck.

b) Ordinary compaction (MNDOT 2360.6C)

CONCRETE PAVEMENT, CURB & GUTTER, AND SIDEWALK

STANDARDS

1) ACI 318, ACI 315, CRSI, ACI 301, latest adoptions.

2) Minnesota Standard Specifications for Construction, most recent edition

GRANULAR BASE COURSE MATERIAL

1) Compacted thickness of finished base: 6" - Concrete Pavement/Aprons
4" - Concrete Sidewalk

2) Base material shall consist of MNDOT 3149.2B2 Select Granular Borrow.

AGGREGATES

1) Coarse: MnDOT Spec. 3137.

2) Fine: MnDOT Spec. 3126.

WATER

1) Clean, fresh and potable, MnDOT Spec. 3906.

AIR ENTRAINING ADMIXTURES

1) ASTM C260.

2) Provide entrainment of 4 - 7 percent by volume.

PORTLAND CEMENT

1) ASTM C150, Type I plus an approved air entraining agent, or Type IA air-entraining Portland cement.

OTHER ADMIXTURES

1) MnDOT Spec. 3113.

2) Calcium Chloride or materials containing chlorides or nitrates shall not be allowed.

PROPORTIONING AND DESIGN OF MIXES

1) Concrete Classifications

a) Curb and gutter, slip-formed concrete: MNDOT Spec. 2461, Mix Design 3F32

b) Sidewalk, aprons, incidental concrete, manual curb & gutter: MNDOT Spec. 2461, Mix Design 3F52

c) Concrete pavements: MNDOT Spec. 2301, Mix Design 3A41

d) Repair concrete, fast strength concrete: MNDOT Spec. 2301, Mix Design 3A41HE

2) Concrete Specifications:

a) 3F32: $\frac{3}{4}$ - 3" slump, 4500 psi, 5-8% air

b) 3F52: 2 - 5" slump, 4500 psi, 5-8% air

c) 3A41: 2 - 5" slump, 4500 psi, 5-8% air

d) Temperatures of all concrete during placement shall be 50-deg F to 90-deg F

CONCRETE PLACEMENT

1) Place concrete as soon as possible after mixing. Place before initial set has occurred, and in no event after it has contained its water content for more than one hour.

2) Avoid overworking concrete or allowing concrete to fall unrestricted for excessive vertical distances, and other situations which can cause segregation of the aggregates.

3) Concrete pavements shall be placed in accordance with applicable portions of MnDOT 2301.

4) Sidewalks shall be placed in accordance with MnDOT 2521.

5) Curb and gutter shall be placed in accordance with MnDOT 2531.

PROTECTION

1) Provide adequate protection against rain, sleet and snow before and during placement and finishing of concrete.

2) Protect concrete from premature drying. Provide temporary covering as required. Keep concrete continuously moist for 7 days.

3) Treat concrete with membrane curing compound in accordance with MnDOT 2531.3G.

COLD WEATHER CONCRETE

1) Do not place concrete when the atmospheric temperature is below 40 degrees F., or when the concrete is likely to be subjected to freezing temperatures within 24 hours after it has been deposited unless adequate temporary heating is provided.

2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from freezing for the following 5 days.

3) No frozen materials may be used in the concrete. Chemicals may not be used to prevent freezing unless approved by the Engineer.

4) Perform all cold weather concreting in accord with ACI 306.

HOT WEATHER CONCRETE

1) Do not place concrete when the atmospheric temperature is above 100 degrees F.

2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from temperatures over 90 degrees for the following 5 days.

3) Thoroughly wet dry porous surfaces before concreting.

4) Water reducing admixtures with retarding properties are required for all concrete placed when the temperature exceeds 80 degrees F.

5) Perform all hot weather concreting in accord with ACI 305.

FINISHING

1) Provide a broomed finish on exterior sidewalks and ramps unless noted otherwise.

QUALITY CONTROL

1) The Contractor shall hire an independent testing firm to provide the following tests:

a) The independent testing technician shall perform random field testing of the fresh concrete including slump, air content, and temperature. (ASTM C143, C173, C231 and C138). One series of the aforementioned tests shall be performed on the first load of concrete.

b) The independent testing technician shall cast a set of four compression test cylinders for the first load of concrete as well as 1 set for every 100 cubic yards, or fraction thereof, of concrete thereafter. Compression tests shall be performed on one test cylinder at 7 days and two test cylinders at 28 days. The fourth test cylinder shall be retained in the event of failing compression tests on the 28-day test cylinders.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018	43129
DATE	LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER MINNESOTA

GENERAL NOTES & SPECIFICATIONS

18005Specs.dwg

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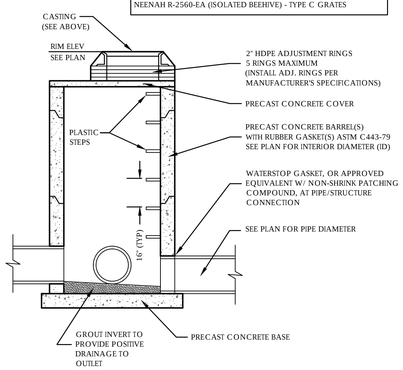

NOTES

1. SEE PLAN FOR INTERIOR DIAMETERS (ID) OF PRECAST CONCRETE BARREL SECTIONS
2. SEE PLAN FOR PIPE CUT-OUT SECTIONS
3. CONSTRUCT GROUTED FLOW LINES WITHIN STRUCTURE TO DIRECT FLOW TO OUTLET WITH NON-SHRINK GROUT
4. FILL ANNULAR SPACE BETWEEN PIPE AND BARREL WITH NON-SHRINK GROUT.
3. PRECAST CONCRETE COVERS, BARREL SECTIONS, AND BASES SHALL MEET THE REQUIREMENTS OF STANDARD MNDOT PLATES 4011 AND 4020
4. PLASTIC STEPS SHALL BE AS PER MNDOT STANDARD PLATE 4180 AND SHALL BE PLACED OVER THE OUTLET PIPE

4 STORM MANHOLE OR CATCH BASIN

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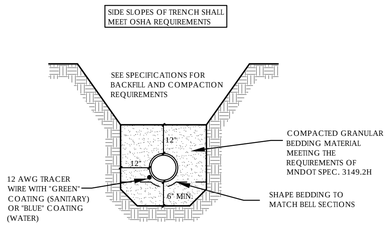

1 PIPE BEDDING DETAIL

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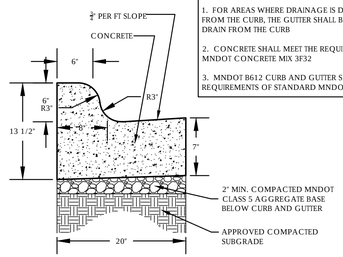

NOTES

1. FOR AREAS WHERE DRAINAGE IS DIRECTED AWAY FROM THE CURB, THE GUTTER SHALL BE TILTED TO DRAIN FROM THE CURB
2. CONCRETE SHALL MEET THE REQUIREMENTS OF MNDOT CONCRETE MIX 3F32
3. MNDOT B612 CURB AND GUTTER SHALL MEET THE REQUIREMENTS OF STANDARD MNDOT PLATE 7100

5 CURB & GUTTER (MNDOT B612)

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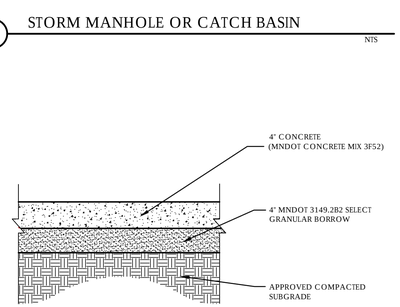
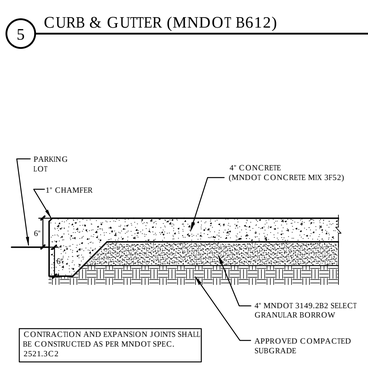


CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER MNDOT SPEC. 2521.3C2

8 CONCRETE SIDEWALK SECTION

NTS



CONTRACTION AND EXPANSION JOINTS SHALL BE CONSTRUCTED AS PER MNDOT SPEC. 2521.3C2

9 THICKENED EDGE SIDEWALK

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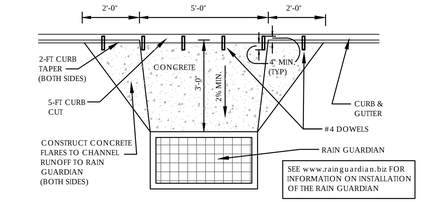

NOTES:

1. CONCRETE SHALL BE 6-IN THICK OVERLYING 6" CLEAN SAND (LESS THAN 5% PASSING THE #200 SIEVE.
2. PLACE EXPANSION JOINT BETWEEN CONCRETE AND ADJACENT CURB/GUTTER.
3. DOWEL SPACING: 18" O.C.
4. DOWELS SHALL BE PLACED AT THE CENTER OF THE SPILLWAY THICKNESS, AND SHALL HAVE A MINIMUM BAR COVER OF 3"
5. DOWELS SHALL BE PLACED ACROSS TOTAL WIDTH OF CONCRETE SPILLWAY

2 CURB AT RAIN GUARDIAN

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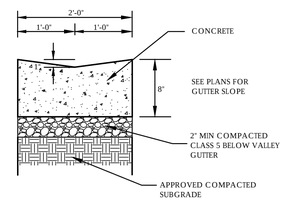

6 VALLEY GUTTER

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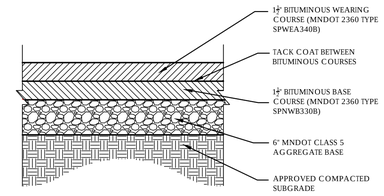

3 BITUMINOUS PAVEMENT SECTION

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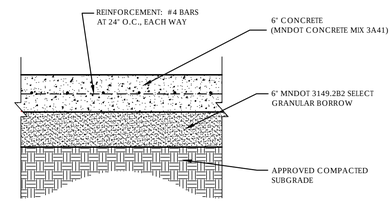

NOTE: PLACE CONCRETE REINFORCEMENT AT THE MIDDLE OF THE PAVEMENT THICKNESS

7 CONCRETE APRON/PAVEMENT SECTION

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018 — DATE

43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING
HANOVER DENTAL

HANOVER
MINNESOTA

STANDARD DETAILS

18005Details.dwg

C-100.2

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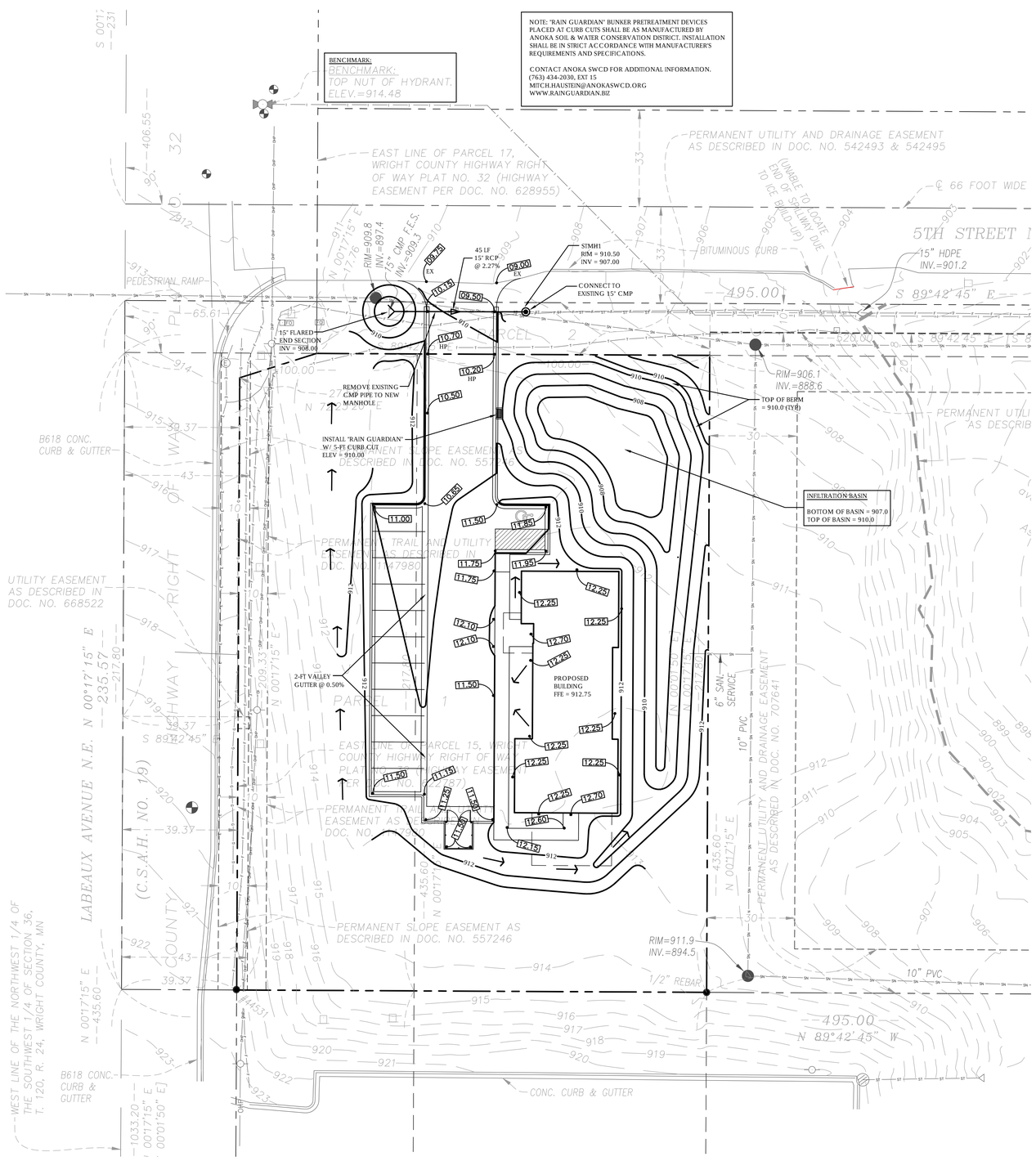


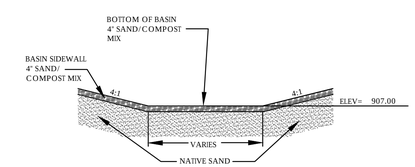
GRADING NOTES:

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS INCLUDING LOCATIONS, AND RIM AND INVERT ELEVATIONS, OF EXISTING DRAINAGE AND SANITARY STRUCTURES. LOCATION AND SIZE OF EXISTING SANITARY, WATER, AND STORM SEWER STUBS, AND EXISTING GRADES SHALL ALSO BE VERIFIED.
2. EXISTING TOPOGRAPHICAL INFORMATION WAS OBTAINED FROM A TOPOGRAPHICAL SURVEY PROVIDED BY MEYER-ROHLIN LAND SERVICES, BUFFALO, MN. (763) 682-1781
3. BENCHMARK: TOP NUT OF HYDRANT LOCATED ON THE NORTHEAST CORNER OF 5TH STREET NE AND LABEAUX AVE NE (SEE PLAN). ELEV = 914.48
4. NOTIFY ENGINEER IMMEDIATELY IF ANY INCONSISTENCIES ARE DISCOVERED BETWEEN ACTUAL SITE CONDITIONS AND WHAT IS SHOWN ON THE PLANS, WHICH ARE SIGNIFICANT ENOUGH TO ALTER THE INTENT OF THE DRAWINGS.
5. IF REQUIRED BY THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY, THE OWNER OR CONTRACTOR SHALL OBTAIN A PLUMBING PERMIT PRIOR TO THE INSTALLATION OF ANY STORM SEWER UTILITIES.
6. THE CONTRACTOR SHALL CONTACT GOPHER ONE CALL AT (800) 252-1166 FOR A UTILITY LOCATE PRIOR TO THE START OF CONSTRUCTION AND VERIFY LOCATIONS OF UTILITIES BEFORE BEGINNING WORK.
7. SEE SHEET C2 FOR STANDARD DETAILS.
8. ALL LENGTHS OF STORM SEWER OR CULVERT PIPE SPECIFIED ON THIS PLAN INCLUDE THE LENGTHS OF ANY ASSOCIATED FLARED END SECTIONS.
9. TRASH GUARDS SHALL BE INSTALLED ON ALL STORM SEWER END SECTIONS.
10. FINISHED ELEVATIONS OF LAWN/GREEN AREAS ADJACENT TO BUILDINGS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR OR TOP-OF-BLOCK ELEVATION.
11. CONTRACTOR SHALL PERFORM CALCULATIONS TO VERIFY EARTHWORK QUANTITIES. CONTRACTOR'S BID SHALL BE BASED ON EARTHWORK CALCULATIONS COMPLETED BY THE CONTRACTOR
12. SPOT ELEVATIONS ARE FLOW LINE AND/OR FINISHED GRADES, UNLESS OTHERWISE INDICATED. TOP OF CURB ELEVATIONS ARE 6" ABOVE THE FLOW LINE SPOT ELEVATION SHOWN ON THE PLANS, UNLESS NOTED OTHERWISE.
13. "EX" DENOTES EXISTING SPOT ELEVATIONS. "HP" DENOTES HIGH POINTS.
14. ALL PROPOSED ELEVATIONS ARE TOP OF PAVING OR GUTTER, UNLESS NOTED OTHERWISE. PROPOSED ELEVATIONS ARE INTENDED TO PROVIDE POSITIVE DRAINAGE TOWARDS CATCH BASINS AND/OR OUTLETS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE REQUIRED ELEVATIONS, WHICH WILL PROMOTE POSITIVE DRAINAGE THROUGHOUT THE PROJECT SITE.

NOTE: CADD FILES FOR ESTIMATING EARTHWORK QUANTITIES ARE AVAILABLE TO CONTRACTORS FOR PREPARING BIDS. IN ORDER TO RECEIVE THE CADD FILES, THE CONTRACTOR WILL NEED TO SIGN A HOLD-HARMLESS AGREEMENT PROVIDED BY SCHULTZ ENGINEERING & SITE DESIGN, AND AGREE TO PAY A $50 PROCESSING FEE. THE CADD FILES WILL BE RELEASED UPON RECEIPT OF THE CHECK

INFILTRATION BASIN NOTES:

1. TRAFFIC FROM CONSTRUCTION EQUIPMENT SHALL BE LIMITED AS MUCH AS POSSIBLE ACROSS INFILTRATION BASIN AREAS, AND BE ONLY LOW IMPACT TRACK EQUIPMENT. BASIN AREAS SHALL BE EXCAVATED WITH A BACKHOE STATIONED OUTSIDE OF THE AREA AS MUCH AS POSSIBLE.
2. DURING CONSTRUCTION OF THE ADJACENT PARKING LOT AND BUILDING, THE INFILTRATION BASIN AREA SHALL BE PROTECTED FROM TRAFFIC AND SEDIMENT WITH SILT FENCE.
3. THE BOTTOM OF THE INFILTRATION BASIN SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 24 INCHES WITH THE USE OF APPROPRIATE EQUIPMENT (TILLER, RIPPER, ETC.). AFTER SCARIFICATION, THE BASIN SIDEWALLS AND BOTTOM SHALL BE LINED WITH A MINIMUM OF 4-INCHES OF SAND/COMPOST MIX. SAND/COMPOST MIX SHALL BE PLACED AS LOOSELY AS POSSIBLE.
4. ONCE EXCAVATED TO FINAL GRADE INFILTRATION AREAS SHALL BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA. ALL INFILTRATION AREAS SHALL BE INSPECTED TO ENSURE THAT UNAUTHORIZED EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREAS.
5. ONCE THE INFILTRATION BASINS ARE COMPLETED AND THE SITE HAS BEEN STABILIZED, THE CONTRACTOR SHALL ARRANGE AND PAY FOR TESTING THE INFILTRATION RATES OF THE BOTTOMS OF THE BASINS. THE TEST RESULTS SHALL BE SUBMITTED TO THE CITY AND THE ENGINEER.
6. FINAL STABILIZATION OF THE INFILTRATION BASINS SHALL NOT BE COMPLETED UNTIL THE UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.



NOTES: 1. BASIN BOTTOM SHALL BE SEEDED W/ NATIVE SEED MIX AND/ OR PLANTINGS

2. SAND/COMPOST MIX SHALL CONSIST OF 70% CLEAN SAND & 30% COMPOST (MN STORM WATER MANUAL MIX 'B'). SAND SHALL CONSIST OF CLEAN CONSTRUCTION SAND, FREE OF DELETERIOUS MATERIALS - AASHTO M-6 OR ASTM C-33 WASHED. COMPOST SHALL CONSIST OF MNDOT GRADE 2

1 INFILTRATION BASIN #1

NTS

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018 — DATE

43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING
HANOVER DENTAL

HANOVER
MINNESOTA

SCALE: 1" = 20'

0 20 40

GRADING PLAN

18005Grading.dwg

C-101.1

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PROJECT INFORMATION

Project Description

This project will consist of the construction of a new dental office building with an approximate footprint of 2,500 SF, as well as parking lot and concrete sidewalk. Storm water management for this project will consist of an infiltration basin.

Disturbed Area & Impervious Surface Tabulation
(within proposed construction area)

Anticipated Disturbed Area	0.60 acres
Existing Impervious Area	0.00 acres
Proposed Impervious Area	0.22 acres
Net Impervious Area Increase	0.22 acres

Permanent Site Drainage

The vast majority of the proposed impervious surfacing has been designed to be routed to a proposed infiltration basin. Due to the land-locked nature of the wetland in the adjacent property to the east, which the subject property naturally drains to, the proposed infiltration basin has been sized to collect and infiltrate the entire runoff volume directed to it from the 100-year storm event.

Receiving Surface Waters

The following surface waters could receive storm water runoff from this project, and are within 1 mile of the project site:

Surface Water	Type of Surface Water	Impaired Water?	Special Water?	USEPA Approved TMDL for Impaired Water?	Comments
Project not subject to					
NPDES Permit					

SEDIMENT AND OTHER POLLUTANTS

This SWPPP has been designed mainly to provide erosion and sediment control of naturally occurring soils at this site (ie: sands, loams, and clays). Although this SWPPP does address pollution prevention of other man-made materials, it is assumed that these materials will consist of debris from existing structures and pavements to be demolished, or debris and chemicals (ie: fuels, new paints, etc.) resulting from new construction.

There are no known solid wastes or hazardous materials buried below grade at this site. If such wastes or hazard materials are discovered during construction, the SWPPP Coordinator (described below) will be responsible for notifying the Engineer. This SWPPP will then be revised to address he presence and disposal of these additional pollutants

EROSION PREVENTION AND SEDIMENT CONTROL BMPS

Standards and References

Materials and construction methods of all BMPs included in this SWPPP shall be as per the Minnesota Department of Transportation (MNDOT) Standard Specifications for Construction, latest edition. The Contractor and SWPPP Coordinator shall obtain a current copy of MNDOT's Standard Specifications for Construction and familiarize themselves with the specification sections applicable to this SWPPP, as there are several BMPs that specifically reference these sections.

The Contractor and SWPPP Coordinator shall be expected to be familiar with the applicable MNDOT specification sections during construction. No additional compensation will be paid to the Contractor for additional work due to unfamiliarity with these specification sections.

Undisturbed Areas

If shown on the plan, the Contractor shall delineate areas that are not to be disturbed on the site. This may be done with flags, stakes, signs, silt fence, etc., and shall be completed prior to the start of any grading operations. Regardless of the delineation method the Contractor chooses to use, the Contractor must communicate to his/her personnel and subcontractors that these areas are not to be disturbed and construction equipment (including trucks and personal vehicles) shall not be allowed in these areas.

The Contractor shall minimize compaction and preserve topsoil as much as possible at the site. In pervious ("green") areas that are not essential to the construction of the project, the Contractor shall avoid construction traffic and maintain the existing condition of these areas.

Temporary and Permanent Stabilization

All exposed soil areas (including stockpiles) shall be provided with temporary or permanent cover within 14 days of construction activity temporarily or permanently ceasing in that portion of the site. Temporary or permanent drainage ditches or swales, which drain off-site or to a surface water, and are within 200 lineal feet of the property line or surface water shall be provided with temporary or permanent cover within 24 hours of construction. Placement of temporary or permanent cover shall be initiated immediately upon suspension or completion of excavation operations.

Temporary Cover:

If the Contractor chooses to halt grading operations in a portion of the site (or the whole site) for a period exceeding 14 days, and grading operations (rough or finish grading) in the affected areas has not yet been completed, temporary cover shall be placed. Affected areas consisting of drainage ditches or swales connected to, and within, 200 lineal feet of a property line or surface water shall be provided with temporary cover within 24 hours of connection. Depending on the Contractor's schedule, the temporary cover shall consist of one of the following BMPs:

1). Disc anchored Mulch

a). Disc anchored mulch may be used in an area of the site (or the whole site) if the Contractor is halting grading operations for a period that is relatively short, but exceeds 14 days.

b). The mulch shall be Type 3 per MNDOT Spec. 3882

c). An adequate quantity of mulch shall be evenly distributed to achieve 90% coverage of the exposed soils.

d). Mulch shall be placed as per MNDOT 2575.3F.

e). All mulch shall be disc anchored as per MNDOT 2575.3G. Prior to the placement and disc anchoring of the mulch, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

f). Any areas that are exposed as a result of wind action after the initial mulch placement shall be covered with additional mulch to maintain 90% coverage.

2). Temporary Seeding with Mulch

a). Temporary seeding with mulch may be used in areas of the site (or the whole site) if the Contractor is halting grading operations for a period that is relatively long. Although mulch still needs to be applied as described above, once the temporary seeding/turf is established, the mulch will no longer need to be maintained. The temporary seeding/turf will require very little maintenance.

b). Prior to the sowing of temporary seed, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

c). Contractor shall utilize Seed Mixes 100, 110, or 130 per MNDOT Spec. 3876 for temporary seeding.

d). Temporary seeding shall be sown per MNDOT Spec. 2575.3D.

e). Once temporary seeding has been sown, mulch shall be placed over the area as described above.

Permanent Cover:

Upon completion of finish grading and/or placement of topsoil, initiation of the placement of permanent cover shall begin immediately over all exposed areas. This includes areas designated for impervious surfacing (ie: buildings, pavements/gravel bases, sidewalks, etc.). Where the construction schedule will not allow for the placement of the permanent impervious surfacing within 14 days of the completion of finish grading, temporary cover shall be provided in these areas, as described above, until the permanent impervious surfacing can be constructed. Affected areas consisting of drainage ditches or swales connected to, and within, 200 lineal feet of a property line or surface water, shall be provided with permanent cover within 24 hours of connection.

Areas designated for permanent turf establishment shall be provided with one or more of the following BMPs (see plan):

1). Permanent Seeding with Mulch

a). Unless otherwise noted on the plans, all areas designated for turf establishment shall be provided with permanent seeding.

b). In addition to the plan included as part of this SWPPP, the Contractor shall verify if a Landscaping Plan has been included in the plans by the Architect. If a Landscape Architect has specified higher quality permanent cover (ie: sod, hydroseeding, etc.), the Contractor shall provide this permanent cover in lieu of the permanent seeding specified in this SWPPP.

c). Prior to the sowing of permanent seed, the soils shall be loosened and the area smooth-rough graded per MNDOT 2575.3B1.

d). Contractor shall utilize Seed Mix 260 per MNDOT Spec. 3876 for permanent seeding.

e). Permanent seeding shall be sown per MNDOT Spec. 2575.3D.

f). Once permanent seeding has been sown, mulch shall be placed over the area as described above (under Temporary Cover), unless noted otherwise.

2). Erosion Control Blanket

a). Erosion control blanket shall be placed in areas as shown on the plan included in this SWPPP. These areas shall still be provided with permanent seeding, as described above, beneath the erosion control blanket.

b). Erosion control blanket shall meet the requirements indicated in MNDOT Spec. 3885. See plan for category(s) of erosion control blanket.

c). Erosion control blanket shall be installed as per MNDOT Spec. 2575.3J2.

d). Erosion control blanket specified in drainage ditches and swales connected to, and within 200 lineal feet, of a property line or surface water shall be installed within 24 hours of the completion of finish grading (including permanent seeding).

3). Riprap

a). Riprap shall be placed in areas as shown on the plan included in this SWPPP.

b). All riprap shall be underlain with Type 4 geotextile fabric. The fabric shall meet the requirements of MNDOT Spec. 3733 and shall be installed as per MNDOT Spec. 2511.3B2.

c). Riprap materials shall meet the requirements of MNDOT Spec. 3601, and shall be Class 3, unless noted otherwise on the plans.

d). Riprap shall be considered "Random Riprap" and shall be placed as per MNDOT Spec. 2511.

e). Although it is permitted for the riprap to be placed with machinery, it will be necessary for the Contractor to hand place some of the riprap in order to provide a dense, well-keyed layer of stones with the least practical quantity of void space.

f). The minimum thickness of the riprap shall be 18 inches, unless otherwise noted on the plans.

g). Riprap designated at the end of pipe outlets shall be placed within 24 hours of installation of the pipe outlet end section.

h). Riprap specified in drainage ditches and swales connected to, and within 200 lineal feet, of a property line or surface water shall be installed within 24 hours of the completion of finish grading.

Sediment Control

The following sediment control BMPs shall be implemented as part of this project:

1). Silt Fence

a). Silt fence shall be installed at the locations shown on the plan included in this SWPPP.

b). Silt fence shall be machine sliced and materials shall meet the requirements of MNDOT Spec. 3886.

c). Silt fence shall be installed as per MNDOT Spec. 2573.3C1.

d). Silt fence shall be installed prior to any upgradient grading operations, and shall remain in place and maintained adequately until upgradient areas achieve Final Stabilization (see below)

e). Silt fence shall be repaired or replaced if damaged during, or after, rain events, or if accumulated sediment on the upstream side of the fence reaches 1/3 of the height of the fence. Repair or replacement of silt fence shall be completed within 24 hours of discovery.

f). Portions of silt fence may be removed to accommodate short-term activities, such as vehicle passage. Short-term activities shall be completed as quickly as possible, and new silt fence installed immediately after completion of the short-term activity. If rainfall is imminent or forecasted in the near future, new silt shall be installed regardless of if the short term activity has been completed or not. The Contractor is advised to schedule short term activities during dry weather as much as practicable. No additional compensation will be paid due to additional silt fence associated with short-term activities.

g). Temporary soil stockpiles shall be placed on the site in areas upgradient from silt fence. Where the Contractor chooses to place temporary soil stockpiles outside designated silt fenced areas, the stockpiles shall be surrounded by additional silt fence. Under no circumstances shall temporary soil stockpiles be placed over surface waters, curb and gutter, catch basins, culvert inlets or outlets, or ditches.

2). Catch Basin Protection

a). WIMCO Road Drain protection devices, as manufactured by WIMCO, shall be used for catch basin protection on this project. WIMCO can be contacted at (952)-233-3055, and their web page is www.roaddrain.com.

b). "Road Drain Top Slab" devices shall be installed at all catch basin locations immediately after placement of the catch basin structures. "Road Drain Top Slab" devices shall remain in place and be adequately maintained until permanent surfacing is constructed (ie: curb and gutter, pavements, and/or gravel surfacing). In areas designated for turf establishment, "Road Drain Top Slab" devices shall remain in place until Final Stabilization of all upgradient areas is established.

c). Upon construction of the permanent surfacing, the "Road Drain Top Slab" devices shall be replaced with the WIMCO product specified on the plans. The WIMCO devices shall remain in place until Final Stabilization of all upgradient areas has been established.

d). The contractor shall install and maintain the catch basin protection devices as per the manufacturer's instructions and specifications.

3). Culvert Inlet Protection

a). Culvert inlet protection shall be provided at all culvert inlet locations immediately after construction of the culvert. See plan included in this SWPPP for culvert inlet locations.

b). Culvert inlet protection shall consist of geotextile fabric wrapped around, and completely covering the inlet end section. The geotextile fabric shall be the same fabric used in silt fence applications and meet the requirements of MNDOT Spec. 3886.

c). The culvert inlet protection shall remain in place and adequately maintained until Final Stabilization of all upgradient areas has been established.

d). Culvert inlet protection shall be repaired or replaced if damaged during, or after, rain events, or if accumulated sediment reaches 1/2 of the diameter of the culvert pipe. Repair or replacement of culvert inlet protection shall be completed within 24 hours of discovery.

4). Temporary Rock Construction Entrance

a). Temporary rock construction entrances shall be installed at the locations shown on the plan included in this SWPPP. See detail for temporary rock entrance design.

b). If the Contractor chooses to access the site from locations other than where temporary rock entrances are specified on the plans, additional temporary rock entrances shall be placed at these locations, as well.

c). Temporary rock entrance shall be constructed prior to the start of grading operations, and shall remain in place and be adequately maintained until Final Stabilization has been established.

d). Temporary rock entrances shall be maintained in such a manner that the entrances prevent sediment tracking onto adjacent streets. If a temporary rock entrance is found to be ineffective, it shall be replaced or improved within 24 hours of discovery.

e). The Contractor has the option to place Type 4 geotextile fabric beneath the temporary rock entrance. The fabric may extend the life of the entrance as it will reduce rock "sinking" into the underlying soils. If the Contractor chooses to use fabric, it should meet the requirements of MNDOT Spec. 3733 and shall be installed as per MNDOT Spec. 2511.3B2.

f). If sediment tracking from the site is discovered on adjacent streets, the sediment shall be removed with a street sweeper or other approved method within 24 hours of discovery. This shall be done throughout construction of the project. This sediment may be returned and graded over exposed areas of the site, or disposed of off site per MPCA requirements.

The City may order street sweeping to be performed at the Contractor's or Owner's expense if City staff find that construction activities are resulting in sediment or debris being tracked onto City streets.

5). Filter Logs

a). Filter logs shall be installed at the locations shown on the plan included in this SWPPP.

b). Filter logs shall consist of Type Wood Fiber biorolls and meet the requirements of MNDOT Spec. 3897.

c). Filter logs shall be installed as per MNDOT Spec. 2573.3J.

d). Filter logs shall be installed immediately after placement of erosion control blanket.

e). Filter logs shall remain in place for the life of the project, and shall be allowed to degrade naturally.

Dewatering

If dewatering of sandy subsoils is required for this project, the pump discharge shall be treated prior to discharge off-site or into a surface water. Treatment of discharge shall be achieved with the use of a "Dandy Dewatering Bag" (or approved equivalent), as manufactured by Dandy Products,Inc. Dandy Products, Inc. can be contacted at (877) 307-0141, and their web page is www.dandyproducts.com. The "Dandy Dewatering Bag" shall be installed, utilized, and maintained per the manufacturer's instructions and specifications.

Once dewatering water has been treated, it may be discharged off-site or to a surface water. The discharge shall be visually checked to ensure that it is relatively clean and not visibly different from any receiving waters. If discharge is noticeably "dirty", the Engineer shall be contacted as additional treatment methods may be necessary.

Adequate erosion control shall be provided at the point of discharge if it is located in an area with exposed soils or established turf. This erosion control may consist of temporarily placed rip rap, or other approved energy dissipation measures. The type of erosion control measure shall be at the Contractor's discretion, depending on the location of the dewatering discharge and the unique site characteristics. The erosion control measures shall be effective and shall be maintained adequately such that no erosion occurs at the point of discharge.

Pollution Prevention Management

Solid waste accumulated during construction, including collected sediment, construction materials, floating debris, construction debris, paper, plastics, and other solid wastes shall be disposed of in accordance with MPCA disposal requirements:

1). Building products that have the potential to leach pollutants shall be maintained under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with storm water.

2). Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials shall be maintained under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.

3). Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) shall be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas shall be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials shall be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.

4). Solid waste shall be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.

5). Portable toilets shall be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.

The Contractor shall take steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. The Contractor shall conduct fueling in a contained area unless infeasible. The Contractor shall ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. The Contractor shall report and clean up spills immediately as required by Minn. Stat. Â 115.061, using dry clean up measures where possible.

If the Contractor washes the exterior of vehicles or equipment on the project site, washing shall be limited to a defined area of the site. Runoff from the washing area shall be contained in a sediment basin or other similarly effective controls and waste from the washing activity shall be properly disposed of. The Contractor shall properly use and store soaps, detergents, or solvents. No engine degreasing shall be allowed on site.

The Contractor shall provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. The liquid and solid washout wastes shall not contact the ground, and the containment shall be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes shall be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

FINAL STABILIZATION

Final Stabilization shall be considered established once the following requirements have been achieved:

1). All soil disturbing activities at the site have been completed and all soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth density over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

2). The permanent storm water management system is constructed, and is operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.

3). All temporary synthetic and structural erosion prevention and sediment control BMPs have been removed from the project site. BMPs designed to decompose on site may be left in place.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE
03/09/2018 — DATE
43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER
MINNESOTA

SWPPP - NOTES

18005SWPPPNotes.dwg

C-101.2

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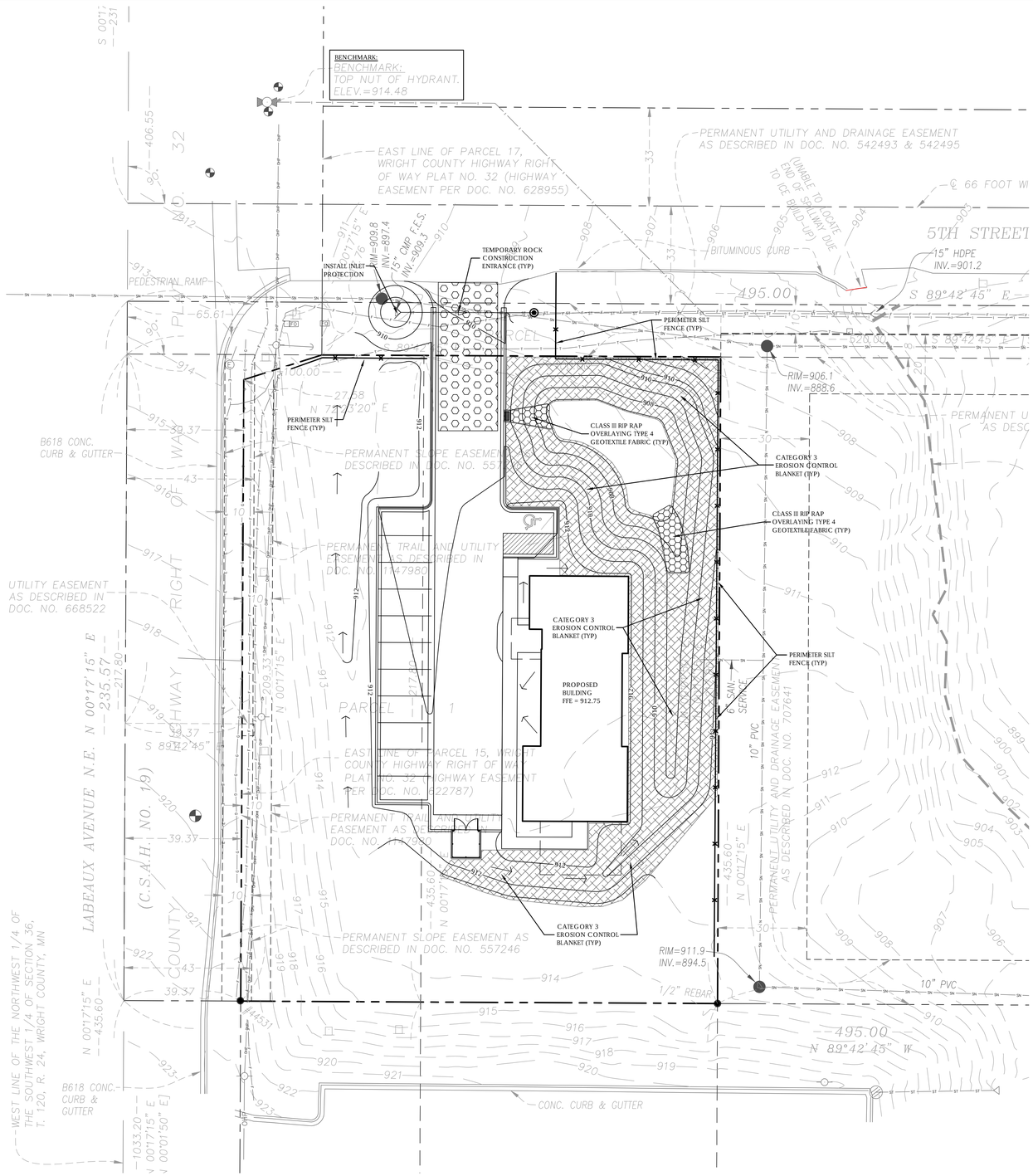
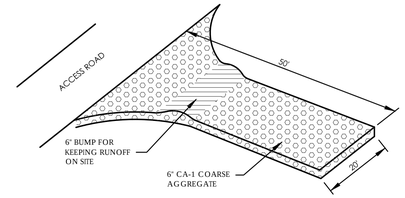


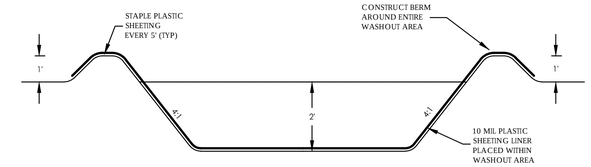


1. THE ROCK ENTRANCE SHALL BE CONSTRUCTED PRIOR TO THE START OF GRADING OPERATIONS.
2. THE ENTRANCE SHALL BE GRADED SUCH THAT POSITIVE DRAINAGE DURING CONSTRUCTION IS PROVIDED.
3. THE ENTRANCE SHALL BE MAINTAINED IN SUCH A CONDITION SUCH THAT IT PREVENTS MUD TRACKING OFF SITE. ADDITIONAL ROCK OR REPLACEMENT OF THE ENTRANCE MAY BE REQUIRED PERIODICALLY IF MUD STARTS TO TRACK OFF SITE.
4. THE ROCK ENTRANCE MAY BE REMOVED JUST PRIOR TO THE PLACEMENT OF AGGREGATE BASE.

NOTE: PLACING FILTER FABRIC UNDER THE ROCK ENTRANCE MAY REDUCE THE AMOUNT OF MAINTENANCE IT WOULD REQUIRE.

1 TEMPORARY ROCK CONSTRUCTION ENTRANCE

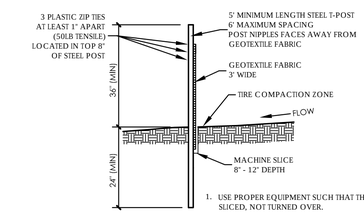
NTS



1. BOTTOM OF CONCRETE WASHOUT AREA SHALL BE 10'X10'
2. CONTRACTOR SHALL REMOVE WASH LIQUID FROM CONCRETE WASHOUT AREA AND DISPOSE OF PER MPCA REQUIREMENTS WHEN WASHOUT AREA BECOMES HALF FULL.
3. CONTRACTOR SHALL SELECT THE MOST OPTIMAL LOCATION FOR THE CONCRETE WASHOUT

2 CONCRETE WASHOUT

NTS

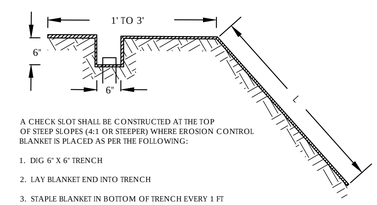


MATERIALS PER MNDOT 3886
INSTALLATION PER MNDOT 2573.3C1

1. USE PROPER EQUIPMENT SUCH THAT THE SOIL IS SLICED, NOT TURNED OVER.
2. AFTER SILT FENCE INSTALLATION, COMPACT THE SOIL IMMEDIATELY NEXT TO THE GEOTEXTILE BY DRIVING OVER IT WITH A TRACTOR TIRE AT LEAST TWICE

3 SILT FENCE (MACHINE SLICED)

NTS

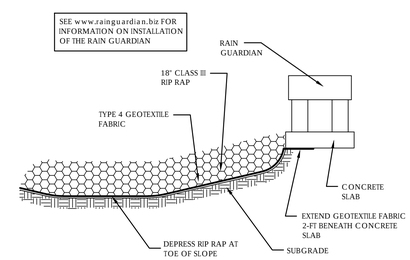


A CHECK SLOT SHALL BE CONSTRUCTED AT THE TOP OF STEEP SLOPES (4:1 OR STEEPER) WHERE EROSION CONTROL BLANKET IS PLACED AS PER THE FOLLOWING:

1. DIG 6" X 6" TRENCH
2. LAY BLANKET END INTO TRENCH
3. STAPLE BLANKET IN BOTTOM OF TRENCH EVERY 1 FT
4. BACKFILL TRENCH WITH SOIL AND COMPACT
5. IF SLOPE LENGTH (L) IS GREATER THAN 100 FT DIG A CHECK SLOT 1/3 FROM THE BOTTOM OF THE SLOPE AND STAPLE THE BLANKET IN AS IN THE TOP TRENCH.

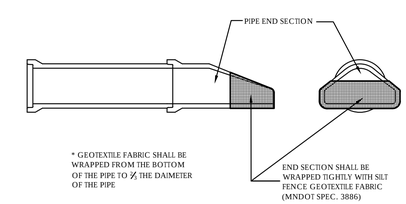
4 EROSION CONTROL BLANKET

NTS



5 RIP RAP AT RAIN GUARDIAN

NTS



6 CULVERT INLET PROTECTION

NTS

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE
03/09/2018 — DATE
43129 — LICENSE NO.

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER MINNESOTA

SCALE: 1" = 20'
0 20 40

SWPPP - PLAN VIEW

18005SWPPP-Plan.dwg

C-101.3

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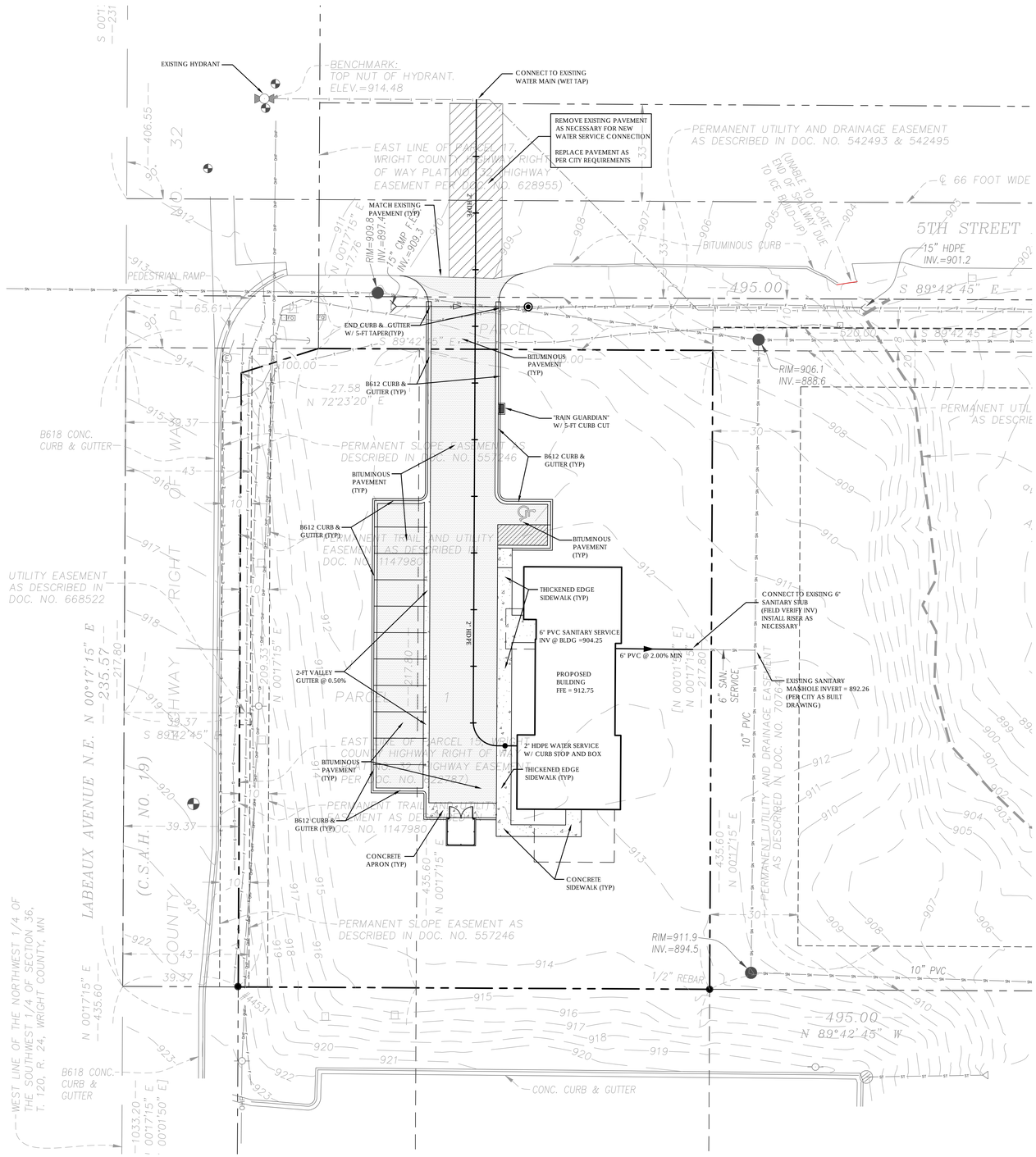

UTILITY AND SURFACING NOTES:

WATER AND SANITARY SEWER UTILITIES

1. WATER MAIN AND ANY WATER SERVICE LINES SHALL BE PLACED AT A MINIMUM DEPTH OF 8 FEET BELOW FINISHED GRADE.

2. IF CONFLICTS ARE DISCOVERED WHERE WATER MAIN CROSSES EXISTING SANITARY SEWER, SERVICE LINES, OR STORM SEWER, THE WATER MAIN SHALL BE RAISED OR LOWERED APPROPRIATELY WHILE STILL MAINTAINING A MINIMUM DEPTH OF 8 FEET BELOW FINISHED GRADE.

3. INSULATION SHALL BE PLACED AT ALL LOCATIONS WHERE STORM SEWER CROSSES SANITARY SEWER, WATER MAIN, OR ASSOCIATED SERVICES. INSULATION SHALL CONSIST OF AN 8-FT X 8-FT SQUARE OF 3"-THICK RIGID INSULATION. INSULATION SHALL BE PLACED BETWEEN THE STORM SEWER AND PIPE CROSSING WITH THE EDGES OF THE INSULATION PARALLEL TO THE PIPING AS MUCH AS POSSIBLE.

4. INSTALL SANITARY SEWER SERVICE LINE CLEANOUTS AS REQUIRED BY THE MINNESOTA PLUMBING CODE

5. SEE SHEET C3 FOR STORM SEWER GRADING, AND SHEET C2 FOR MISCELLANEOUS DETAILS RELATING TO THE PLACEMENT OF THE UTILITIES.

6. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

7. PRIOR TO CONSTRUCTION OF SANITARY SEWER, AND ORDERING ASSOCIATED MATERIALS, THE CONTRACTOR'S PLUMBING DESIGNER SHALL PROVIDE THE ENGINEER WITH THE TOTAL DRAINAGE FIXTURE UNITS (DFUs) FOR THE INTERIOR PLUMBING TO VERIFY THE CORRECT SIZING AND SLOPE OF THE SANITARY SEWER SERVICE

OWNER/CONTRACTOR SHALL OBTAIN A PLUMBING PERMIT FROM THE MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PRIOR TO THE INSTALLATION OF ANY SANITARY SEWER OR WATER UTILITIES. CONSTRUCTION OF SANITARY SEWER OR WATER UTILITIES SHALL NOT COMMENCE UNTIL AFTER THE PLUMBING PERMIT HAS BEEN OBTAINED, AND ANY AND ALL PERTINENT COMMENTS HAVE BEEN ADDRESSED ON THE PLAN AND IN THE PROJECT SPECIFICATIONS.

SURFACING

1. SUBGRADES SHALL BE SCARIFIED AND/OR COMPACTED AS NECESSARY TO ATTAIN THE REQUIRED COMPACTION DESCRIBED IN THE GENERAL NOTES (SHEET C1). TEST ROLLING OF THE SUBGRADE SHALL BE OBSERVED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN. LOCATIONS EXHIBITING EXCESSIVE RUTTING (PER MNDOT SPEC. 2111) SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER PRIOR TO THE PLACEMENT OF AGGREGATE BASE. COMPACTION TESTING IN UTILITY TRENCHES SHALL BE PERFORMED BY AN INDEPENDENT TESTING FIRM.

2. GRAVEL BASE COURSES SHALL BE ROLLED AND COMPACTED. TEST ROLLING OF THE GRAVEL BASE SHALL BE OBSERVED BY A SOILS ENGINEER TO VERIFY STABILITY.

3. ALL EXISTING BITUMINOUS OR CONCRETE EDGES, WHICH WILL ABUT NEW BITUMINOUS OR CONCRETE SURFACING SHALL BE SAWCUT TO OBTAIN A VERTICAL EDGE.

4. EXPANSION JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE NEW CONCRETE ABUTS EXISTING CONCRETE, AND AT ALL LOCATIONS WHERE SEPARATE CONCRETE POURS ABUT EACH OTHER.

5. SEE SHEET C1 FOR SPECIFICATIONS REGARDING THE CONSTRUCTION OF PAVEMENTS, AND CURB AND GUTTER.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the state of Minnesota

BRIAN J. SCHULTZ, PE

03/09/2018	*43129*
DATE	*LICENSE NO.*

Revisions

1728
Sjoquist Project Number

18005
Schultz Eng. Project Number

NEW BUILDING

HANOVER DENTAL

HANOVER
MINNESOTA

SCALE: 1" = 20'

0 20 40

UTILITY & PAVING PLAN

18005UtilityPaving.dwg

C-102

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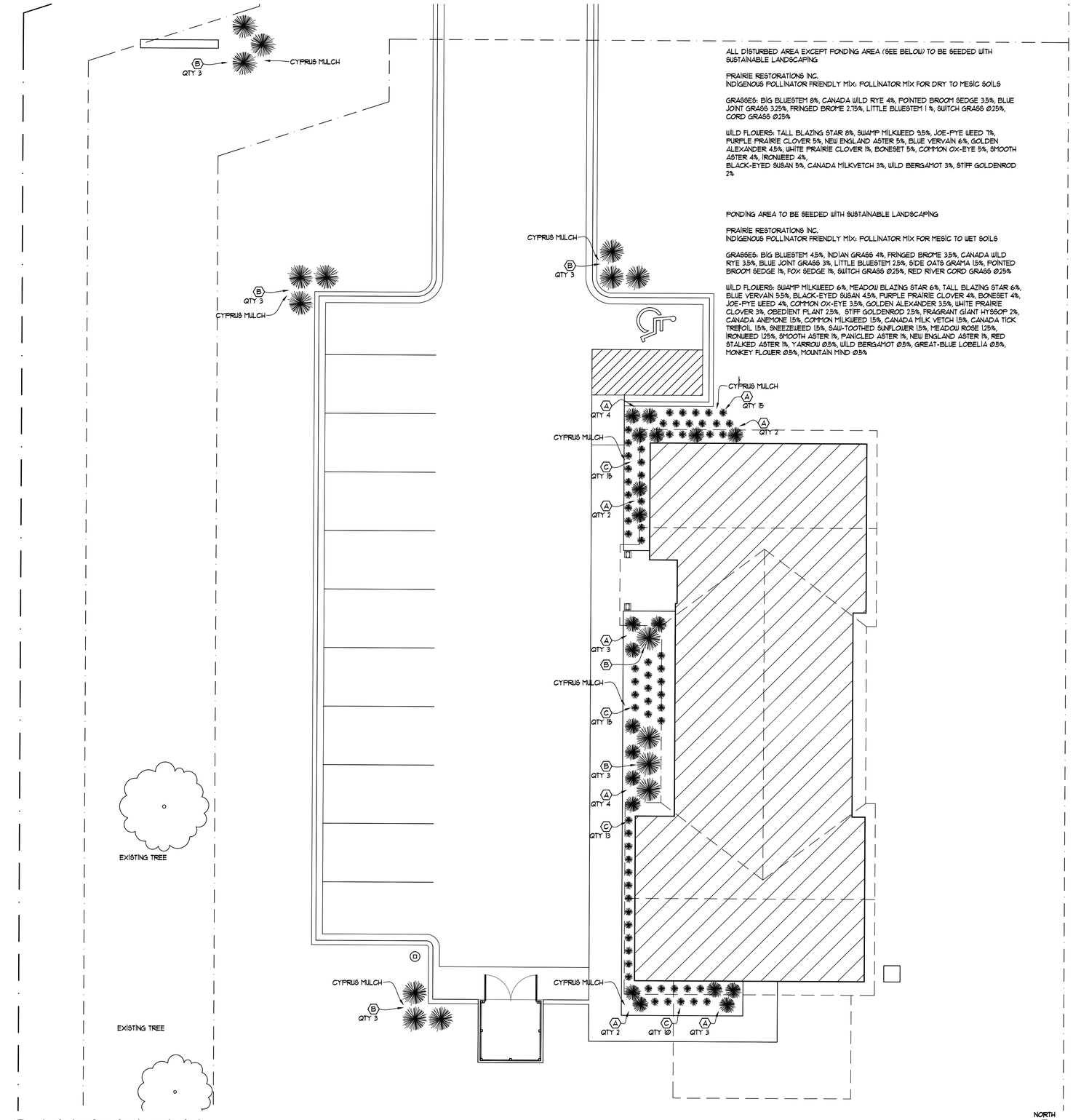

A1
L-101
LANDSCAPE PLAN
1" = 20'

ALL DISTURBED AREA EXCEPT PONDING AREA (SEE BELOW) TO BE SEEDED WITH SUSTAINABLE LANDSCAPING

PRAIRIE RESTORATIONS INC.
INDIGENOUS POLLINATOR FRIENDLY MIX: POLLINATOR MIX FOR DRY TO MESIC SOILS

GRASSES: BIG BLUESTEM 8%, CANADA WILD RYE 4%, POINTED BROOM SEDGE 3.5%, BLUE JOINT GRASS 3.25%, FRINGED BROME 2.75%, LITTLE BLUESTEM 1 %, SWITCH GRASS 0.25%, CORD GRASS 0.25%

WILD FLOWERS: TALL BLAZING STAR 8%, SWAMP MILKWEED 9.5%, JOE-PYE WEED 7%, PURPLE PRAIRIE CLOVER 5%, NEW ENGLAND ASTER 5%, BLUE VERVAIN 6%, GOLDEN ALEXANDER 4.5%, WHITE PRAIRIE CLOVER 1%, BONESET 5%, COMMON OX-EYE 5%, SMOOTH ASTER 4%, IRONWEED 4%,
BLACK-EYED SUSAN 5%, CANADA MILKVETCH 3%, WILD BERGAMOT 3%, STIFF GOLDENROD 2%

PONDING AREA TO BE SEEDED WITH SUSTAINABLE LANDSCAPING

PRAIRIE RESTORATIONS INC.
INDIGENOUS POLLINATOR FRIENDLY MIX: POLLINATOR MIX FOR MESIC TO WET SOILS

GRASSES: BIG BLUESTEM 4.5%, INDIAN GRASS 4%, FRINGED BROME 3.5%, CANADA WILD RYE 3.5%, BLUE JOINT GRASS 3%, LITTLE BLUESTEM 2.5%, SIDE OATS GRAMA 1.5%, POINTED BROOM SEDGE 1%, FOX SEDGE 1%, SWITCH GRASS 0.25%, RED RIVER CORD GRASS 0.25%

WILD FLOWERS: SWAMP MILKWEED 6%, MEADOW BLAZING STAR 6%, TALL BLAZING STAR 6%, BLUE VERVAIN 5.5%, BLACK-EYED SUSAN 4.5%, PURPLE PRAIRIE CLOVER 4%, BONESET 4%, JOE-PYE WEED 4%, COMMON OX-EYE 3.5%, GOLDEN ALEXANDER 3.5%, WHITE PRAIRIE CLOVER 3%, OBEDIENT PLANT 2.5%, STIFF GOLDENROD 2.5%, FRAGRANT GIANT HYSSOP 2%, CANADA ANEMONE 1.5%, COMMON MILKWEED 1.5%, CANADA MILK VETCH 1.5%, CANADA TICK TREFOIL 1.5%, SNEEZEWEED 1.5%, SAW-TOOTHED SUNFLOWER 1.5%, MEADOW ROSE 1.25%, IRONWEED 1.25%, SMOOTH ASTER 1%, PANICLED ASTER 1%, NEW ENGLAND ASTER 1%, RED STALKED ASTER 1%, YARROW 0.5%, WILD BERGAMOT 0.5%, GREAT-BLUE LOBELIA 0.5%, MONKEY FLOWER 0.5%, MOUNTAIN MIND 0.5%

PLANT SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE	METHOD	REMARK
A	KARL FOERSTER	CALAMAGROSTIS ACUTIFOLIA	20	#3	CONTAINER	1
B	CHINESE SILVER GRASS	MISCANTHUS SINENSIS	16	#3	CONTAINER	1
C	LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	68	#1	CONTAINER	2

REMARKS:

1 PLANT 4' OC
2 PLANT 2' OC

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Architect / Registration

2018. 03. 09
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Revisions

1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

1" = 20'- 0"

LANDSCAPE PLAN

L-101

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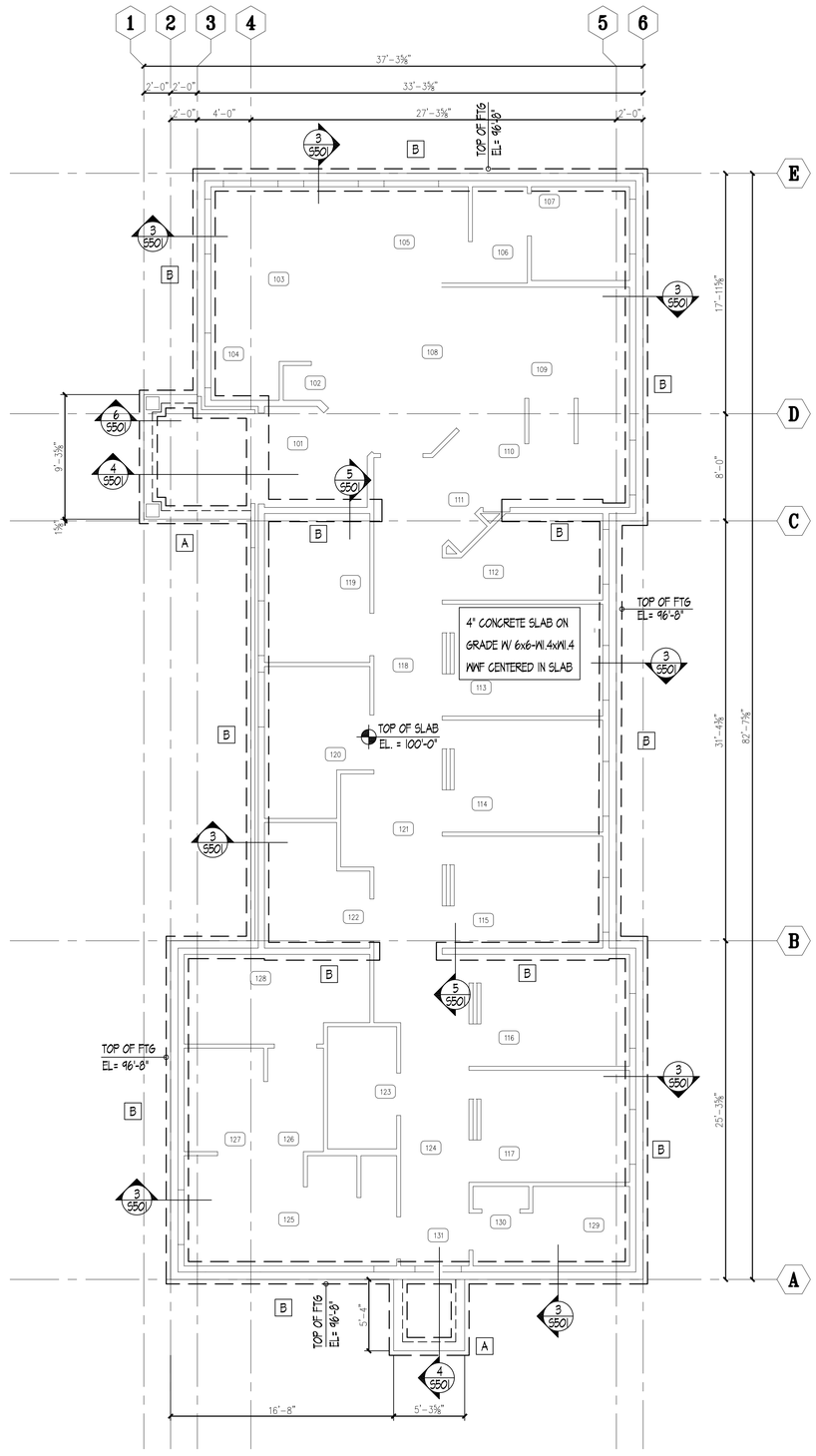

1 S100 FOOTING & FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

SEE PLAN FOR SLAB & ELEVATION. SEE ARCHITECTURAL DRAWINGS FOR SLOPED SLABS & FLOOR DRAINS. SEE DETAIL 1/S501 FOR TYPICAL CONTROL JOINT. PLACE CONTROL JOINT AT 15'-0" O.C. MAX.

SEE DETAIL 2/S501 FOR TYPICAL CONSTRUCTION JOINT. PLACE CONSTRUCTION JOINTS AT ALL DISCONTINUOUS SLAB POURS.

SEE PLAN & SCHEDULE FOR FOOTING SIZE & REINFORCEMENT. REEFER TO PLAN FOR TOP OF FOOTING ELEVATION. UNLESS NOTED OTHERWISE, TOP OF FOOTING ELEVATION =96'-8".

FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT
A	16" x 10" DEEP CONT.	2- #4 CONT.
B	20" x 10" DEEP CONT.	2- #4 CONT.

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Print Name DAVID P. WAGNER

Signature David P Wagner

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411 LABEAUX AVENUE NE
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FOOTING & FOUNDATION PLAN

S100

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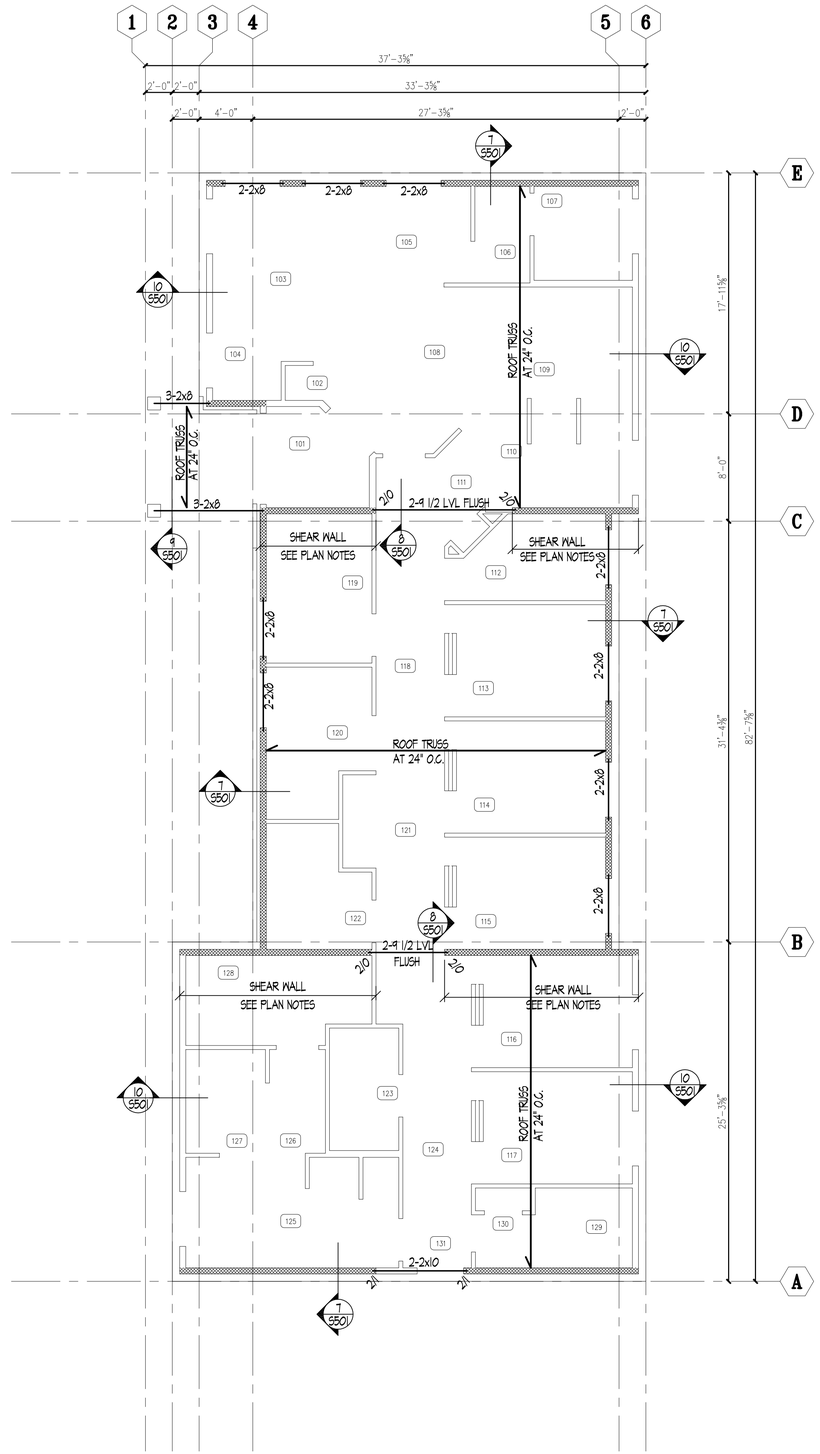

1 S120 ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

ROOF: 5/8" APA RATED SHEATHING W/10d NAIL AT 6" O.C. PANEL EDGE & 12" O.C. FIELD.

WALL: 7/16" APA RATED SHEATHING W/8d NAIL AT 6" O.C. PANEL EDGE & 12" O.C. FIELD.

MARKS THUS: "2/1" INDICATE NUMBER OF BEARING/KING STUDS. 1/1 MINIMUM.

SHEAR WALL: 5/8" GYPSUM WALLBOARD EACH FACE W/ No. 6 TYPE S OR W DRYWALL SCREWS (1 1/4" LONG) AT 4" O.C. PANEL EDGE & 12" O.C. FIELD. FULLY BLOCK ALL PANEL EDGES.

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HANOVER MINNESOTA

ROOF FRAMING PLAN

S120

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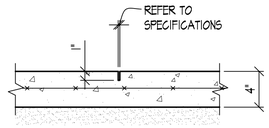
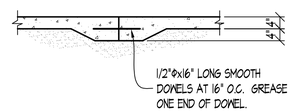
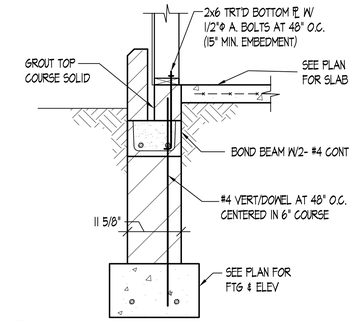


PLACE CONTROL JOINTS
AT 15'-0" O.C. MAXIMUM

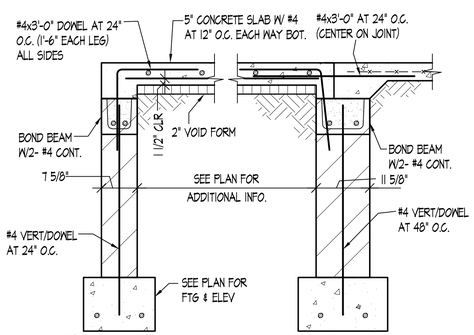
1/650 TYP. CONTROL JOINT
SCALE: N.T.S.



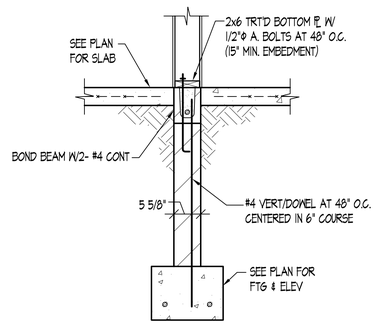
2/650 TYPICAL CONSTRUCTION JOINT
SCALE: N.T.S.



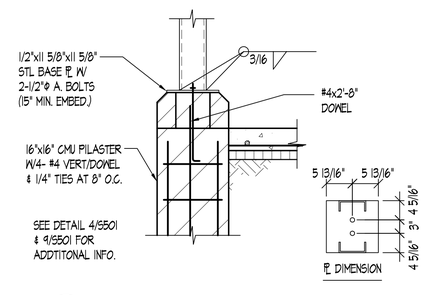
3/650 SECTION
SCALE: 3/4"= 1'-0"



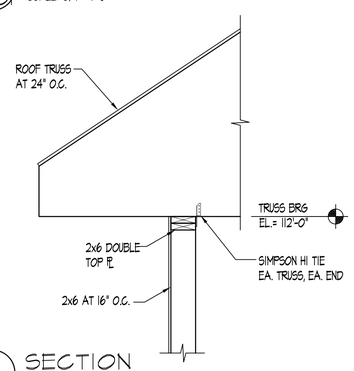
4/650 SECTION
SCALE: 3/4"= 1'-0"



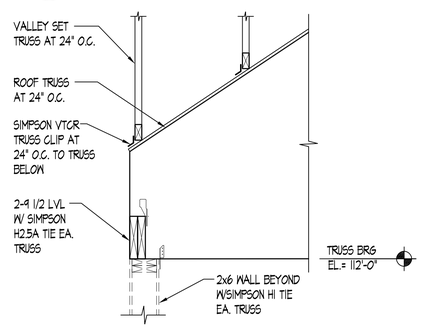
5/650 SECTION
SCALE: 3/4"= 1'-0"



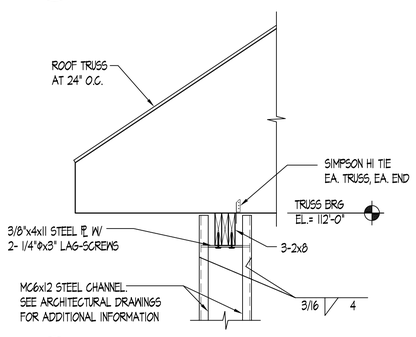
6/650 SECTION
SCALE: 3/4"= 1'-0"



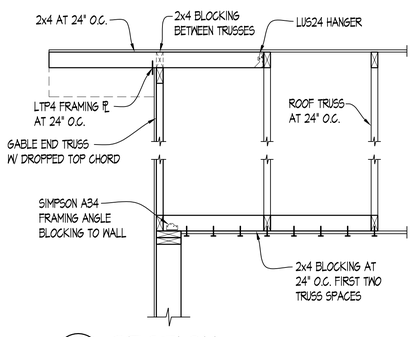
7/650 SECTION
SCALE: 3/4"= 1'-0"



8/650 SECTION
SCALE: 3/4"= 1'-0"



9/650 SECTION
SCALE: 3/4"= 1'-0"



10/650 SECTION
SCALE: 3/4" = 1'-0"

SPECIAL INSPECTIONS

International Building Code section 1705 requires that in addition to the inspections required by section 110 the owner shall employ one or more special inspectors to provide inspections during construction on the types of work listed under section 1705.

"Special Inspection" concerns work requiring observations and judgement and shall be performed by a structural engineer or a designated person under the supervision of the engineer. "Testing" involves the analysis of materials in accordance with the approved standards and shall be performed by an independent testing agency.

The contractor shall coordinate the testing and inspection services in accordance with the progress of the work. The contractor shall provide sufficient prior notice to the testing or inspection agency of the required work to allow proper scheduling of personnel. The cost of any re-testing or additional inspections as a result of failed tests and rejected work shall be borne by the coordinator.

REQUIRED STRUCTURAL TESTS AND SPECIAL INSPECTIONS

Description of Work	Inspection		Testing		N/A	REMARKS
IBC Section 1705	Yes	No	Yes	No		
1.1 Special Cases					●	
2.1 Welding	●			●		2.1 a, b
2.2 Details (steel)	●			●		2.2 a
2.3 High-Strength Bolts					●	
3.1 Concrete Reinforcing		●		●		3.1 a
3.5 Concrete Mix	●		●			3.5 a, b, c
4.3 Masonry					●	
6.3 Density (fill)					●	
6.4 Fill Placement					●	
6.5 Site Preparation					●	

2.1 Welding
- a. Qualification of welders prior to start of work.
- b. Periodic inspection of all welding

2.2 Steel Details
- a. Periodic visual inspection of steel details to verify compliance with the construction documents

3.1 Concrete Reinforcing
- a. Footing design based on f'c of 2,500 psi. Special inspection of footing reinforcing not required.

3.5 Concrete Mix Design
- a. Verify use of required mix design.
- b. Make and test concrete cylinders for representative strength in accordance with the specifications.
- c. Test concrete at time of pouring for slump, air content, and temperature in accordance with the specifications.

STRUCTURAL NOTES

MATERIAL STRENGTHS

Structural Steel — Fy = 36,000 psi (A36)

Reinforcing Steel — Fy = 60,000 psi (A615 grade 60)

Concrete — F'c = Compressive strength in 28 days
3,000 psi for footings
3,000 psi for masonry grout
3,500 psi for interior slabs on grade
4,000 psi unless noted

Masonry — f'm = 1,750 psi unless noted

DESIGN LIVE LOADS

Roof Snow Load
- -Pg ground snow load — 50 PSF
- -Pf flat-roof snow load — 38.5 PSF
- -Ce snow exposure — 1.0
- -Is importance factor — 1.0
- -Ct thermal factor — 1.1

Wind
- -Vult (3-second gust) — 115 MPH
- -Vasd (3-second gust) — 90 MPH
- -Risk Category — II
- -Exposure Category — B
- -GCpi Internal Pressure — +/- 0.18

DESIGN CODES - LATEST EDITIONS

International Building Code
Minnesota State Building Code
American Institute of Steel Construction
American Concrete Institute
CRSI Manual of Standard Practice
American Welding Society Standards for Welding as modified by A.I.S.C. specifications
American Institute of Timber Construction
National Concrete Masonry Association

SOIL BEARING DESIGN VALUE

2,000 PSF on undisturbed soil or compacted fill for footings. Assumed soil bearing value to be verified by a geotechnical engineer where required by the building official.

COORDINATION - ARCHITECTURAL, MECHANICAL AND ELECTRICAL ITEMS

Location, dimensions and details of recesses, depressions, openings and equipment supports shall be verified by reference to architectural, mechanical and electrical drawings.

TEMPORARY BRACING

Provide temporary lateral support for all walls until walls are adequately braced by floor or roof structure. Provide required temporary bracing for structural steel until permanent bracing and walls are in place.

OPENINGS

Verify size and location of all openings with architectural and mechanical drawings. Openings in roof not shown on structural drawings must be placed between structural members. The contractor shall provide sleeves through concrete slabs for all plumbing. Spread reinforcing as required to provide concrete cover for reinforcing.

FOOTINGS

Wall footings are cast-in-place concrete with continuous reinforcing placed 3" clear of bottom and sides. Provide 40 diameter lap at all splices and full crossing lap at corners and intersections. Unless otherwise noted, wall footings are centered under walls and column footings under columns. Footing elevations shown on plan are to top of footing. Bottom of footings to be at or below code required frost depth. Footings for walls, unless otherwise noted, shall be 10" thick with a minimum projection of 4" each side with 2 - #4 continuous.

SLABS ON GRADE

All slabs on grade, unless otherwise noted, shall be 4" thick with 6x6-W1.4xW1.4 WWF centered in slab.

REINFORCED CONCRETE BLOCK WALLS

See plans for locations of reinforced walls. When one bar is in a single core place in center, unless noted otherwise. When two bars are in a single core, place one near each face. Fill block core at vertical steel with 3,000 p.s.i. grout, rodded or vibrated in place. Do not rod with permanent reinforcing bars. Vertical steel shall be continuous with lap at all splices thus: #4 bar - 20in., unless noted otherwise. Provide horizontal joint reinforcing placed every 2nd course. No. 9 gage side rods and no. 9 gage cross rods. Hollow unit concrete masonry shall be ASTM C90-11. Mortar and grout shall be per ASTM C476: Type S for below grade and exterior masonry, type N for all interior above grade masonry.

STRUCTURAL STEEL

All structural steel shall be designed, fabricated and erected according to the American Institute of Steel Construction (A.I.S.C.) standard specifications. Structural steel supplier shall supply all cap plates, bearing assemblies, base plates, stiffeners, splices, connections and shall design same unless noted on drawings. All welding shall be done using the shielded arc process using E70 electrodes in accordance with the rules of the American Welding Society (A.W.S.) Structural Welding Code. All welders shall be certified using the rules of the American Welding Society.

DIMENSION LUMBER

Dimension lumber shall be No. 2 Hem Fir or equal for joists, beams and headers. Wall studs shall be Stud Grade SPF or equal. Treated lumber shall be No. 2 Southern Pine or equal. Wood lintels and headers shall have a full 1 1/2" length of bearing at each end unless notes otherwise. Double all joists under parallel partitions. All beams and joists not bearing on supporting members shall be framed with @Simpson Strong-Tie® joist hangers or equal. Interior walls to have 2x4 studs at 16" on center. Exterior walls to have 2x6 studs at 16" on center. Wood beams made of 2 plies shall be fastened with 2 rows of 10d (0.128" x 3") nails at 16" O.C. Wood beams made of 3 plies shall be fastened with 2 rows of 10d (0.128" x 3") nails at 16" O.C. each face. Sill plates to be bolted to foundation walls with 1/2" diameter anchor bolts at 4'-0" on center maximum to extend 15" minimum into grouted masonry. Each sill plate to have a minimum of 2 bolts with one bolt located within 12" of each end of each piece. Nailing to be in accordance with Table 2304.9.1 of the I.B.C.

LVL WOOD MEMBERS

LVL members noted on drawings are laminated veneer lumber as manufactured by Trus-Joist. Equivalent at contractor's option. Sizes shown on plan are actual size. Fb = 2,600 psi, E = 2,000,000 psi

WOOD ROOF TRUSSES

Lumber for wood roof trusses shall be in accordance with the manufacturer's recommendations. Trusses shall be designed for a top chord superimposed load of 45 PSF and a bottom chord load of 10 PSF or as listed on the drawings. Submit certified calculations with shop drawings. Spacing of roof trusses shall not exceed 24" on center. Truss configuration, pitch, overhang, etc. shall be indicated on the architectural drawings. Provide girder trusses, hip jacks, step-down trusses as required and designed to support all superimposed loads. Provide metal framing anchors at truss bearing to mechanically fasten truss to bearing wall or supporting member. Bridging, and bracing of truss compression members, shall be installed in accordance with the truss manufacturer's design and directions. No field modifications will be allowed without the written approval of the truss manufacturer. Truss manufacturer shall provide metal hangers where necessary.

CONCRETE COVER ON REINFORCING

Footings — 3" clear bottom and sides
Slab on Grade — Center reinforcing in slab

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Date 03/09/2018 License No. 25420

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SPECIAL INSPECTIONS,
STRUCTURAL NOTES & DETAILS

S501

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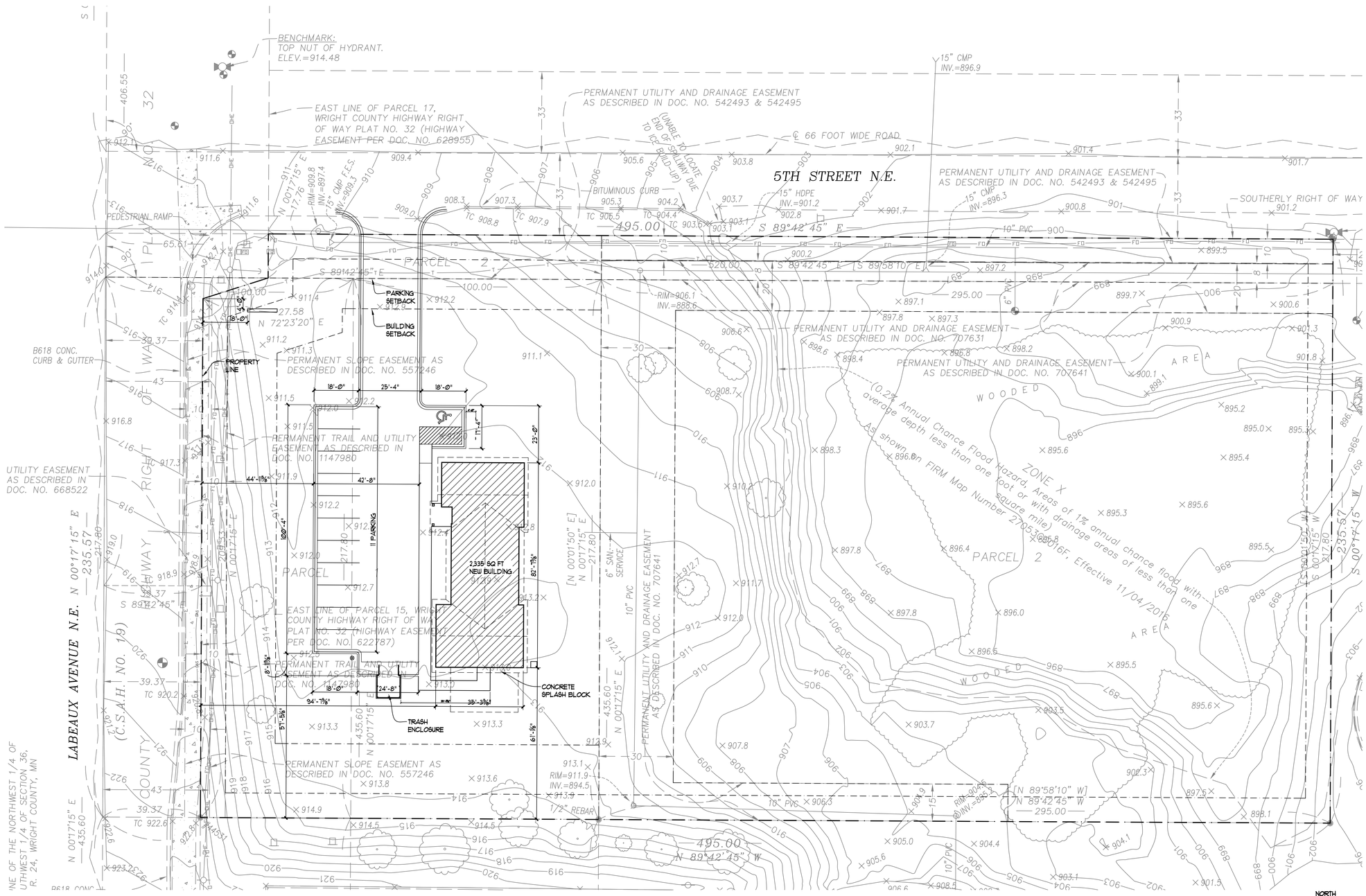
PARKING REQUIREMENTS 6 SPACES PER DR = 6 SPACES

PARKING PROVIDED = 12 SPACES

SEE AS101 FOR ENLARGED SITE PLAN



A1 AS101 SITE PLAN
1" = 20'

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SITE PLAN

AS101

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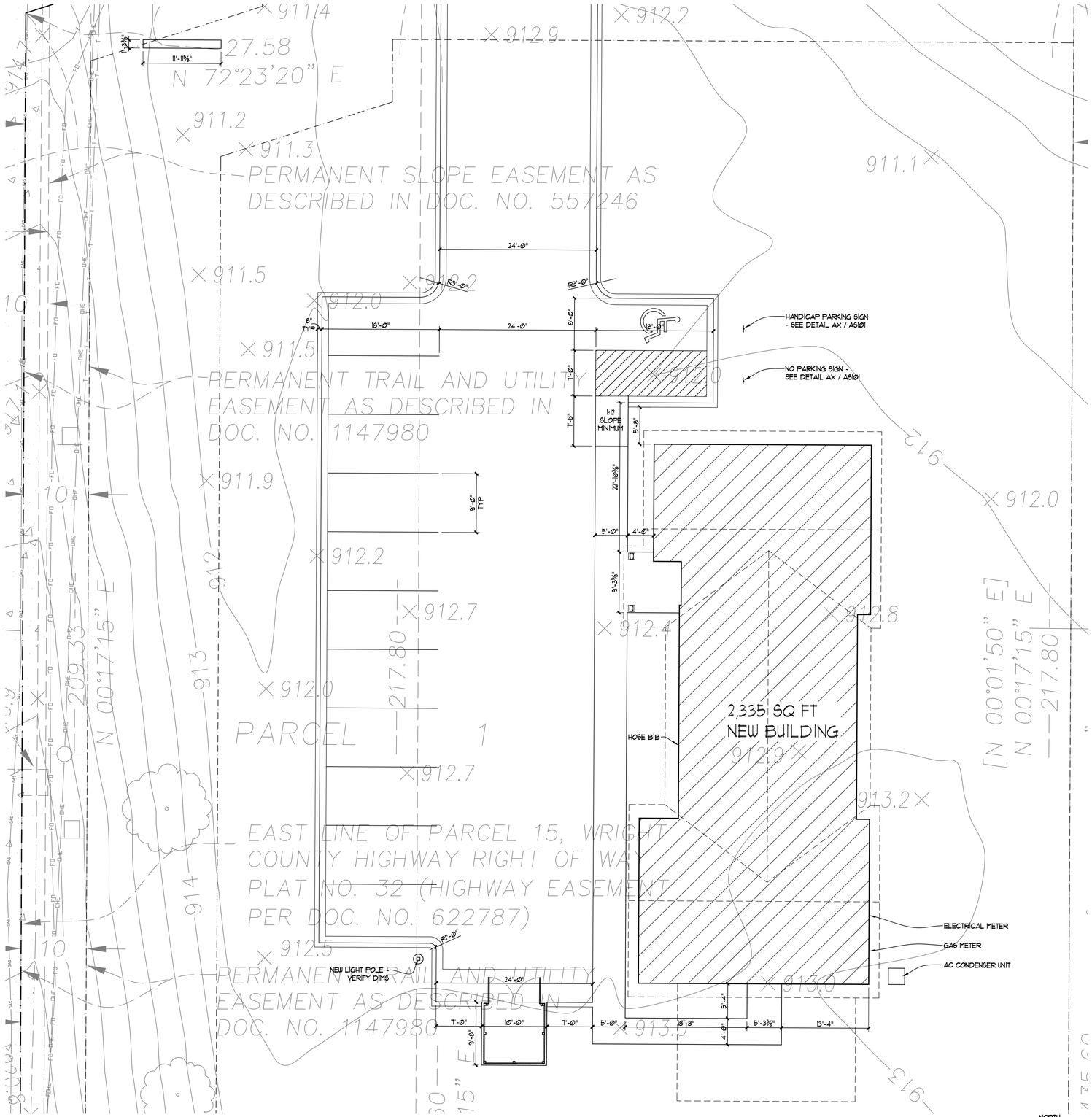

A1 / AS102 ENLARGED SITE PLAN
⅛" = 1'-0"

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HANOVER DENTAL

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HANOVER
MINNESOTA

SITE PLAN

AS102

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PLAN NOTES:

1. DIMENSIONS ON FLOOR PLANS ARE FROM FACE OF FRAMING OR GRID LINE
2. DIMENSIONS TO WALLS WITH RESILIENT CHANNELS ARE TO STUDS, NOT CHANNELS
3. DIMENSION ON HINGE SIDE OF DOOR JAMB IS 6" UNLESS NOTED OTHERWISE, OPENING IS DRAWN 2" WIDER THAN DOOR, FINISHED DIMENSION IS 6⅝" FROM BUTT SIDE OF DOOR TO FACE OF ADJACENT WALL
4. PARTITIONS ARE TYPE "A" UNLESS NOTED OTHERWISE
5. DIMENSIONS NOTED AS "VERIFY" ARE THE LESS CRITICAL DIMENSIONS AND IDENTIFY THE LOCATION WHERE ADJUSTMENTS CAN BE MADE TO MATCH ACTUAL CONDITIONS
6. ANY ADJUSTMENTS TO DIMENSIONS SHALL BE APPROVED BY THE ARCHITECT
7. ALL ANGLED WALLS ARE 45° UNLESS NOTED OTHERWISE
8. BACKING FOR LARGE EQUIPMENT TO BE FASTENED TO 18 GA STUDS
9. ALL BACKING TO BE INSTALLED PRIOR TO INSTALLATION OF PLUMBING AND ELECTRICAL

SEE SHEET A-101a FOR ELEVATION TAGS
SEE SHEET A-101a FOR ACCESSORY, EQUIPMENT, AND PLUMBING TAGS
SEE SHEET A-601 FOR WALL & PARTITION TYPES
SEE SHEET A-411 FOR ENLARGED PLANS

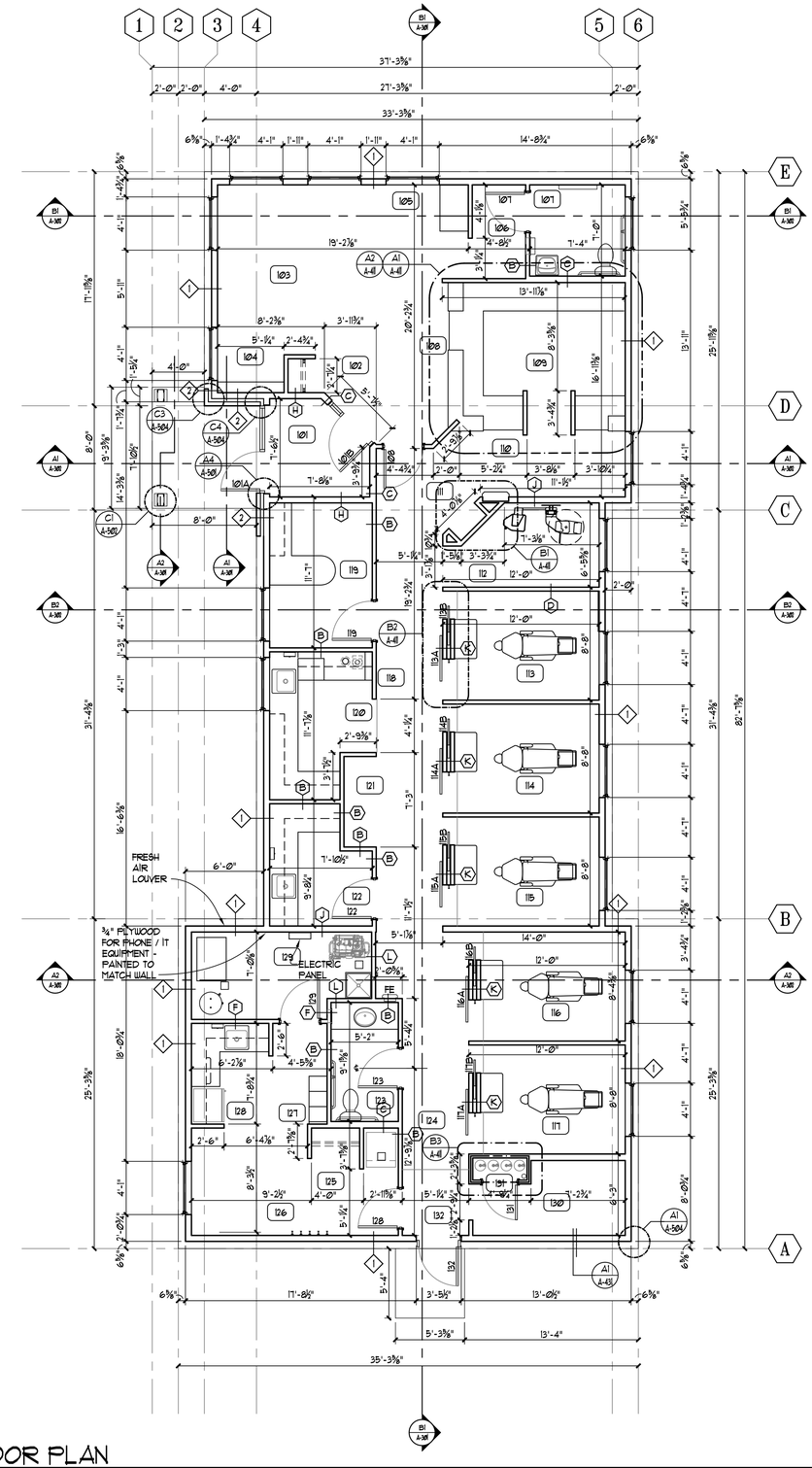
ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CEILING HT	REMARKS
101	VESTIBULE	PT1	PT2	PNT 1	GYP BD	10' - 0"	
102	COATS	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
103	PATIENT LOUNGE	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
104	KIDS AREA	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
105	HOSPITALITY	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
106	HALL	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
107	TOILET ROOM	PT 1	PT 4	PT 1 & 2 , PNT 1	ACT 1	9' - 0"	
108	RECEPTION	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
109	RECEPTIONIST	CPT 1	CPT 2	PNT 1 & 2	ACT 1	9' - 0"	
110	REAPPOINT	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
111	GOODBYE MIRROR / TOYS	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
112	PAN	CPT 1	CPT 2	PNT 1	ACT 1	8' - 0"	
113	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
114	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
115	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
116	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
117	TREATMENT	CPT 1	CPT 2	PNT 1	ACT 1	9' - 0"	
118	HALL	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
119	DOCTOR OFFICE	CPT 1	CPT 2	PNT 1	ACT	9' - 0"	
120	STERILE	VCT 1	VB 1	PNT 1 & 2	ACT 1	9' - 0"	
121	CART STORAGE	CPT 1	CPT 2	PNT 1 & 2	ACT 1	10' - 0"	
122	LAB	VCT 1	VB 1	PNT 1	ACT 1	8' - 0"	
123	TOILET ROOM	PT 1	PT 4	PT 1 & 2 , PNT 1	ACT 1	8' - 0"	
124	HALL	CPT 1	CPT 2	PNT 1	ACT 1	10' - 0"	
125	LAUNDRY / GOWNS	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
126	COAT HANING	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
127	STAFF LOCKERS	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
128	STAFF LOUNGE	VCT 1	VB 1	PNT 1	ACT 1	9' - 0"	
129	MECHANICAL / UTILITY ROOM	CONC	VB 1	PNT 1	GYP BD	12' - 0"	
130	STORAGE	VCT 1	VB 1	PNT 1	ACT 1	8' - 0"	
131	GAS CLOSET	VCT 1	VB 1	PNT 1	GYP BD	12' - 0"	
132	STAFF ENTRY	VCT 1	VB 1	PNT 1	ACT 1	10' - 0"	

KEY:

ACT	ACOUSTIC CEILING TILE	GYP BD	GYPSUM BOARD
CONC	FINISHED CONCRETE	PNT	PAINT
CPT	CARPET	VCT	VINYL COMPOSITION TILE
CT	CERAMIC TILE	VB	VINYL BASE

SEE FINISH MATERIALS SCHEDULE (SHEET A-131) FOR MORE INFORMATION ON FINISHES



A1 / A-101 FLOOR PLAN
3/16" = 1'-0"

NORTH

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3/16" = 1'- 0"

FLOOR PLAN
ROOM FINISH SCHEDULE

A-101

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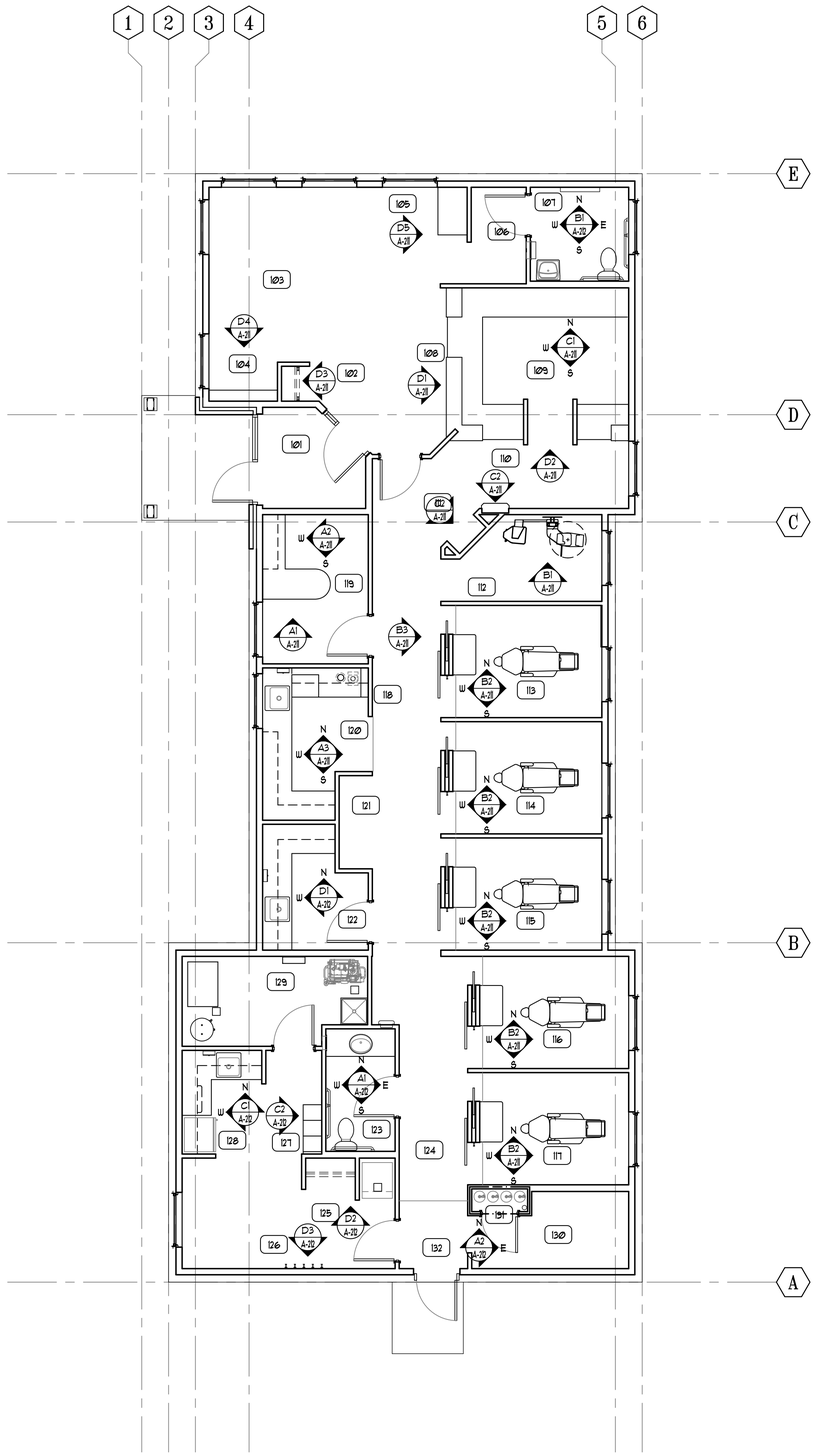
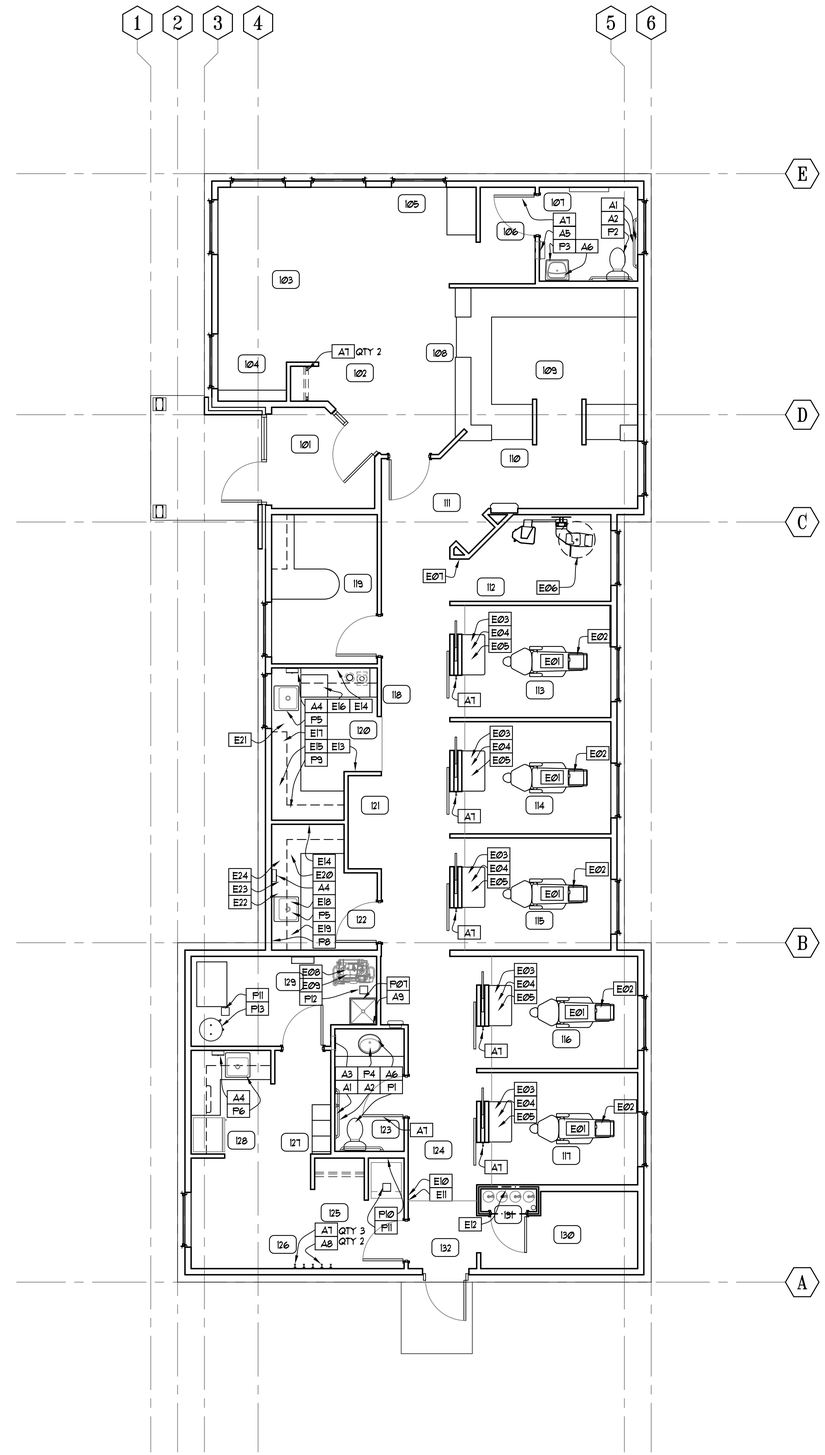


A1 A-101a FLOOR PLAN - ELEVATION TAGS
3/16" = 1'-0"



A2 A-101a FLOOR PLAN - ACCESSORIES, EQUIPMENT, PLUMBING TAGS
3/16" = 1'-0"

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MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

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Revisions

1728
Project Number

NEW BUILDING
HANOVER
DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

3/16" = 1'- 0"

FLOOR PLAN - ELEVATIONS
FLOOR PLAN - TAGS

A-101a

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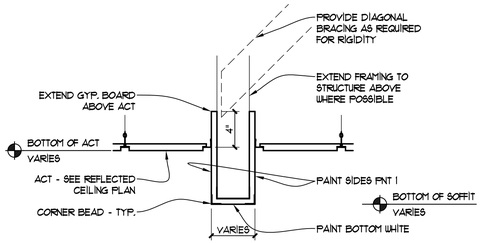
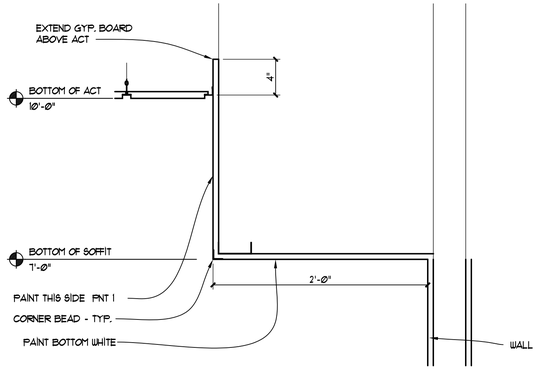
CEILING NOTES:

1. DIMENSIONS ON CEILING PLANS ARE FROM FINISHED SURFACES , ELEVATIONS ARE ABOVE FINISHED FLOOR
2. ASSUME GRIDS ARE CENTERED IN THE ROOMS AS SHOWN UNLESS DIMENSIONED OTHERWISE
3. THERE ARE TO BE NO VISIBLE "SLIVERS" OF ACT LESS THAN 3"
4. WHERE STRAIGHT RUNS OF WALL ANGLE ARE GREATER THAN 48", THERE ARE TO BE NO SEGMENTS OF WALL ANGLE LESS THAN 48"
5. CEILING HEIGHT IS AT 9'- 0" UNLESS NOTED OTHERWISE
6. CEILING HEIGHTS NOTED ARE TO FACE OF FINISHED CEILING MATERIAL, GRIDS ARE TO BE LOCATED ⅜" HIGHER THAN NOTED
7. NOTIFY THE ARCHITECT IF DIMENSIONS IN THE FIELD DO NOT MATCH DIMENSIONS ON THE PLANS
8. PARTITIONS THAT REQUIRE ENTIRE ASSEMBLY TO EXTEND TO THE DECK ABOVE ARE INDICATED ON PLAN BY A HATCH

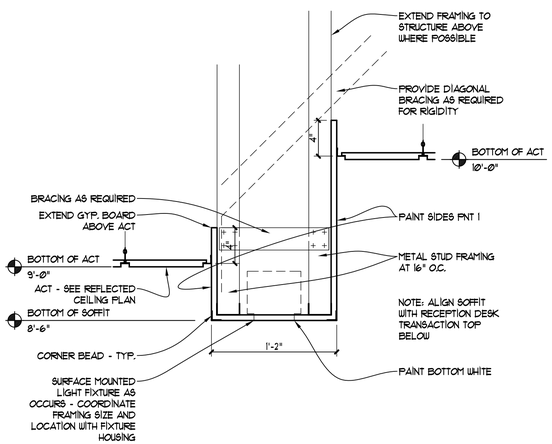
SEE FINISH MATERIALS SCHEDULE A-131



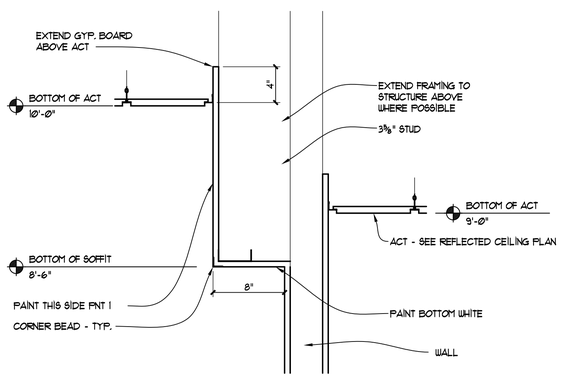
B1 A-III SOFFIT @ HEADER
1½" = 1'-0"



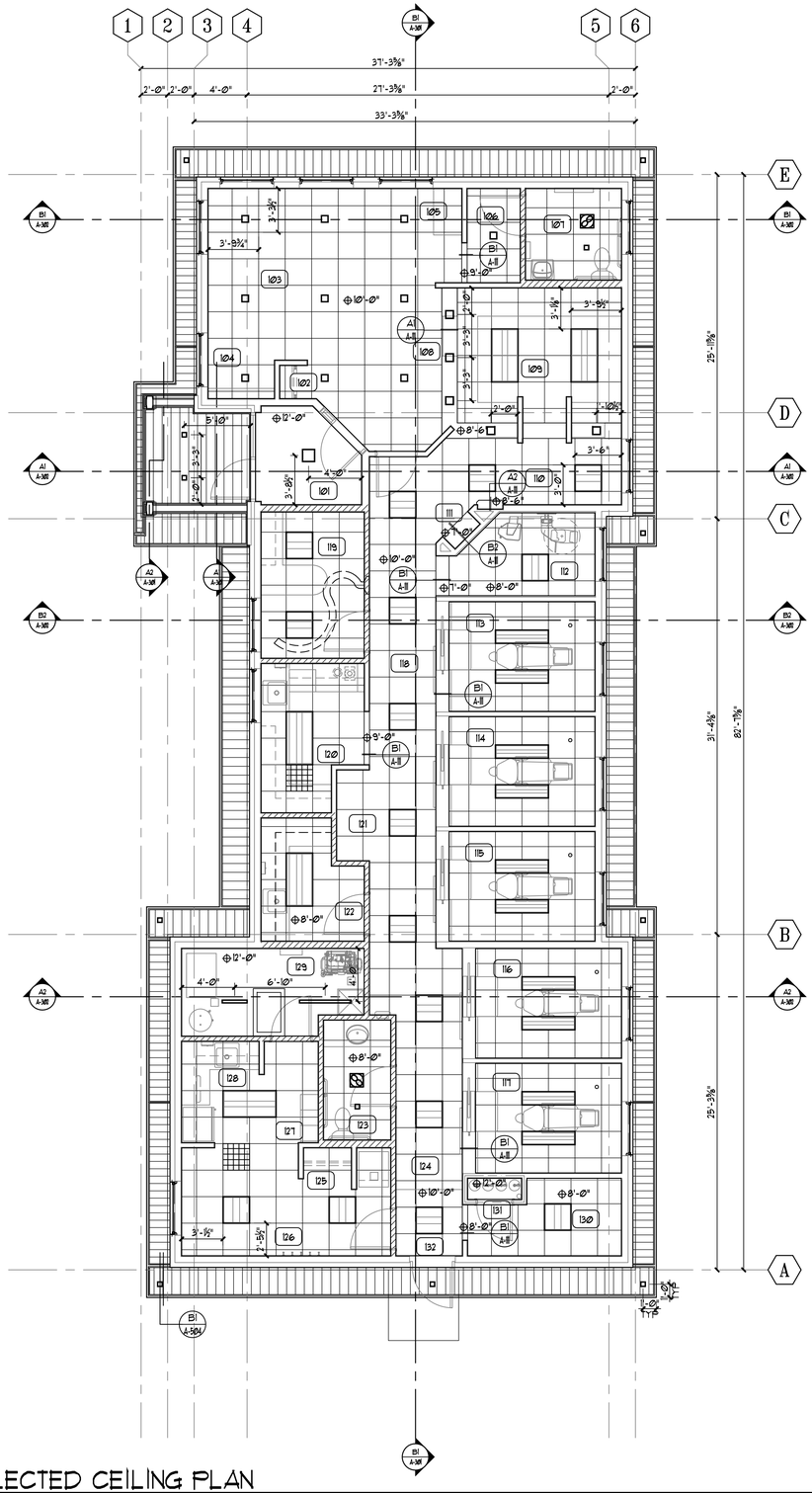
B2 A-III SOFFIT @ TOY GIVE-AWAY
1½" = 1'-0"



A1 A-III SOFFIT @ RECEPTION
1½" = 1'-0"



A2 A-III SOFFIT @ GOODBYE MIRROR
1½" = 1'-0"



A3 A-III REFLECTED CEILING PLAN
3/16" = 1'-0"

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HANOVER MINNESOTA

3/16" = 1'- 0"

REFLECTED CEILING PLAN

A-111

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FINISH MATERIALS SCHEDULE

FIN #	ITEM	ROOM	MANUFACTURER	PRODUCT	COLOR	REMARKS
ACT 1	ACOUSTIC CEILING TILE 2' X 2' X ¾"	SEE ROOM FINISH SCHEDULE	USG	808 SANDDRIFT	WHITE	WITH DONN DX GRID - WHITE LOCAL REPRESENTATIVE:
CG 1	CORNER GUARDS TAPE-ON	SEE FINISH PLAN	IN PRO CORPORATION	TAPE-ON CORNER GUARDS		IN PRO CORPORATION 11248 TAPE-ON CORNER GUARDS CORNER GUARDS CORRESPOND W/ SURFACES RECEIVING VWC 1 CORNER GUARD SELECTION FOR REFERENCE ONLY - NIC
CPT 1	CARPET TILE	SEE FINISH PLAN AND SCHEDULE	BENTLEY	MULTIPLAY 4MYT4	SUPER EVOLUTION 401380	SEE FLOOR COVERING AND GENERAL NOTES LOCAL REPRESENTATIVE: KELLAN BAKER 612. 827. 8282
CPT 2	CARPET BASE 3" HIGH , EDGE BIND AT TOP	SEE FINISH PLAN AND SCHEDULE	BENTLEY	MULTIPLAY 4MYT4	SUPER EVOLUTION 401380	SEE FLOOR COVERING AND GENERAL NOTES LOCAL REPRESENTATIVE: KELLAN BAKER 612. 827. 8282
ISO	ISOLATION PAD 48" x 72"	SEE ROOM FINISH SHEDULE	ACOUSTICAL SURFACES, INC	QUIET FLOOR NP		LOCAL REPRESENTATIVE: ACOUSTICAL SURFACES, INC - 1. 800. 854. 2948
PLAM 1	PLASTIC LAMINATE (COUNTERTOPS / SPLASHES)	SEE CABINET SCHEDULE	NEVAMAR		COOL CHIC VA7002T	SEE CABINET SCHEDULE CAULK AT BACKSPLASHES W/ KAMPEL COLOR-FLEX CF8009 MALT LOCAL REPRESENTATIVE: YOUNGBLOOD LUMBER CO. 800. 933. 1335
PLAM 2	PLASTIC LAMINATE (VERTICAL FACES)	SEE CABINET SCHEDULE	PIONITE		SABLE AG021	SEE CABINET SCHEDULE CAULK AT PERIMETERS W/ KAMPEL COLOR-FLEX CF8212 CHARCOAL LOCAL REPRESENTATIVE: BAER SUPPLY 800. 283. 2231
PLAM 3	PLASTIC LAMINATE (VERTICAL FACES)	SEE CABINET SCHEDULE	TAFISA		ANTIQUE WHITEWASH L475 (S)	SEE CABINET SCHEDULE CAULK AT PERIMETERS W/ KAMPEL COLOR-FLEX CF8009 MALT LOCAL REPRESENTATIVE:
PNT 1	PAINT	SEE FINISH PLAN AND SCHEDULE	SHERWIN WILLIAMS		WHITETAIL 7103	SEE PAINT NOTES FOR PAINT FINISH PAINTED DOOR FRAMES TO BE PNT 1 LOCAL REPRESENTATIVE:
PNT 2	PAINT	SEE FINISH PLAN AND SCHEDULE	SHERWIN WILLIAMS		DIGNITY BLUE 6804	SEE PAINT NOTES FOR PAINT FINISH LOCAL REPRESENTATIVE:
PNT 3	PAINT	SEE FINISH PLAN AND SCHEDULE	SHERWIN WILLIAMS		CEILING WHITE	SEE PAINT NOTES FOR PAINT FINISH
PT 1	PORCELAIN TILE 10" HEXAGON	SEE FINISH PLAN AND SCHEDULE	KATE-LO	ROMA HEXAGON	GRAFITE FORMGFT.10HEX	SEE PORCELAIN TILE NOTES / SANDED GROUT BOSTIK FRENCH GRAY H142 LOCAL REPRESENTATIVE: JENNIFER BOHLINGER 763. 545. 5455
PT 2	PORCELAIN TILE 3x12 BASE	SEE FINISH PLAN AND SCHEDULE	KATE-LO	ROMA	GRAFITE FORMGFT.0312	SEE PORCELAIN TILE NOTES / SANDED GROUT BOSTIK FRENCH GRAY H142 LOCAL REPRESENTATIVE: JENNIFER BOHLINGER 763. 545. 5455
PT 3	PORCELAIN TILE 3x6 WALL TILE	SEE FINISH PLAN AND SCHEDULE	KATE-LO	COLOUR & DIMENSION	ARCTIC WHITE MATTE QT.CD.ARWL0306.MT	SEE PORCELAIN TILE NOTES / SANDED GROUT BOSTIK FRENCH GRAY H142 LOCAL REPRESENTATIVE: JENNIFER BOHLINGER 763. 545. 5455
PT 4	PORCELAIN TILE 4½x6 COVED BASE	SEE FINISH PLAN AND SCHEDULE	KATE-LO	COLOUR & DIMENSION	ARCTIC WHITE MATTE STCB	SEE PORCELAIN TILE NOTES / SANDED GROUT BOSTIK FRENCH GRAY H142 LOCAL REPRESENTATIVE: JENNIFER BOHLINGER 763. 545. 5455
PT 5	PORCELAIN TILE 3x6 BULLNOSE TILE	SEE FINISH PLAN AND SCHEDULE	KATE-LO	COLOUR & DIMENSION	ARCTIC WHITE MATTE REL	SEE PORCELAIN TILE NOTES / SANDED GROUT BOSTIK FRENCH GRAY H142 LOCAL REPRESENTATIVE: JENNIFER BOHLINGER 763. 545. 5455
QS 1	QUARTZ STONE	SEE CABINET SCHEDULE	CAMBRIA		WHITE CLIFF	SEE CABINET SCHEDULE CAULK AT PERIMETERS W/ KAMPEL COLOR-FLEX CF8191 PEARL SAND LOCAL REPRESENTATIVE: KIMBERLY KIGER 952.944.1676
SS 1	SOLID SURFACE	SEE CABINET SCHEDULE	MEGANITE		SANDY SHORE 246A	SEE CABINET SCHEDULE, SEE PLUMBING SCHEDULE FOR SINK INFORMATION CAULK AT PERIMETERS W/ KAMPEL COLOR-FLEX CF8009 MALT LOCAL REPRESENTATIVE:
VB 1	VINYL BASE 2½" COVE	SEE ROOM FINISH SCHEDULE	JOHNSONITE	TRADITIONAL WALL BASE	22 PEARL CB	COVE PROFILE - SEE FLOOR COVERING NOTES LOCAL REPRESENTATIVE:
VCT 1	VINYL COMPOSITION TILE	SEE ROOM FINISH SCHEDULE	BENTLEY	CORE GCORE06X36	WHITE MYRTLE 801573	SEE FLOOR COVERING AND GENERAL NOTES LOCAL REPRESENTATIVE: KELLAN BAKER 612. 827. 8282
WD 1	WOOD-VENEER & SOLID	SEE CABINET SCHEDULE				SPECIES: ROTARY WHITE BIRCH STAIN TO MATCH MARSHFEILD SAND - DISCONTINUED SUBMIT SAMPLE TO ARCHITECT FOR APPROVAL LOCAL REPRESENTATIVE:
WD 1	WOOD-VENEER & SOLID	SEE CABINET SCHEDULE				SPECIES: ROTARY WHITE BIRCH STAIN TO MATCH MASONITE ASPIRO SERIES - STOUT SUBMIT SAMPLE TO ARCHITECT FOR APPROVAL LOCAL REPRESENTATIVE:

GENERAL FINISH NOTES:

A CONTRACTOR SHALL SUBMIT SAMPLES OF MATERIALS FOR THE ARCHITECT'S REVIEW
B ALL FLOORS ARE TO BE PREPARED AS REQUIRED FOR NEW FINISHES BY THE GENERAL CONTRACTOR.
C INSTALL ALL MATERIALS PER MANUFACTURER'S RECOMMENDATIONS.
D FIELD VERIFY ALL CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION - DO NOT SCALE DRAWINGS.
E ALL WORK TO BE IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES.
F ALL ELECTRICAL DEVICES TO BE GRAY , COVER PLATES TO BE STAINLESS STEEL.

VINYL FLOOR COVERING NOTES:

A PROVIDE SCHLUTER TRANSITION / EDGING STRIPS AT CARPET / SHEET VINYL, CARPET / CONCRETE, AND CARPET / TILE LOCATIONS IN APPROPRIATE PROFILES - ALL SUCH STRIPS TO BE SCHLUTER SYSTEMS - SATIN ANODIZED ALUMINUM.
B INSTALL VINYL FLOORING OVER APPROVED SUBSTRATE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
C INSTALL VINYL BASE IN COIL LENGTHS TO MINIMIZE SEAMS.
D USE OUTSIDE CORNER VINYL BASE TRIM "LOC" OR INSIDE CORNER BASE TRIM "LIC" WHERE APPROPRIATE.

CARPETING NOTES:

A PROVIDE SCHLUTER TRANSITION / EDGING STRIPS AT CARPET / SHEET VINYL, CARPET / CONCRETE, AND CARPET / TILE LOCATIONS IN APPROPRIATE PROFILES - ALL SUCH STRIPS TO BE SCHLUTER SYSTEMS - SATIN ANODIZED ALUMINUM.
B INSTALL CARPET BY DIRECT GLUE DOWN METHOD PER MANUFACTURER'S RECOMMENDATION IN A BRICK PATTERN.
C CARPET EDGES ARE BUTTED TOGETHER TO FORM SEAMS - A BEAD OF SEAM ADHESIVE IS TO BE APPLIED TO ALL EDGES TO SEAL THE SEAMS AND AT ALL EXPOSED EDGES TO PREVENT FRAYING AND UNRAVELING - SEAM ADHESIVE IS TO BE APPLIED ALONG THE TRIMMED EDGE WHERE THE FACE YARN ENTERS THE BACKING.
D CARPET BASE SHALL BE 3" HIGH. EDGE BIND AT TOP. SUBMIT COLOR SAMPLE FOR ARCHITECT'S APPROVAL.
E ORDER ALL CARPET MATERIALS FOR THE PROJECT AT THE SAME TIME.

PORCELAIN TILE NOTES:

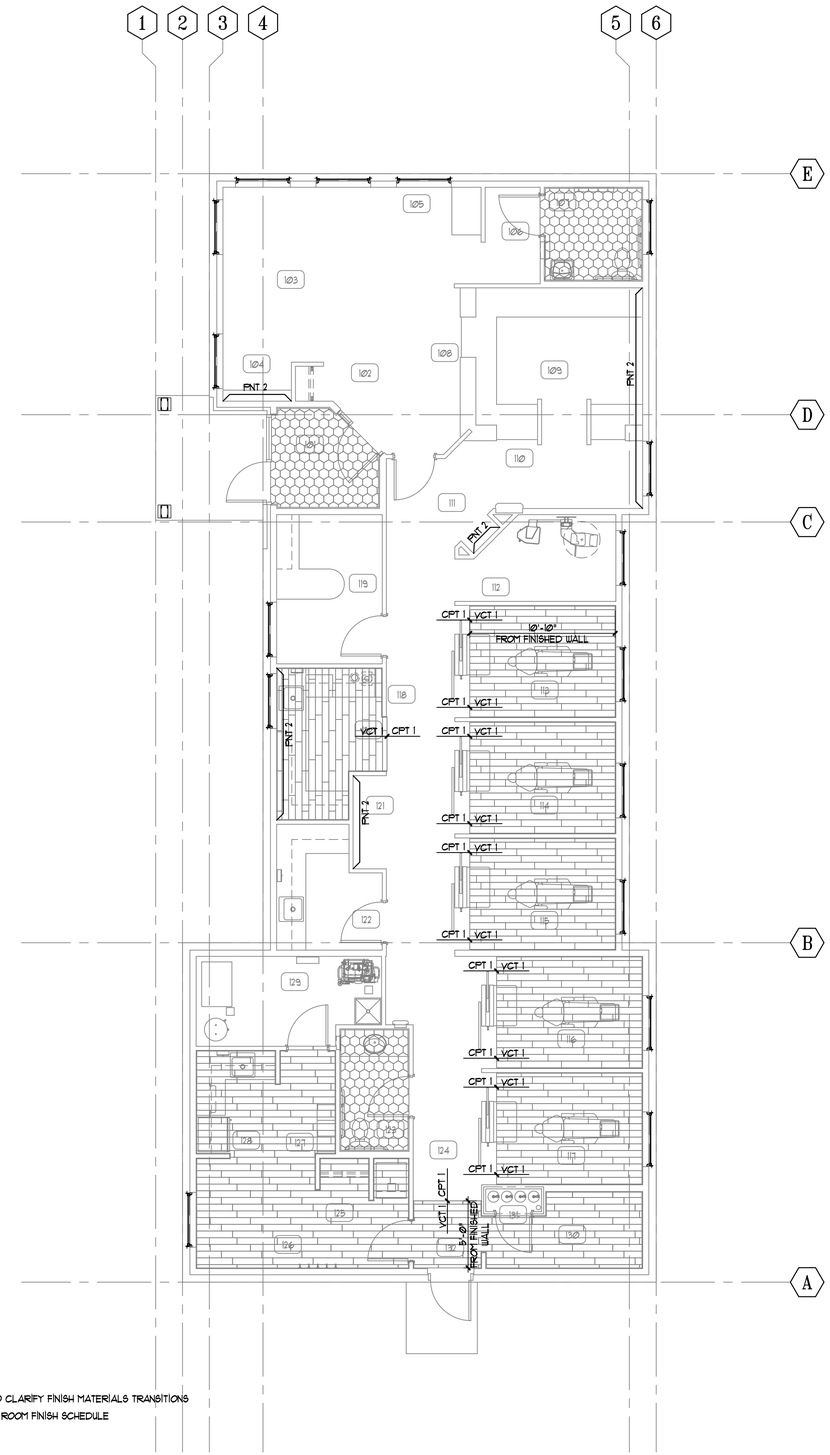
A LATEX MODIFIED GROUT TO BE USED FOR PORCELAIN TILE INSTALLATION.
B PREPAIRE FLOOR AND WALL SURFACES AND INSTALL PORCELAIN TILE ACCORDING TO TILE MANUFACTURERS RECOMMENDATION.
C GROUT JOINTS TO BE KEPT TO A MINIMUM - TILE INSTALLER TO VERIFY MANUFACTURER'S RECOMMENDATIONS.
D ALL EXPOSED TILE EDGES SHALL BE BULLNOSED, AND MANUFACTURED CORNERS AND COVED BASE SHALL BE USED WHEN AVAILABLE.
E COVE BASE SHALL BE INSTALLED FLUSH WITH FLOOR.

PAINT NOTES:

A ALL WALLS TO RECEIVE EGGSHELL FINISH.
ALL SOFFITS TO RECEIVE FLAT FINISH.
ALL HOLLOW METAL FRAMES TO RECEIVE SATIN ENAMEL FINISH.
B PREPARE AND PAINT ALL SURFACES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
C SOFFITS AND HEADERS RECEIVE PAINT MATCHING THE ADJACENT WALL(S), WITH THE BOTTOM FACE OF THE SOFFIT OR HEADER BEING PAINTED WHITE. IF BOTTOM FACE OF HEADER IS FLUSH WITH ADJACENT CEILING , THAT SIDE OF HEADER TO BE PAINTED WHITE . HEADERS ARE IN THE SAME PLANE AS THE WALL IMMEDIATELY ADJACENT, SOFFITS ARE NOT.

STAIN NOTES:

A WOOD SURFACES (DOORS , BASE , TRIM , ETC) SHALL HAVE FINISH TO MATCH MARSHFIELD SAND - DISCONTINUED - STAIN OR MASONITE ARCHITECTURAL ASPIRO SERIES STOUT STAIN WHERE NOTED AS WD2.
FINISHED WOOD VENEER PLYWOOD PANELS TO BE GRADE A BIRCH. FINISHED TRIM AND DIMENSION LUMBER TO BE BIRCH , SELECT OR BETTER.
B WHEN USING A DARKER STAIN PAINTER SHALL PRE WASH THE WOOD WITH A MIXTURE OF THINNER AND SEALER AS REQUIRED TO MINIMIZE BLOTCHING.



FINISH PLAN NOTES:

1 THIS PLAN SERVES TO CLARIFY FINISH MATERIALS TRANSITIONS
2 SEE SHEET A-101 FOR ROOM FINISH SCHEDULE

A1 / A-131 FINISH PLAN
3/16" = 1'-0"

NORTH

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HANOVER MINNESOTA

3/16" = 1'- 0"

FINISH PLAN
FINISH SCHEDULE

A-131

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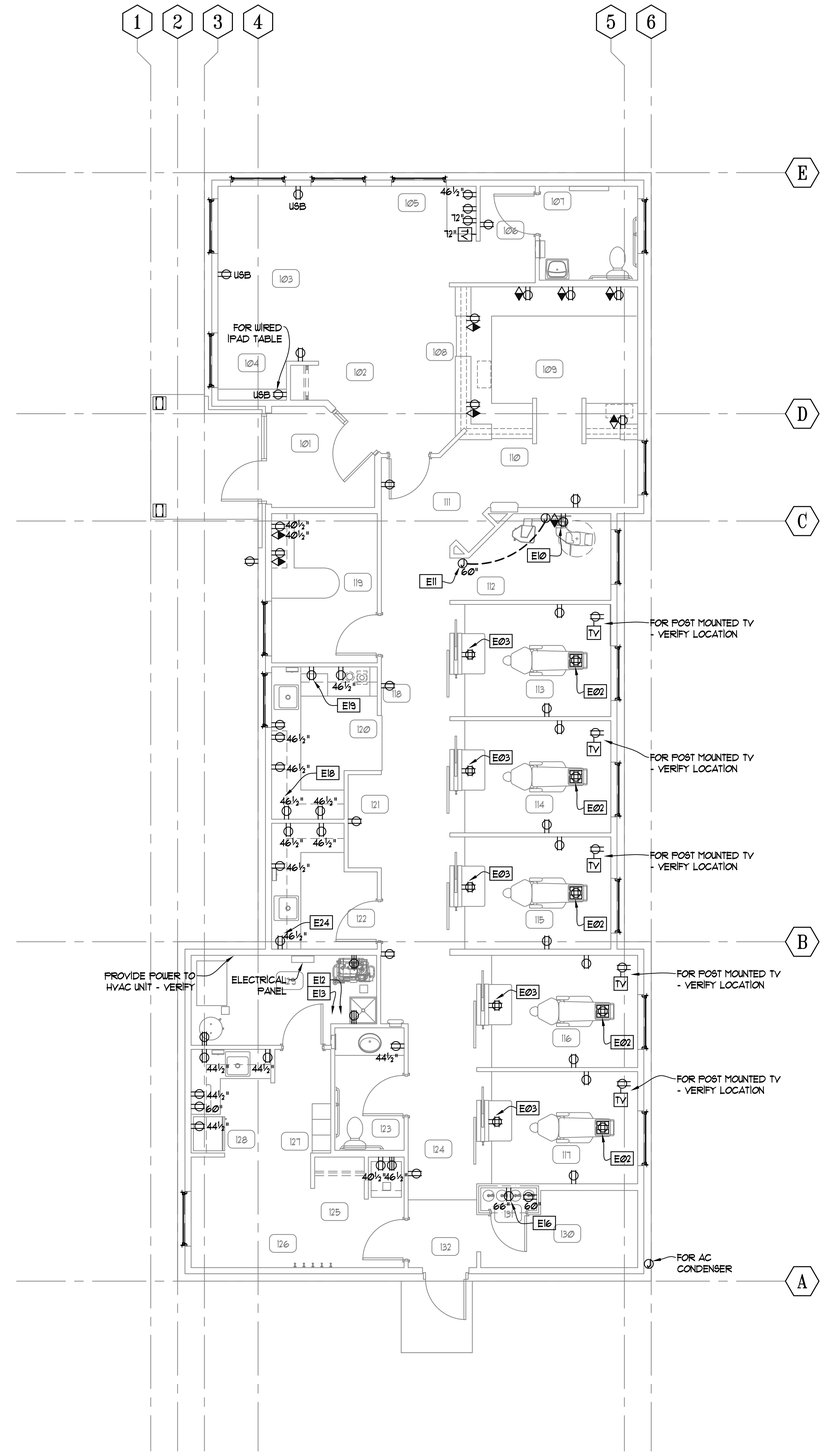
KEY TO ELECTRICAL SYMBOLS

- 120V DUPLEX RECEPTACLE
- USB 120V DUPLEX RECEPTACLE LEVITON T5632-GY USB CHARGER DEVICE
- 120V QUADRAPLEX RECEPTACLE
- 120V FLUSH FLOOR QUADRAPLEX RECEPTACLE
- 220V RECEPTACLE OR CONNECTION
- PHONE / DATA OUTLET
- "J" BOX W/CONDUIT TO ABOVE CEILING
- TV "J" BOX FOR CABLE W/CONDUIT TO ABOVE CEILING

ELECTRICAL NOTES:

1. REFER TO INTERIOR ELEVATIONS FOR OUTLET PLACEMENT
2. REFER TO EQUIPMENT SCHEDULE FOR ELECTRICAL REQUIREMENTS OF EQUIPMENT
3. VERIFY ALL FINAL OUTLET LOCATIONS WITH OWNER AND EQUIPMENT SUPPLIER
4. UNLESS NOTED OTHERWISE, INSTALL DEVICES AT TYPICAL HEIGHT NOTED BELOW
5. TYPICAL SWITCH HEIGHT IS 46 1/2" AFF TO CENTER
6. TYPICAL OUTLET HEIGHT IS 18" AFF TO CENTER, 12" AFF IN KNEESPACES UNDER DESKTOPS
7. DEVICES ARE TO BE GREY, PLATES ARE TO BE STAINLESS STEEL
8. ELECTRICAL CONTRACTOR TO COORDINATE WITH CABINET CONTRACTOR TO DETERMINE THE CORRECT DEPTH OF MUD RING TO ASSURE THAT DEVICES INSTALLED IN THE BACKS OF CABINETS ARE FLUSH WITH THE INSIDE FACE OF CABINET BACK
9. ELECTRICAL CONTRACTOR TO REVIEW THERMOSTAT LOCATIONS W/ ARCHITECT



A1 / A-151 POWER PLAN
3/16" = 1'-0"

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MINNESOTA

3/16" = 1'- 0"

POWER PLAN

A-151

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LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	VOLTAGE	LAMPS	WATTAGE	DIFFUSER	MOUNTING	MFGR & CAT NUMBER	REMARKS
A	LED 1' x 4' HIGH OUTPUT DIMMING	UNV	LED 3500K	41.1 WATTS	ROUND PATTERN	RECESSED	METALUX CRUZE 14CZ-LD5-44-RDP-UNV-L835-CD1	
B	LED 1' x 4' HIGH OUTPUT EMERGENCY	UNV	LED 3500K	41.1 WATTS	ROUND PATTERN	RECESSED	METALUX CRUZE 14CZ-LD5-44-RDP-UNV-ELTW-L835-CD1	
C	LED 2' x 4' HIGH OUTPUT DIMMING	UNV	LED 3500K	40.7 WATTS	ROUND PATTERN	RECESSED	METALUX CRUZE 24CZ-LD5-50-RDP-UNV-L835-CD1	
D	LED 2' x 2' STANDARD OUTPUT DIMMING	UNV	LED 3500K	29.4 WATTS	ROUND PATTERN	RECESSED	METALUX CRUZE 24CZ-LD5-34-RDP-UNV-L835-CD1	
E	LED 2' x 2' HIGH OUTPUT DIMMING	UNV	LED 3500K	41.8 WATTS	ROUND PATTERN	RECESSED	METALUX CRUZE 24CZ-LD5-44-RDP-UNV-L835-CD1	
F	LED CEILING MOUNT 11" SQUARE	UNV	LED 3500K	20 WATTS		SURFACE CEILING	WAC LIGHTING FM-11SQ-935-BN	1
G	LED CEILING MOUNT 7" SQUARE	UNV	LED 3500K	15 WATTS		SURFACE CEILING	WAC LIGHTING FM-07SQ-935-BN	
H	LED RECESSED 6" SQUARE	UNV	LED 3500K	35.8 WATTS	HAZE CLEAR	RECESSED CEILING	ATLANTIC LIGHTING LED6x6-DLM30-35K-U L6Q6621-HZ	
J	LED RECESSED 4" SQUARE	UNV	LED 3500K	35.8 WATTS	HAZE CLEAR	RECESSED CEILING	ATLANTIC LIGHTING LED4x4-DLM30-35K-U L6Q4421-S6	1, 2
K	LED VANITY 24" ROTARY PANEL	120	LED 3000K	22 WATTS	ACRYLIC	WALL MOUNT	WAC LIGHTING LINE WS-6724-30-AL	
L	UNDER CABINET TASK LIGHT 42" LOW PROFILE	120	(2) F13/T5 COOL WHITE	27 WATTS	ACRYLIC PRISMATIC	SURFACE UNDER CAB	METALUX CL CL-213T5-EB-120V-U	
M	UNDER CABINET TASK LIGHT 42" LOW PROFILE SOLID FRONT	120	(2) F13/T5 COOL WHITE	27 WATTS	ACRYLIC PRISMATIC	SURFACE UNDER CAB	METALUX CL SF-CL-213T5-EB-120V-U	
N	LINEAR LED ABOVE DOOR WALL MOUNTED	120	LINEAR LED 4000K	23 WATTS	SLSTP SERIES	SURFACE WALL	METALUX AP SERIES SLSTP LENSED 2SLSTP2040DD-120V	
P	LINEAR LED CEILING MOUNTED	UNV	LINEAR LED 3500K	41 WATTS	SLSTP SERIES	SURFACE CEILING	METALUX AP SERIES SLSTP LENSED 4SLSTP4035DD-UNV	
Q	LINEAR LED CEILING MOUNTED	UNV	LINEAR LED 3500K	23 WATTS	SLSTP SERIES	SURFACE CEILING	METALUX AP SERIES SLSTP LENSED 2SLSTP2035DD-UNV	
R	PARKING LIGHTING POST MOUNTED			225 WATTS		POST MOUNT	MCGRAW GLEON-AF-04-LED-E1-T4FT	

NOTE:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THESE ITEMS FOR THE ARCHITECT'S REVIEW

REMARKS

1 FIXTURE TO BE ON TIMER AND PHOTOCELL

2 FIXTURE TO BE SUITABLE FOR WET WATER APPLICATION

KEY TO LIGHTING SYMBOLS

- RECESSED DOWNLIGHT
- SURFACE MOUNTED DOWNLIGHT
- SURFACE MOUNT LIGHT FIXTURE - WALL BOX
- RECESSED LIGHT FIXTURE
- EMERGENCY RECESSED LIGHT FIXTURE
- UNDERCABINET FLUORESCENT LIGHT FIXTURE
- RECESSED CEILING MOUNT EXIT LIGHT
- $ SINGLE POLE SWITCH
- $3 THREE WAY SWITCH
- $D DIMMER SWITCH
- [$] OCCUPANCY SENSOR

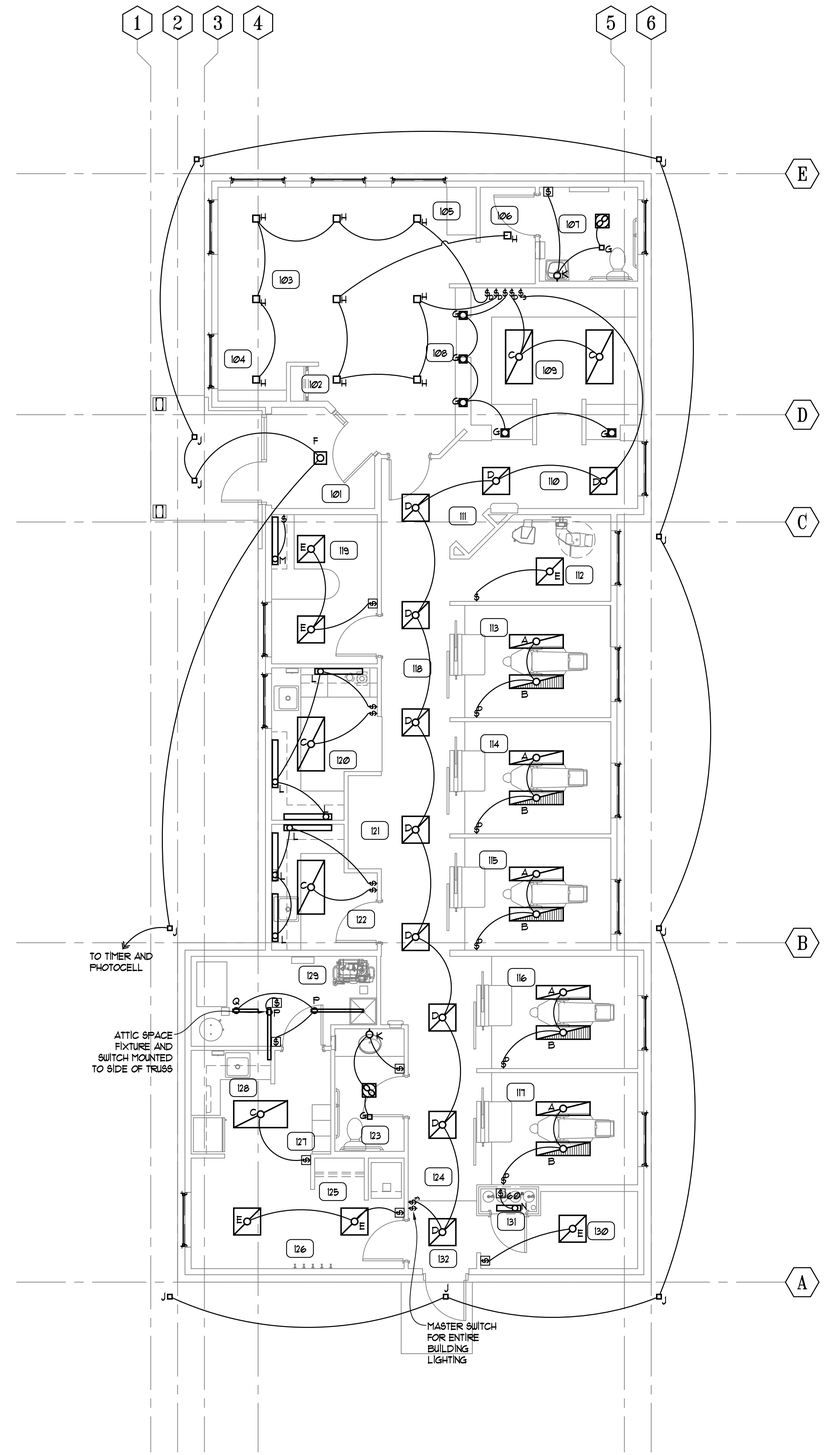
LIGHTING NOTES:

1 UNLESS NOTED OTHERWISE, INSTALL SWITCHES AT 46 1/2" AFF TO CENTER

2 DEVICES ARE TO BE GREY, PLATES ARE TO BE STAINLESS STEEL

3 ELECTRICAL CONTRACTOR TO COORDINATE WITH CABINET CONTRACTOR TO DETERMINE THE CORRECT MOUNTING HEIGHT OF UNDER CABINET LIGHTS TO ASSURE THAT FIXTURES INSTALLED FLUSH WITH THE UNDERSIDE FACE OF CABINET

4 EACH UNDER CABINET LIGHT FIXTURE SHALL BE FED INDIVIDUALLY (I.E. NOT LINKED W/ VISUAL CABLE)



A1 / A-161 LIGHTING PLAN
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LIGHTING PLAN
LIGHT SCHEDULE

A-161

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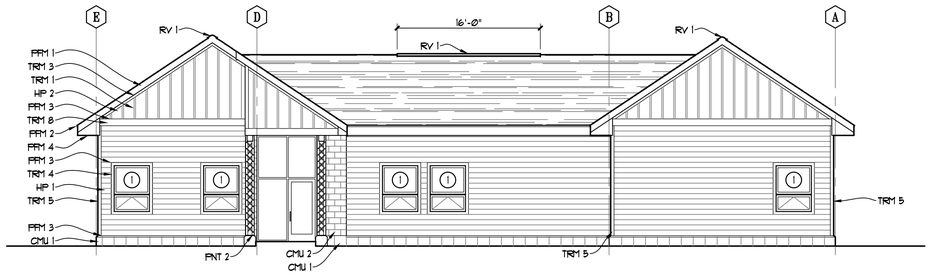
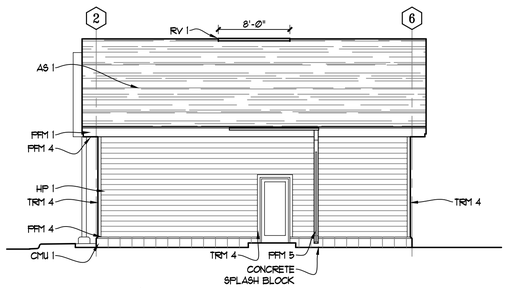
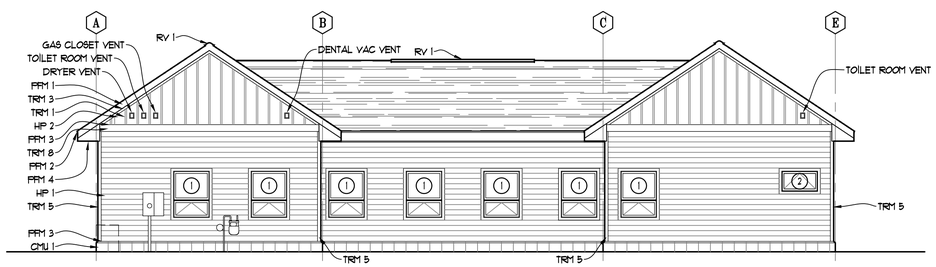


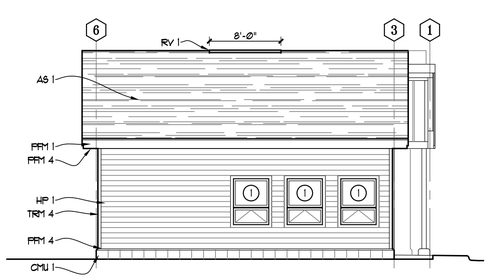
D1 / A-201 EXTERIOR ELEVATION - WEST
1/8" = 1'- 0"



C1 / A-201 EXTERIOR ELEVATION - SOUTH
1/8" = 1'- 0"



B1 / A-201 EXTERIOR ELEVATION - EAST
1/8" = 1'- 0"



A1 / A-201 EXTERIOR ELEVATION - NORTH
1/8" = 1'- 0"

EXTERIOR FINISH SCHEDULE

FINISH	ITEM	MANUFACTURER	COLOR	REMARKS
AS 1	ASPHALT SHINGLES HERITAGE PREMIUM	TAMKO	RUSTIC BLACK	
CMU 1	4" CONCRETE MASONRY SILL UNIT 12512000000001	AMCON BLOCK	ONYX	
CMU 2	4" CONCRETE MASONRY UNIT BURNISHED	AMCON BLOCK	ONXY	
GRT 1	GROUT PRISM PIGMENTS	PRISM CORPORATION	PRISM PS1140 SLATE GREY	
HP 1	HARDIEPLANK LAP SIDING SELECT CEDARMILL	JAMES HARDIE	BOOTHBAY BLUE	
HP 2	HARDIEPANEL VERTICAL SIDING SELECT CEDARMILL	JAMES HARDIE	LIGHT MIST	
FRM 1	FASCIA CLADDING	FIRESTONE UNA - CLAD	BONE WHITE	
FRM 2	DRIP EDGE	FIRESTONE UNA - CLAD	BONE WHITE	
FRM 4	FLASHING	FIRESTONE UNA - CLAD	BONE WHITE	
FRM 5	SOFFIT 8" UC-500 AND UC-500V	FIRESTONE UNA - CLAD	BONE WHITE	1
FRM 4	GUTTER 4"x3" BEVELED GUTTER	FIRESTONE UNA - CLAD	BONE WHITE	
PTX 1	EXTERIOR PAINT	SHERWIN WILLIAMS	SW 7007	
PTX 2	EXTERIOR PAINT	SHERWIN WILLIAMS	SW 7593	
RV 1	RIDGE VENT SHINGLEVENT II	AIR VENT INC	CHARCOAL	
TRE 1	1x6 TREX PLANK 6' LENGTHS	TREX	WINCHESTER GREY	
TRM 1	EXTERIOR COMPOSITE TRIM WOOD TEXTURE ⅝" x 2" ACTUAL	MIRATEC	PRIMED TO PAINT	2
TRM 2	EXTERIOR COMPOSITE TRIM SMOOTH ⅝" x 2" ACTUAL	MIRATEC	PTX 1	
TRM 3	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 4 NOMINAL	MIRATEC	PTX 1	
TRM 4	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 4 NOMINAL	MIRATEC	PTX 1	
TRM 5	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 5 NOMINAL	MIRATEC	PTX 1	
TRM 6	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 5 NOMINAL	MIRATEC	PTX 1	
TRM 7	EXTERIOR COMPOSITE TRIM SMOOTH 4/4 x 6 NOMINAL	MIRATEC	PTX 1	
TRM 8	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 10 NOMINAL	MIRATEC	PTX 1	
TRM 9	EXTERIOR COMPOSITE TRIM SMOOTH 5/4 x 2 NOMINAL	MIRATEC	PTX 1	
WIN 1	WINDOW ALUMINUM CLAD	MARVIN	STONE WHITE	

NOTE:

CONTRACTOR SHALL SUBMIT SAMPLES OF THESE ITEMS FOR THE ARCHITECT'S REVIEW

REMARKS:

1 SEE REFLECTED CEILING PLAN A-111 FOR LOCATION OF VENTED SOFFITS

2 TO BE PAINTED TO MATCH HARDIEPANEL VERTICAL SIDING LIGHT MIST

WINDOW SCHEDULE

WINDOW	MANUFACTURER	UNIT NUMBER	FRAME SIZE	ROUGH OPENING	REMARKS
1	MARVIN	CWUN4840 / CWUN4824	4'-0" X 5'-2¼"	4'-1" X 5'-3½"	1 , 3
2	MARVIN	CWUN4828	4'-0" X 2'-4"	4'-1" X 2'-5¼"	2 , 3

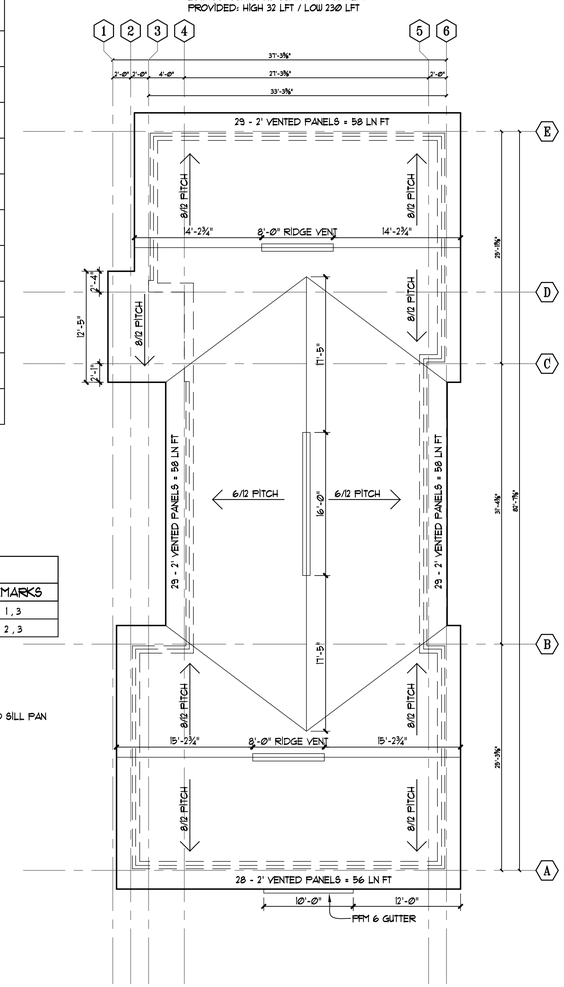
REMARKS:

1 STATIONARY UPPER AND OPERATING LOWER, GRAY TINTED LOW E II GLASS, CLADDING COLOR IS STONE WHITE

2 OPERATING WINDOW, GRAY TINTED LOW E II GLASS, CLADDING COLOR IS STONE WHITE

3 RO DIMENSIONS REFER TO STUD FRAMING AND ARE ADJUSTED FROM MANUFACTURER'S SUGGESTION TO ACCOMMODATE SLOPED SILL PAN DETAIL AS SHOWN

ATTIC VENTING
REQUIRED: 2336 SQ FT / 300 = 7.79 SQ FT = 1121 SQ IN
HIGH: 561 SQ IN / 18 SQ IN / LFT = 32 LFT
LOW: 561 SQ IN / 25 SQ IN / FT = 224 LFT
PROVIDED: HIGH 32 LFT / LOW 230 LFT



A2 / A-201 ROOF PLAN
1/8" = 1'- 0"

NORTH

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2800 University Avenue SE, Suite 100
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DENTAL

411 LABEAUX AVENUE NE

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MINNESOTA

1/8" = 1'- 0"

EXTERIOR ELEVATIONS
EXTERIOR FINISH SCHEDULE

A-201

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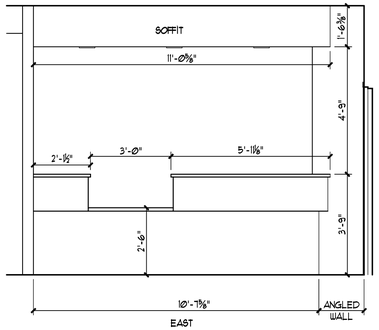
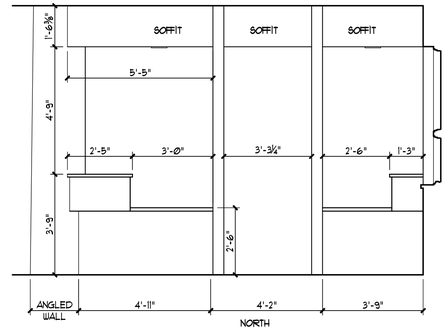


D1 A-211 **RECEPTION - 108**
⅜" = 1'- 0"



D2 A-211 **REAPPOINT - 110**
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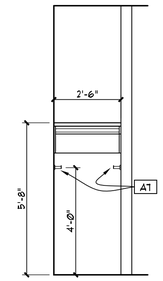

D3 A-211 **COATS - 102**
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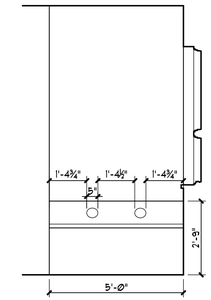
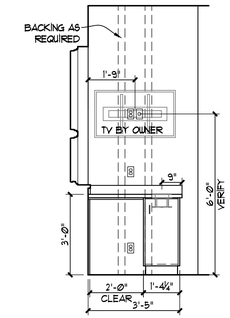
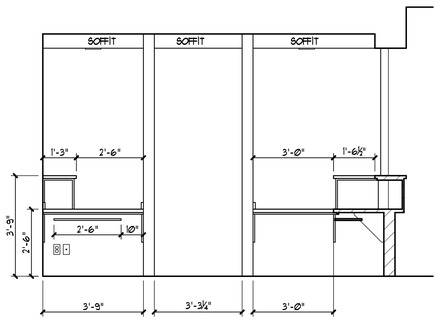


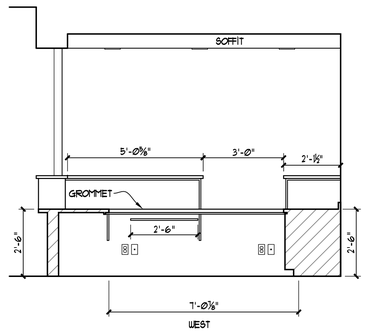
D4 A-211 **KIDS AREA - 104**
⅜" = 1'- 0"

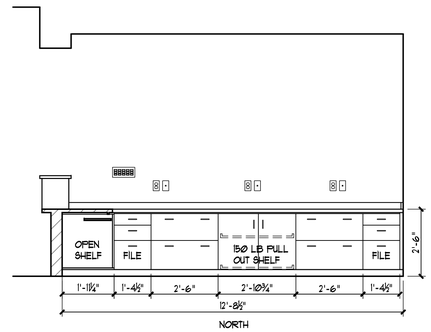


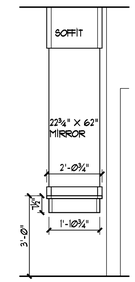
D5 A-211 **HOSPITALITY - 105**
⅜" = 1'- 0"

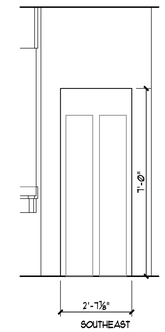


C1 A-211 **RECEPTIONIST - 109**
⅜" = 1'- 0"

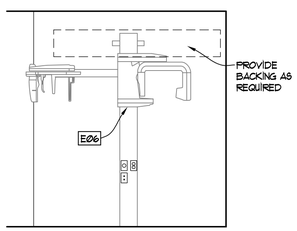




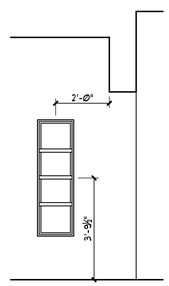


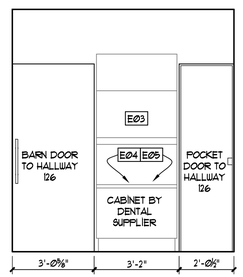


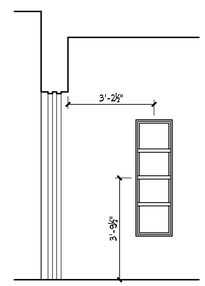
C2 A-211 **GOODBYE MIRROR / TOYS - 111**
⅜" = 1'- 0"



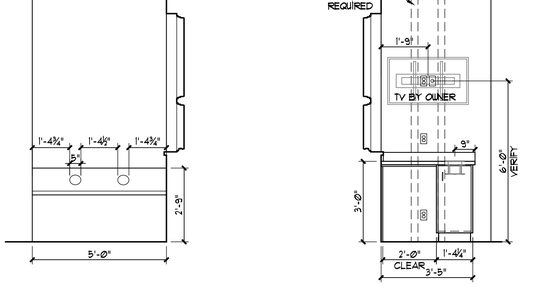
B1 A-211 **PAN - 112**
⅜" = 1'- 0"



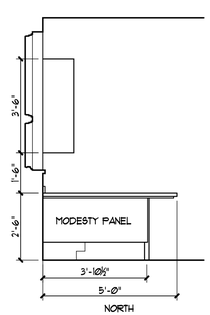


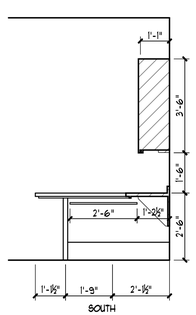


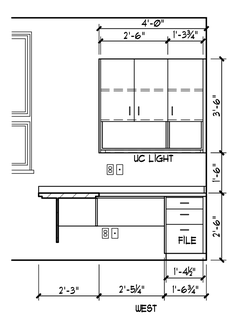
B2 A-211 **TREATMENT - 113 / 114 / 115 / 116 / 117**
⅜" = 1'- 0"



B3 A-211 **HALL - 118**
⅜" = 1'- 0"

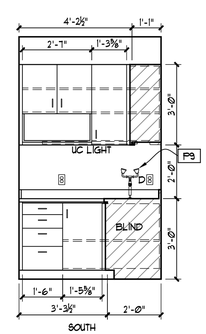


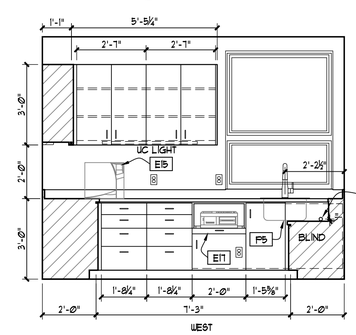


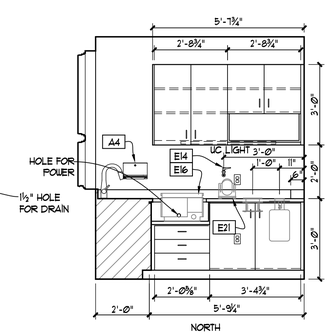


A1 A-211 **DOCTOR OFFICE - 119**
⅜" = 1'- 0"

A2 A-211 **DOCTOR OFFICE - 119**
⅜" = 1'- 0"







A3 A-211 **STERILE - 120**
⅜" = 1'- 0"

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C L ROBERTSON / 22275
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1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

3/8" = 1'- 0"

INTERIOR ELEVATIONS

A-211

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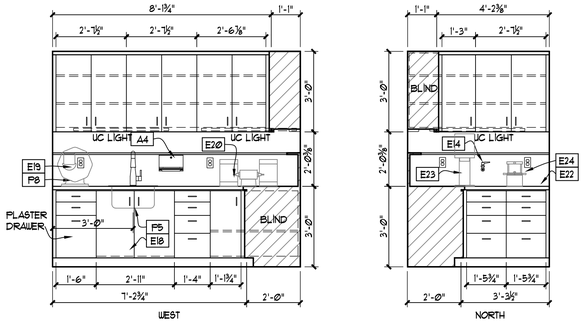
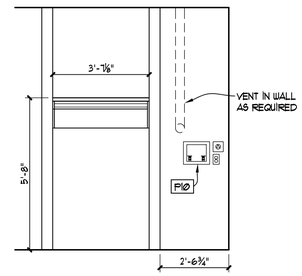
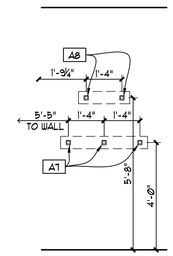


D1 A-212 LAB - 122
⅜" = 1'- 0"



D2 A-212 LAUNDRY / GOWNS - 125
⅜" = 1'- 0"



D3 A-212 COAT HANGING - 126
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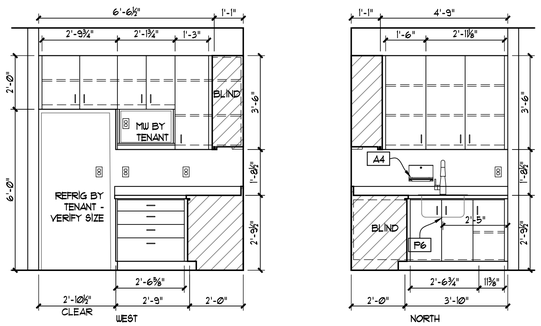
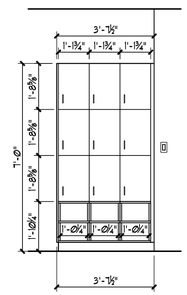


C1 A-212 STAFF LOUNGE - 128
⅜" = 1'- 0"



C2 A-212 STAFF LOCKERS - 127
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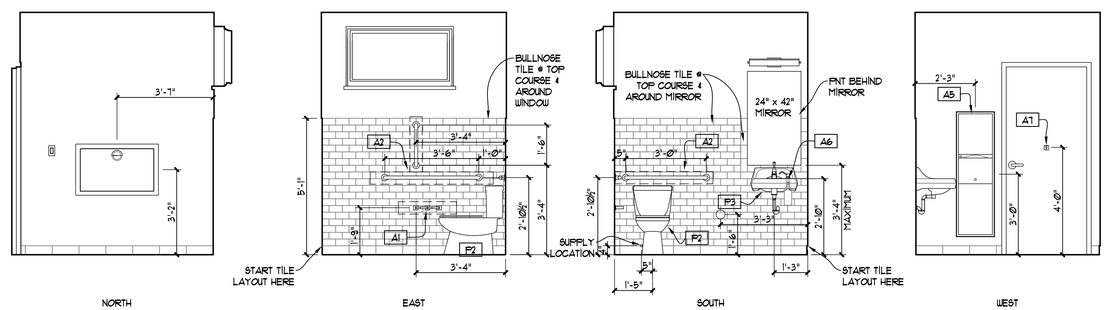
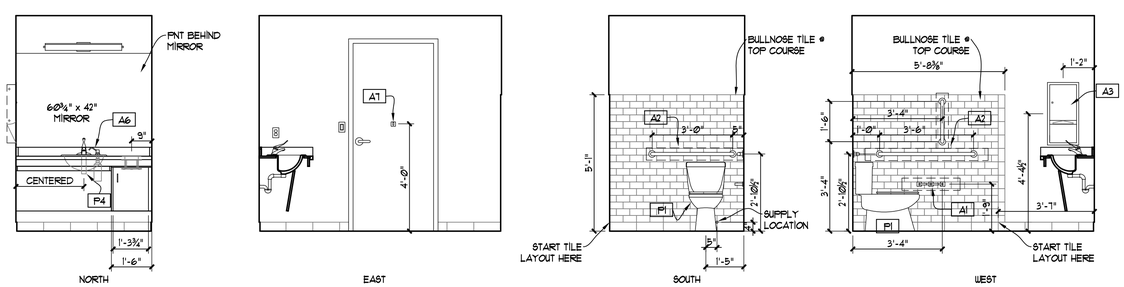


B1 A-212 TOILET ROOM - 107
⅜" = 1'- 0"



A1 A-212 TOILET ROOM - 123
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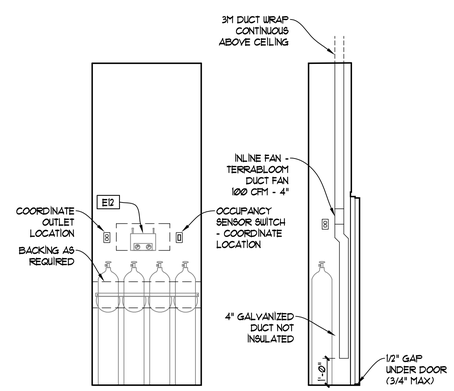

A2 A-212 GAS CLOSET - 131
⅜" = 1'- 0"

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HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

3/8" = 1'- 0"

INTERIOR ELEVATIONS

A-212

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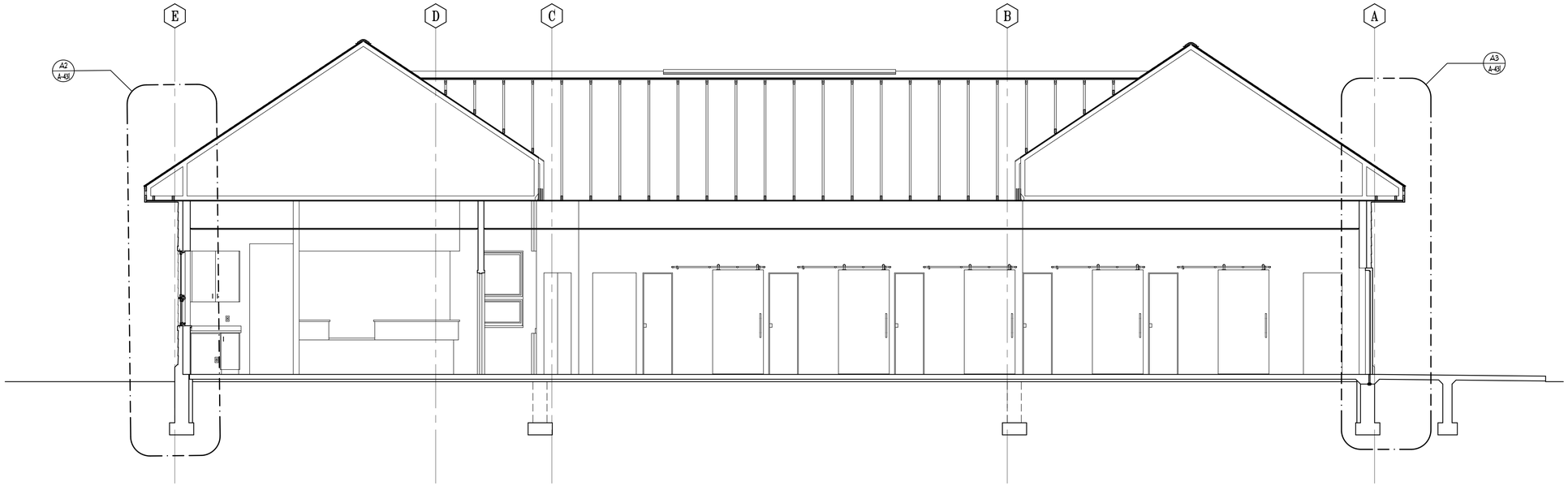
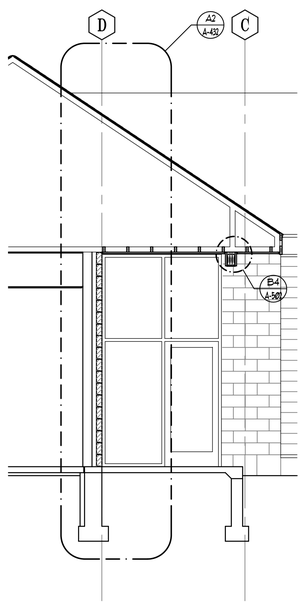


B1 A-301 BUILDING SECTION
¼" = 1'-0"



A1 A-301 PARTIAL SECTION
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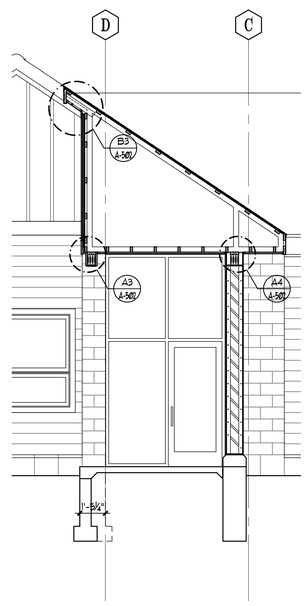

A2 A-301 PARTIAL SECTION
¼" = 1'-0"

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NEW BUILDING
HANOVER
DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

1/4" = 1'- 0"

BUILDING SECTIONS

A-301

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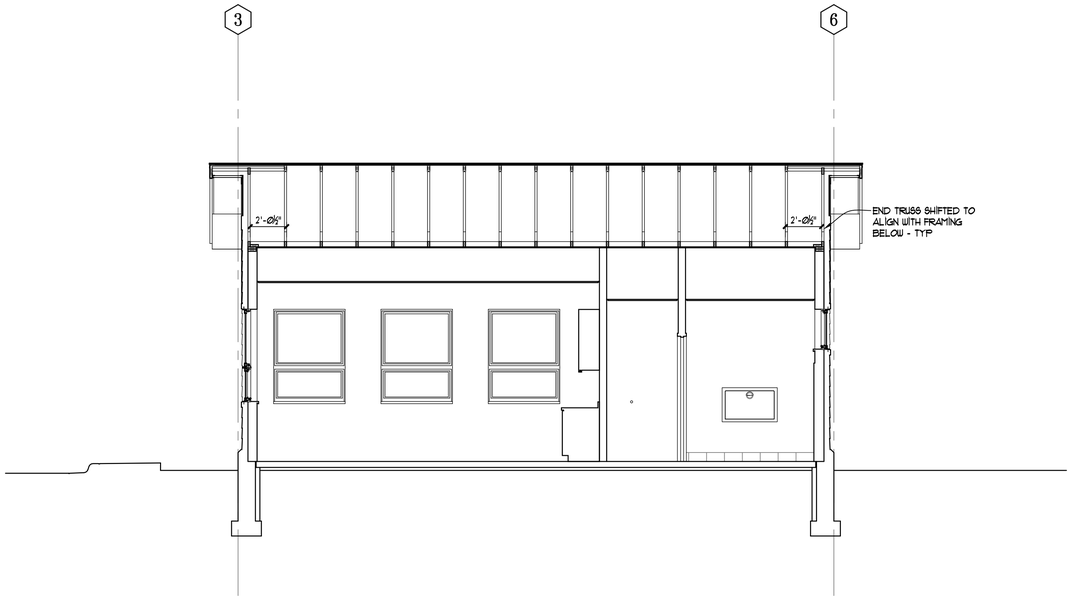

B1 A-302 BUILDING SECTION
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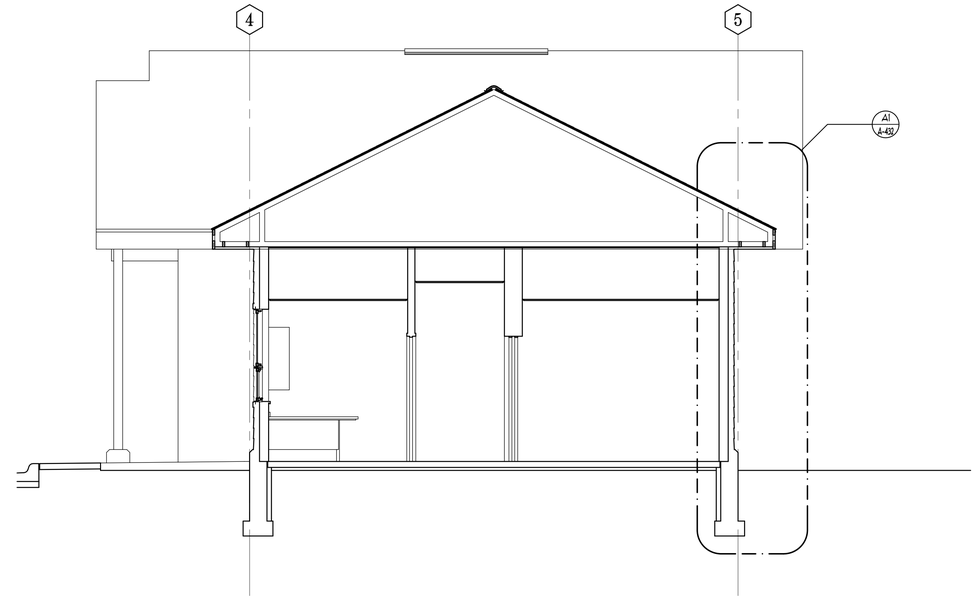

B2 A-302 BUILDING SECTION
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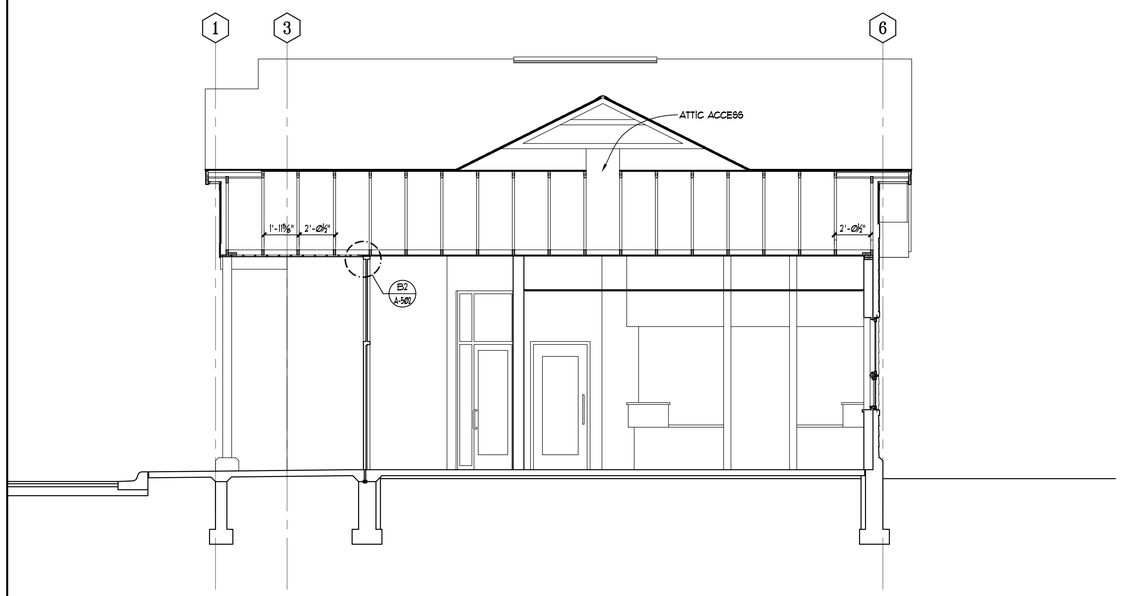
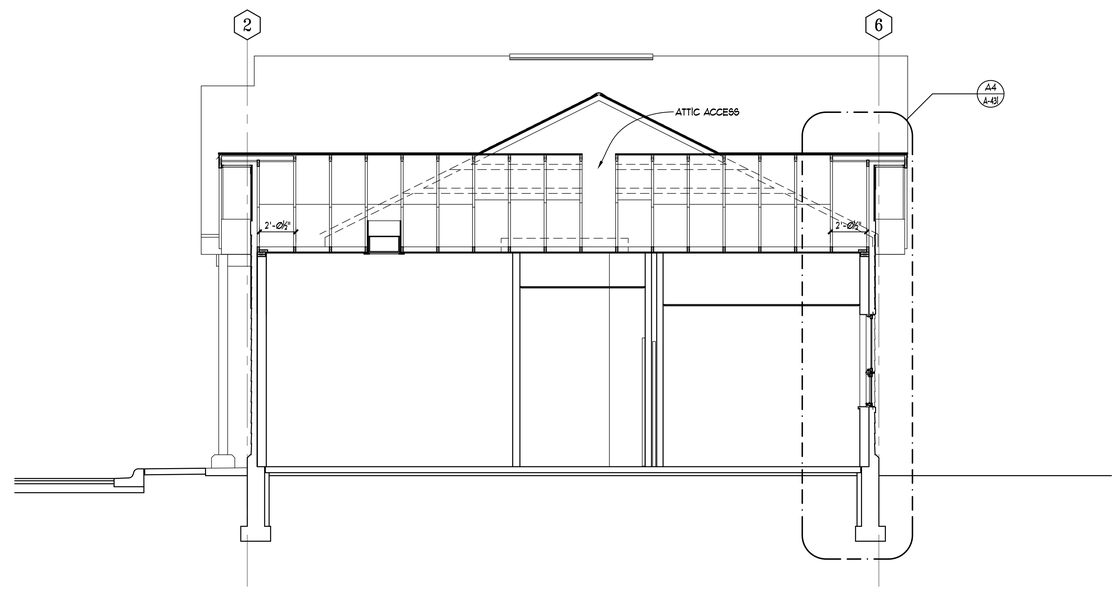


A1 A-302 BUILDING SECTION
¼" = 1'-0"



A2 A-302 BUILDING SECTION
¼" = 1'-0"

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NEW BUILDING
HANOVER
DENTAL

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HANOVER
MINNESOTA

1/4" = 1'- 0"

BUILDING SECTIONS

A-302

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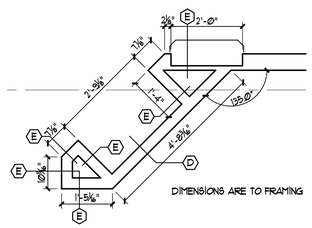
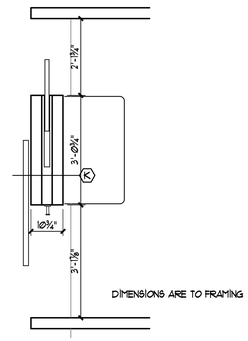
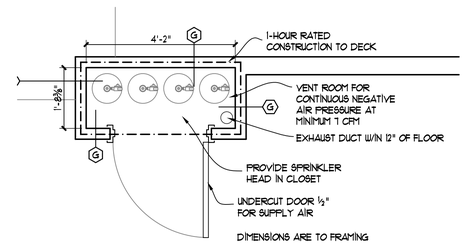


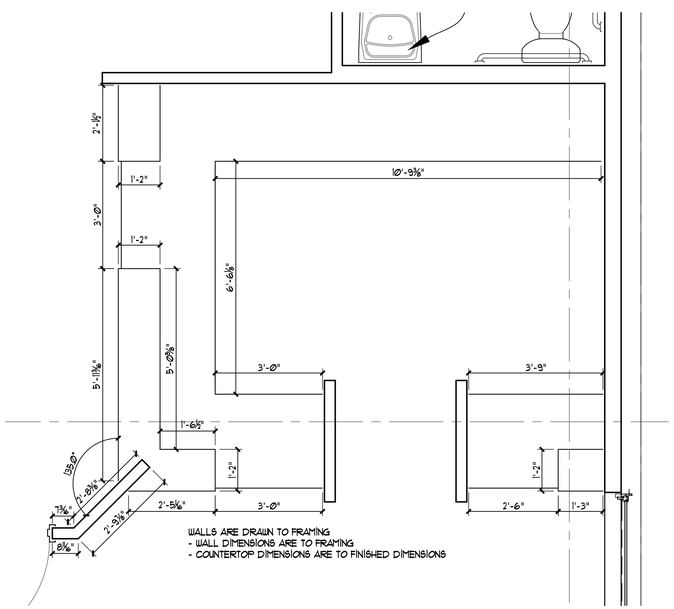
B1 A-411 ENLARGED GOODBYE MIRROR/TOYS - 111
½" = 1'-0"



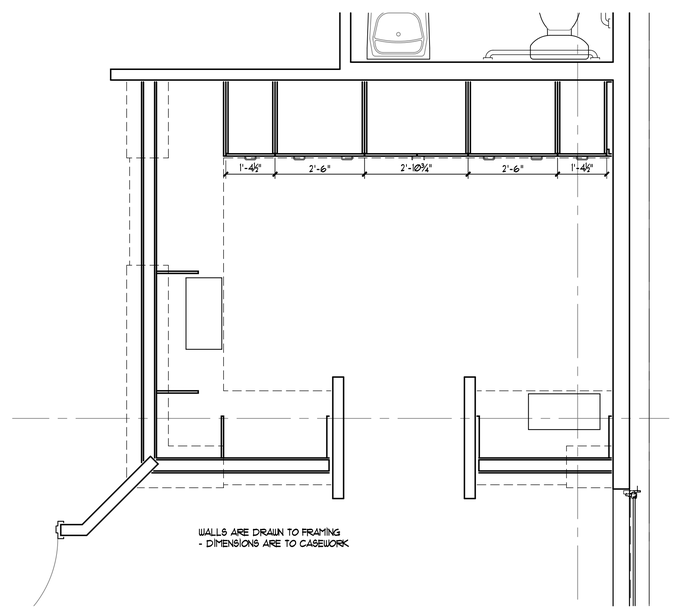
B2 A-411 ENLARGED HEADWALL
½" = 1'-0"



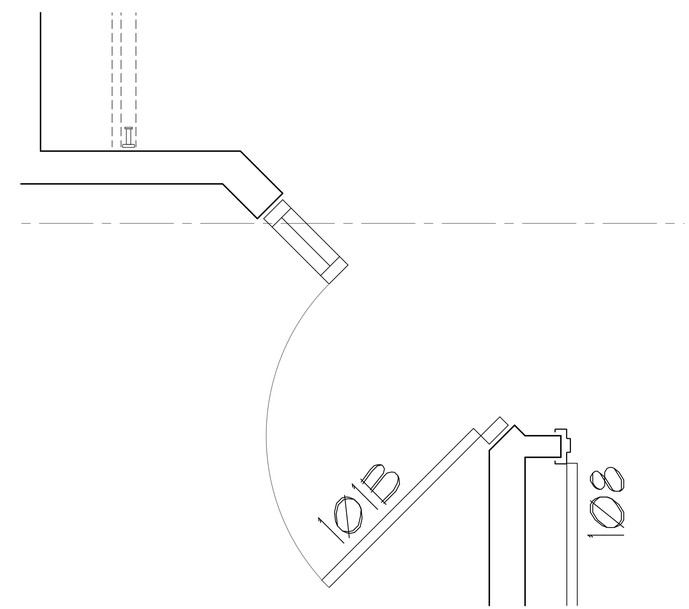
B3 411 ENLARGED GAS CLOSET - 125
½" = 1'-0"



A1 A-411 ENLARGED PLAN @ RECEPTION - COUNTERTOPS
½" = 1'-0"



A2 A-411 ENLARGED PLAN @ RECEPTION - BASE FRAMING
½" = 1'-0"



A3 A-411 ENLARGED PLAN @ ENTRY
½" = 1'-0"

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ENLARGED FLOOR PLANS

A-411

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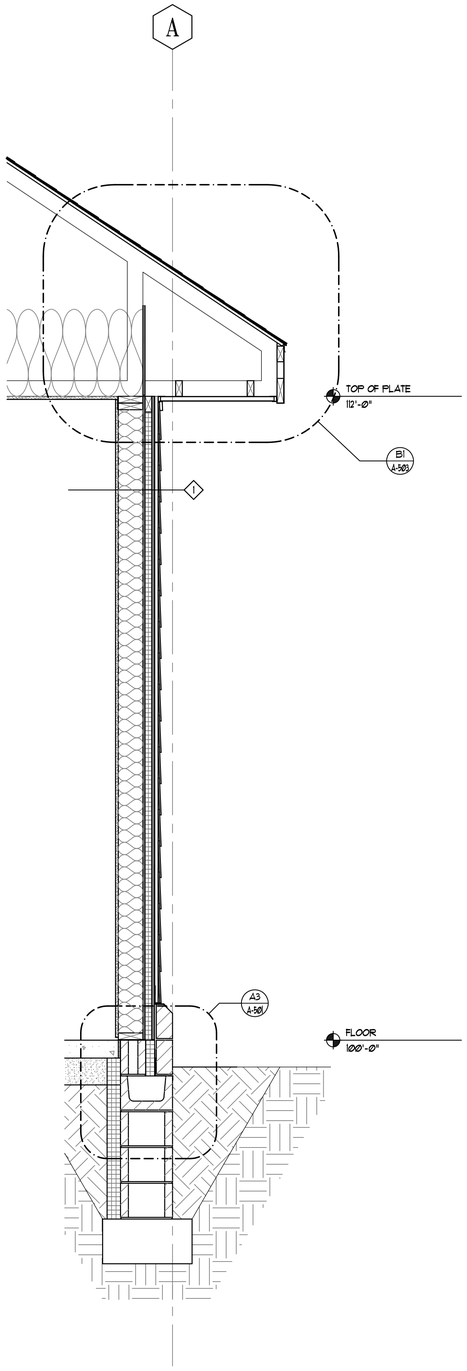
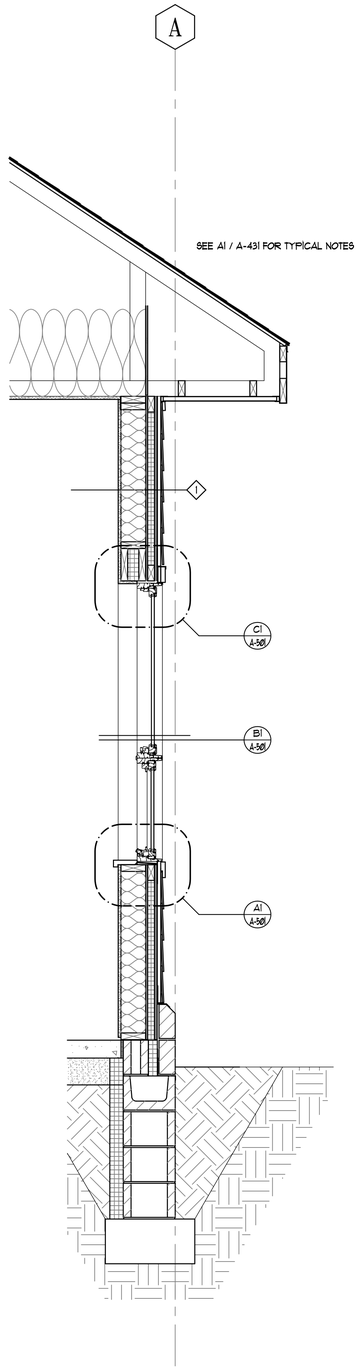
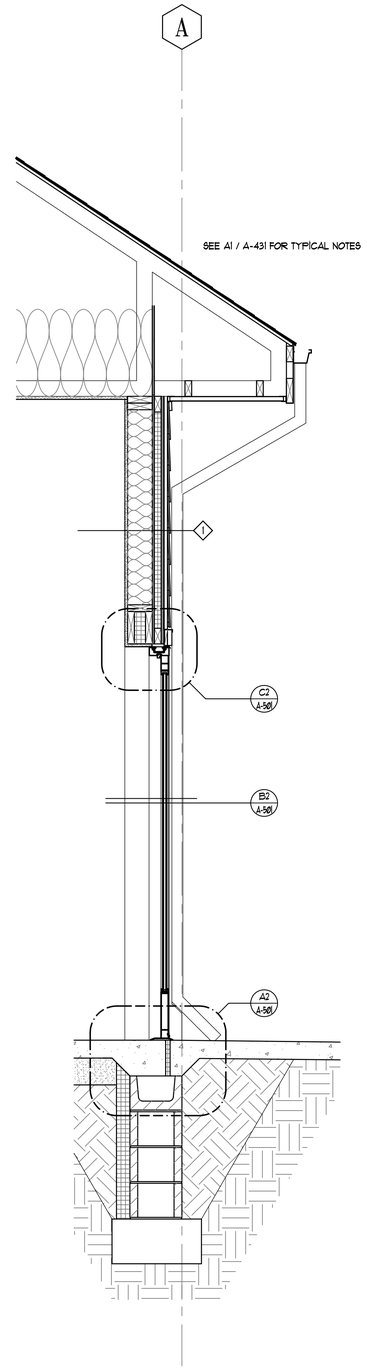


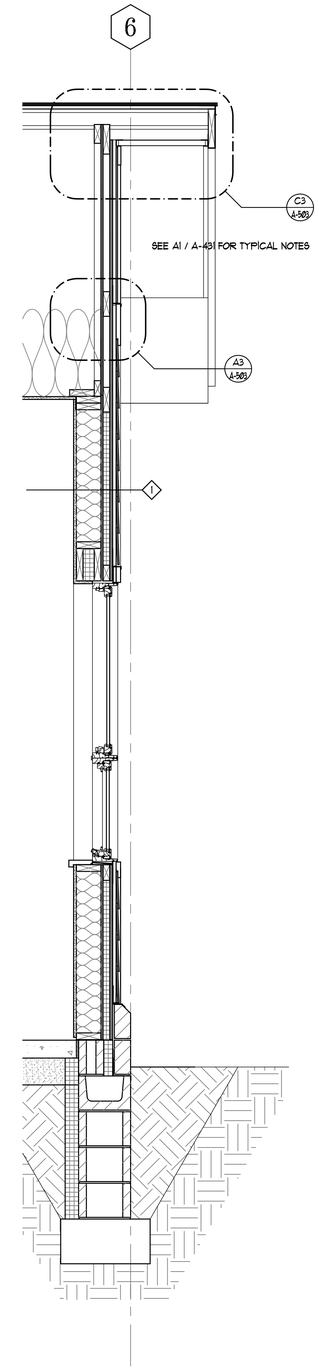
A1 / A-431 WALL SECTION
3/4" = 1'- 0"



A2 / A-431 WALL SECTION
3/4" = 1'- 0"



A3 / A-431 WALL SECTION
3/4" = 1'- 0"



A4 / A-431 WALL SECTION
3/4" = 1'- 0"

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3/4" = 1'- 0"

WALL SECTIONS

A-431

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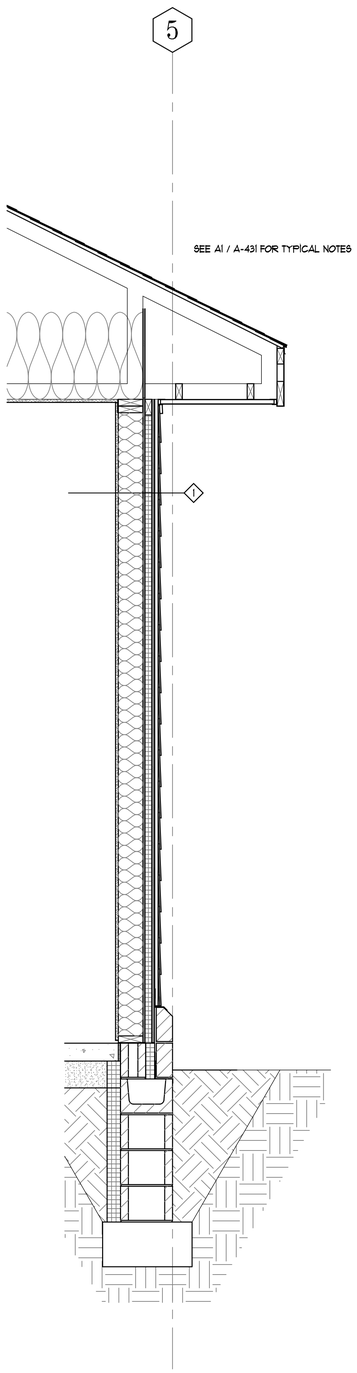
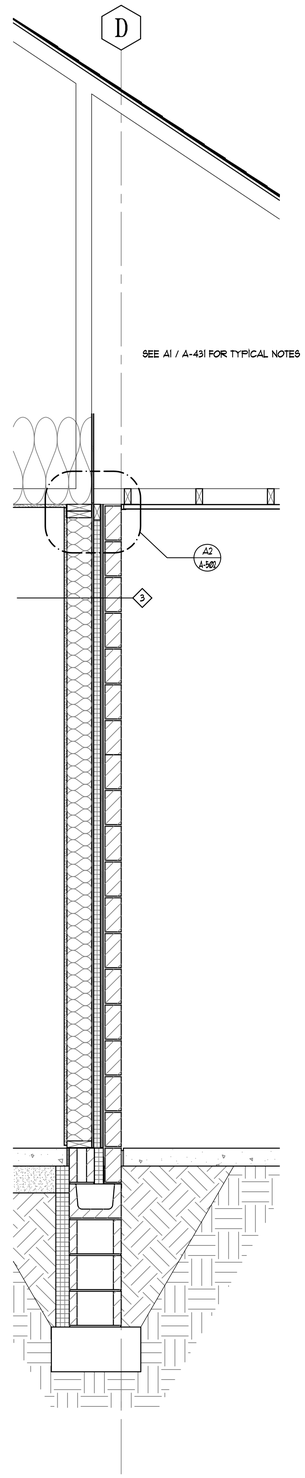


A1 / A-432 WALL SECTION
3/4" = 1'- 0"



A2 / A-432 WALL SECTION
3/4" = 1'- 0"

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3/4" = 1'- 0"

WALL SECTIONS

A-432

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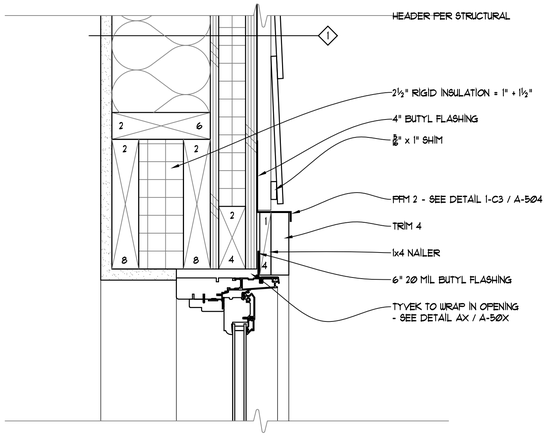
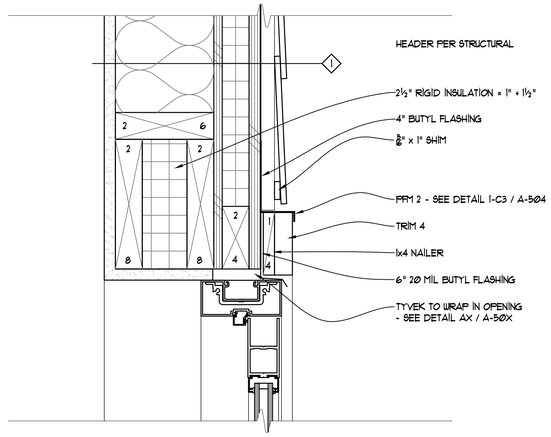
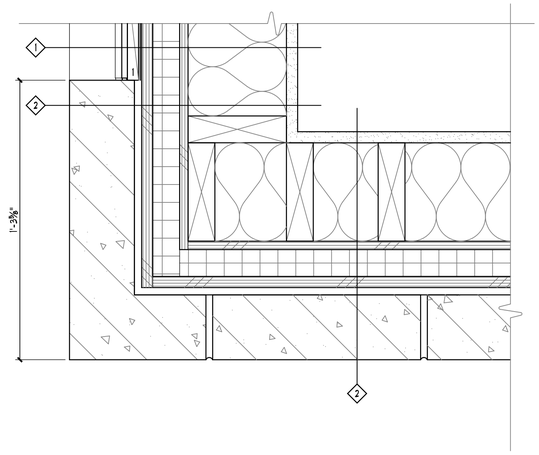


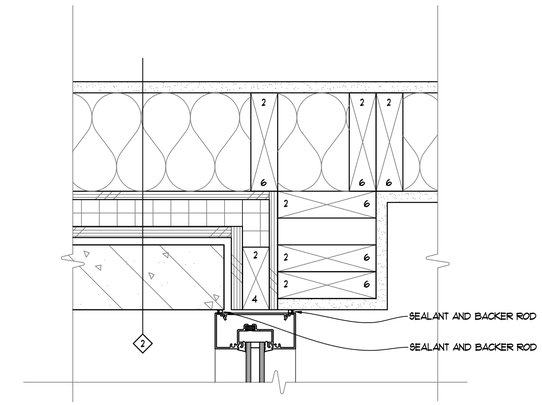
C1 A-501 HEAD @ WINDOW
3" = 1'-0"



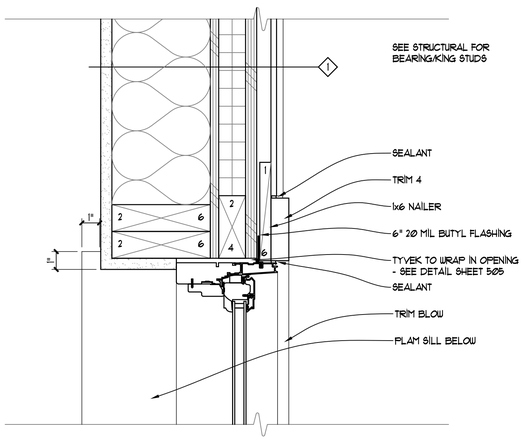
C2 A-501 HEAD @ ALUM DOOR
3" = 1'-0"



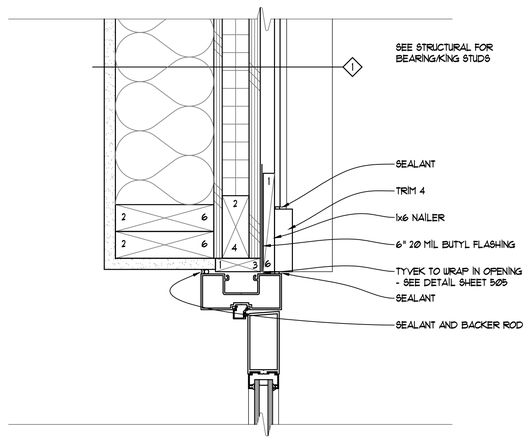
C3 A-501 DETAIL @ CMU CORNER
3" = 1'-0"



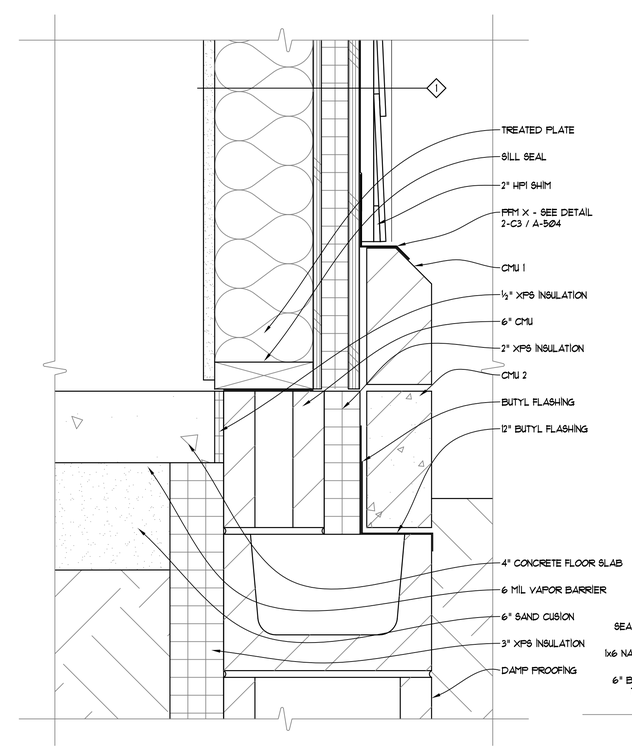
C4 A-501 JAMB @ VESTIBULE NORTH
3" = 1'-0"



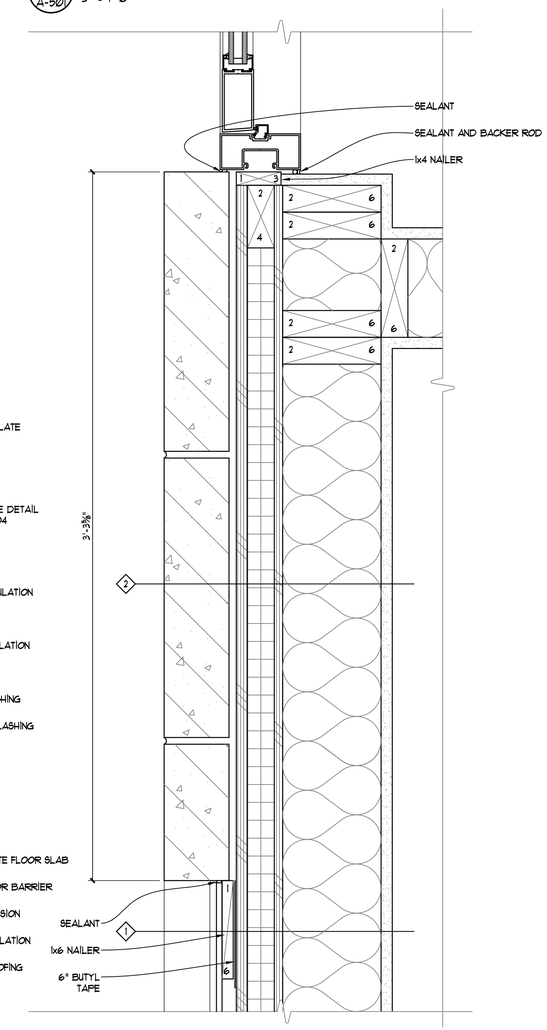
B1 A-501 JAMB @ WINDOW
3" = 1'-0"



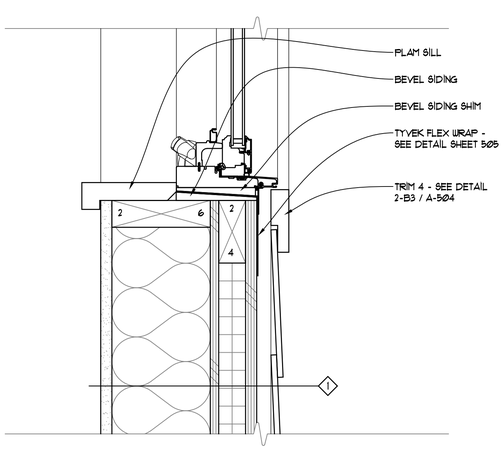
B2 A-501 JAMB @ ALUM DOOR
3" = 1'-0"



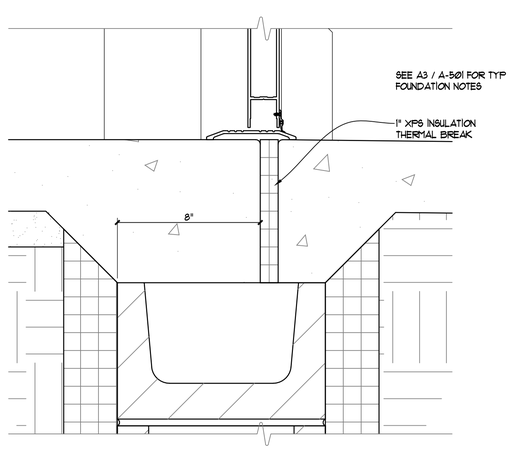
A3 A-501 DETAIL @ FOOTING
3" = 1'-0"



A4 A-501 JAMB @ VESTIBULE SOUTH
3" = 1'-0"



A1 A-501 SILL @ WINDOW
3" = 1'-0"



A2 A-501 THRESHOLD @ ALUM DOOR
3" = 1'-0"

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1 1/2" = 1'- 0"

EXTERIOR DETAILS

A-501

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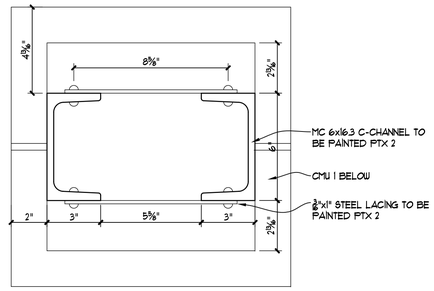
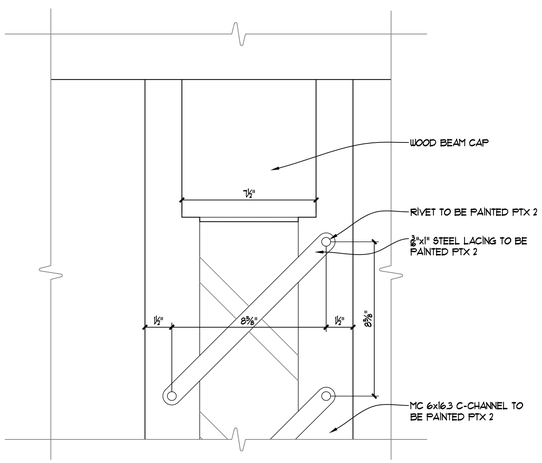
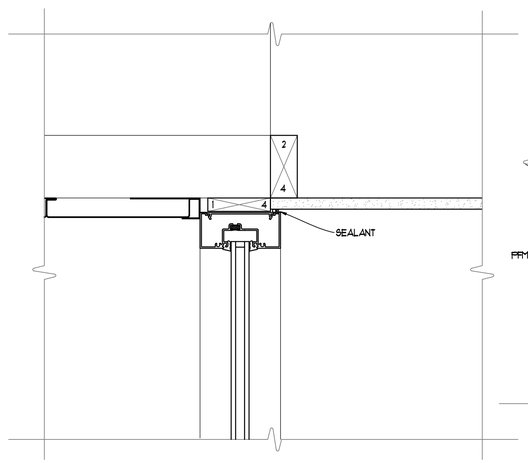


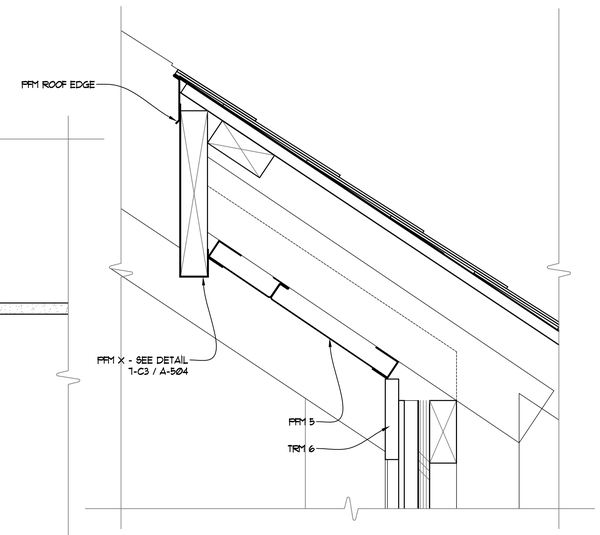
C1 A-502 LACED COLUMN PLAN
3" = 1'-0"



B1 A-502 HEAD @ LACED COLUMN
3" = 1'-0"



B2 A-502 HEAD @ VESTIBULE DOOR
3" = 1'-0"



B3 A-502 ROOF RAKE @ ENTRY
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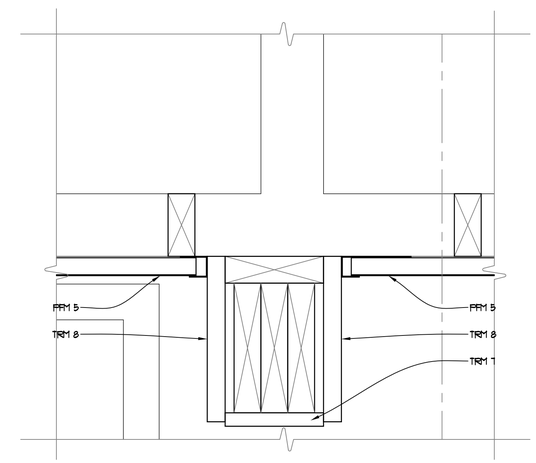

B4 A-502 SOUTH BEAM @ ENTRY
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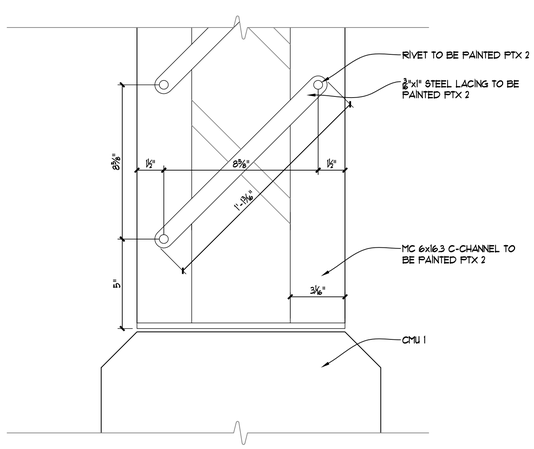
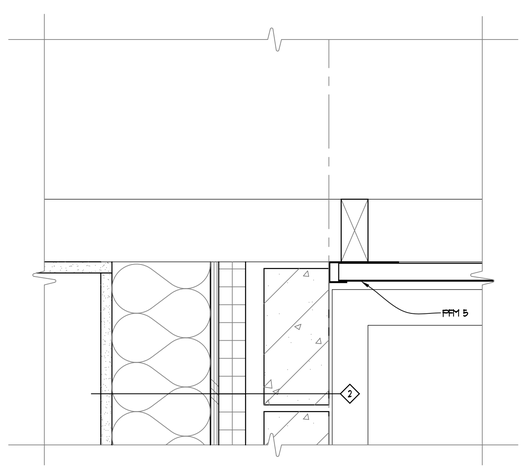
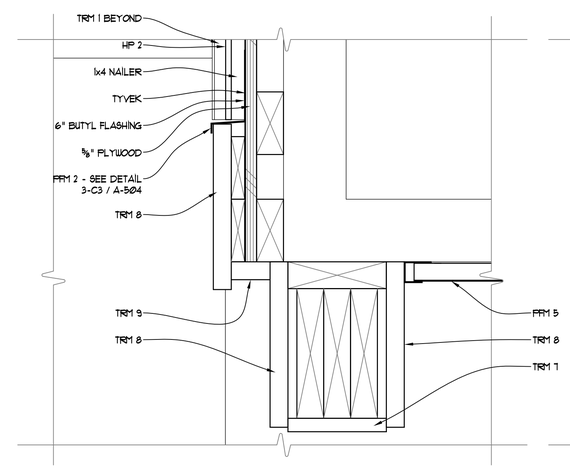


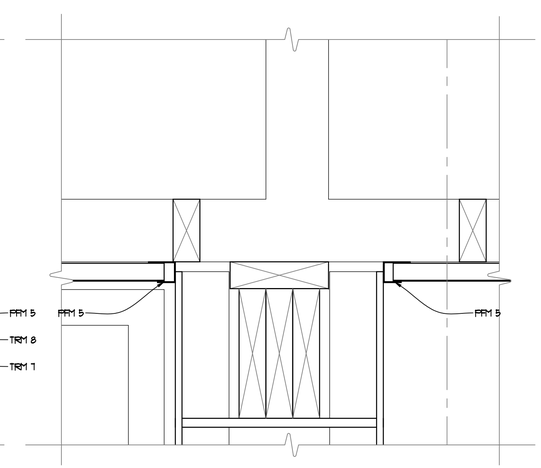
A1 A-502 BASE @ LACED COLUMN
3" = 1'-0"



A2 A-502 CMU @ SOFFIT
3" = 1'-0"



A3 A-502 NORTH BEAM @ ENTRY
3" = 1'-0"



A4 A-502 SOUTH BEAM @ COLUMN
3" = 1'-0"

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1 1/2" = 1'- 0"

EXTERIOR DETAILS

A-502

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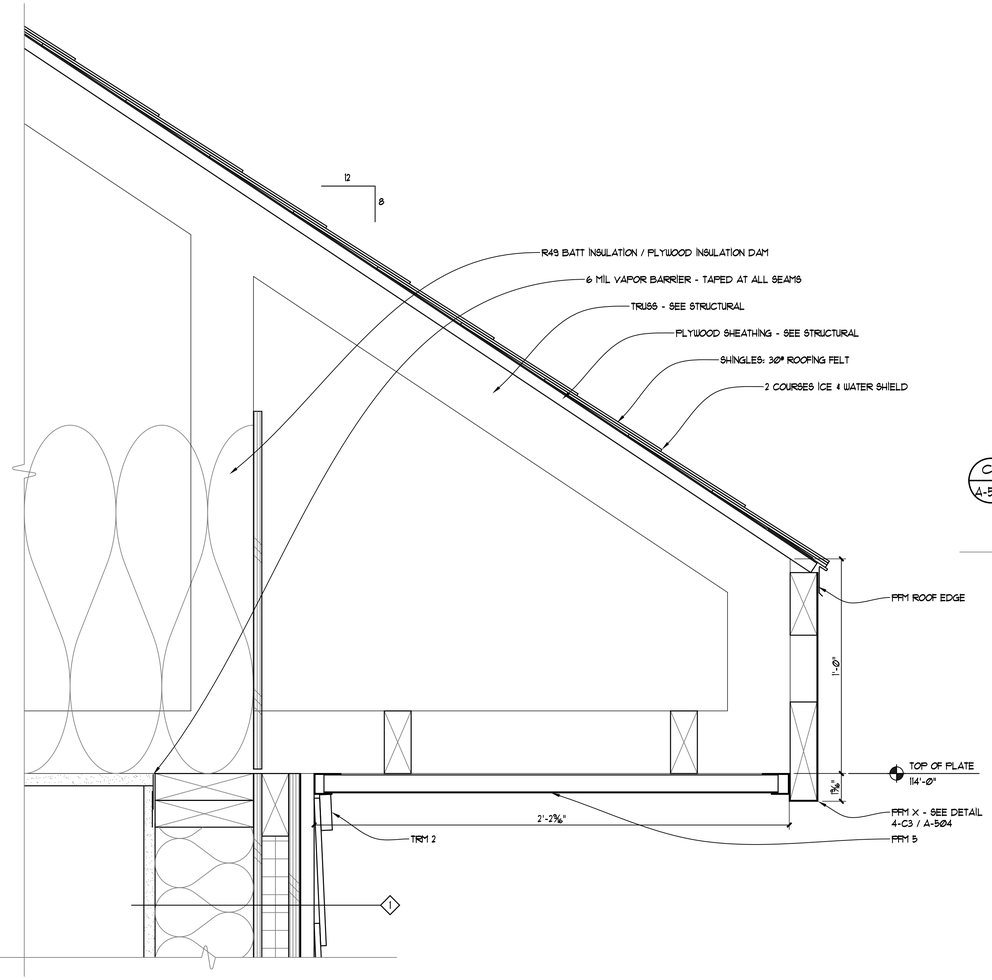
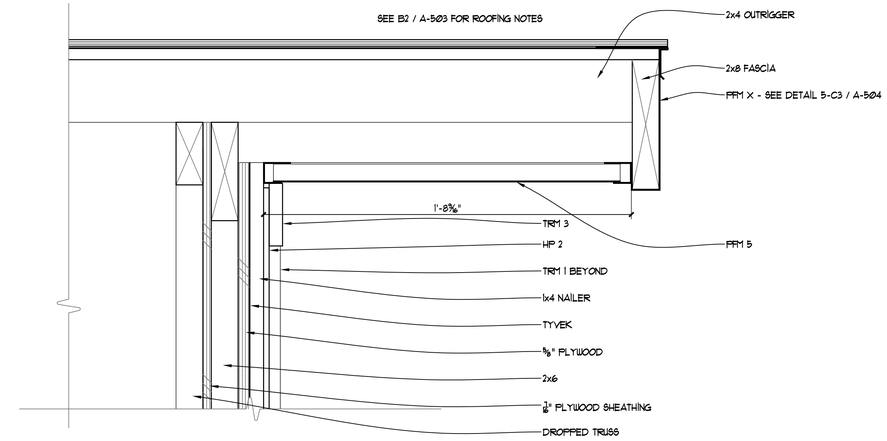
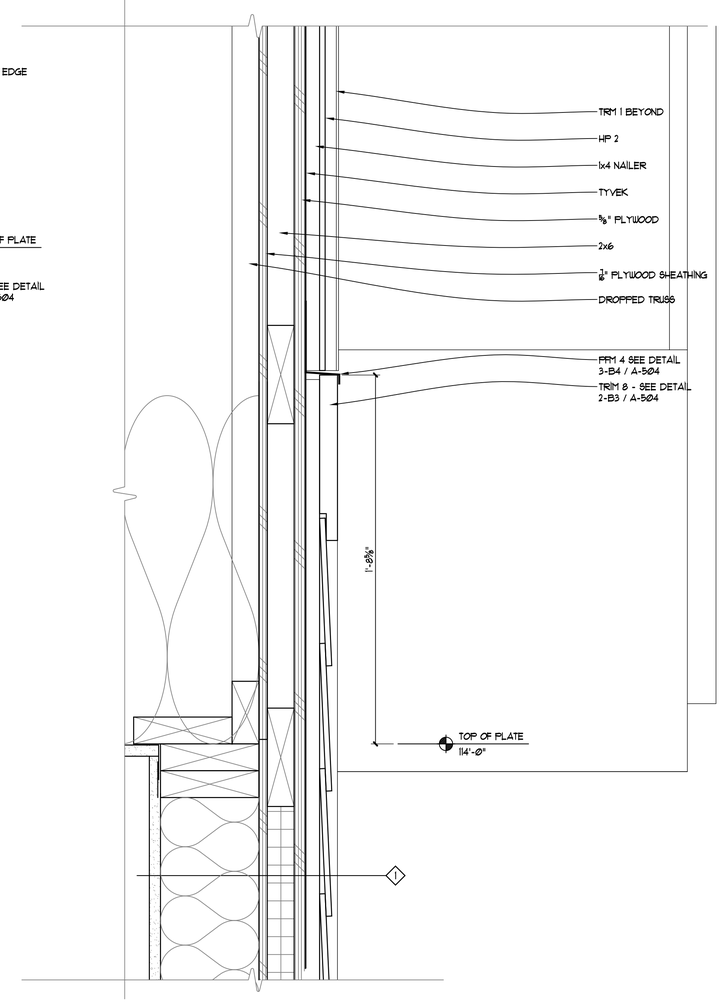


B1 / A-503 DETAIL @ ROOF
3" = 1'-0"



C3 / A-503 DETAIL @ RAKE
3" = 1'-0"



A3 / A-503 HARDIEPLANK @ BOARD & BATTEN
3" = 1'-0"

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1 1/2" = 1'- 0"

EXTERIOR DETAILS

A-503

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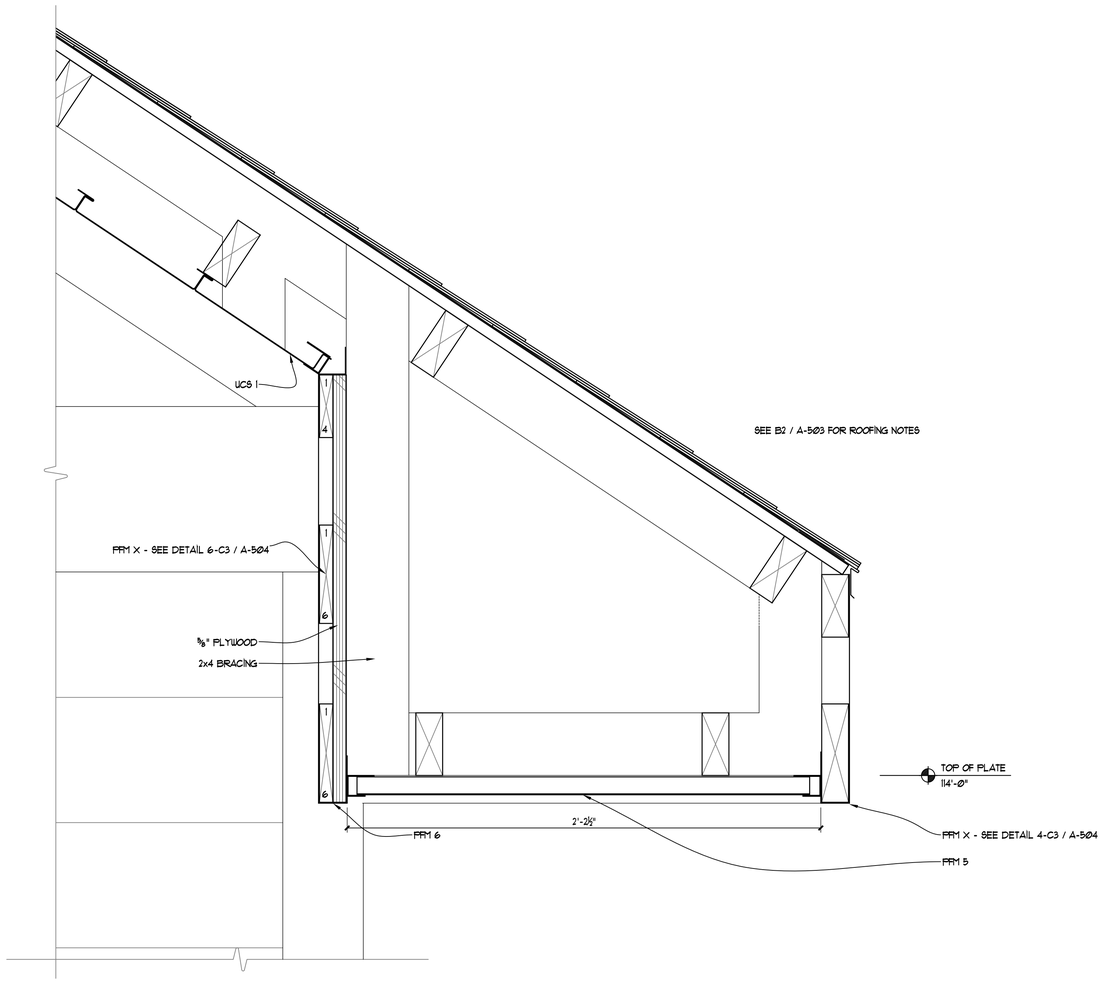
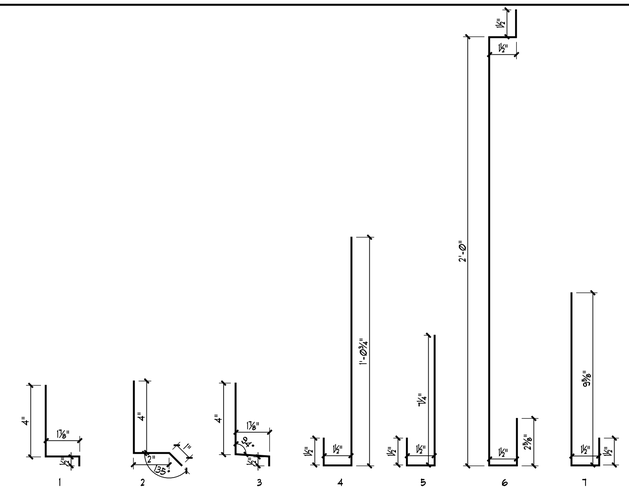


B1 A-504 DETAIL @ RAKE TRANSITION TO SOFFIT
3" = 1'-0"



C3 A-504 FLASHING DETAILS
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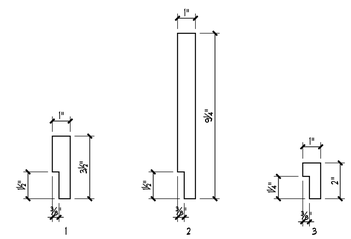

B3 A-504 CUSTOM TRIM DETAILS
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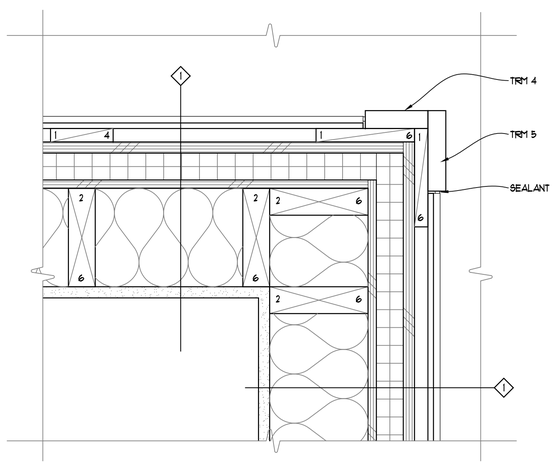
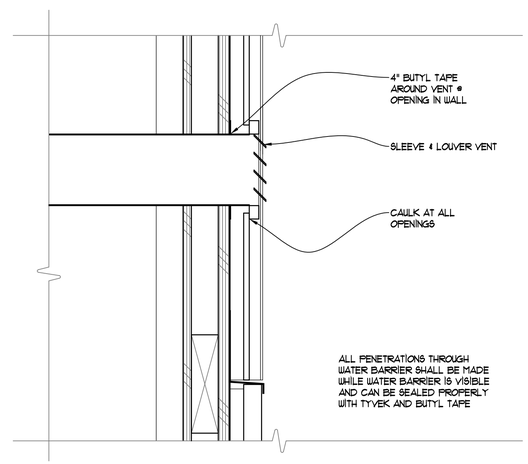
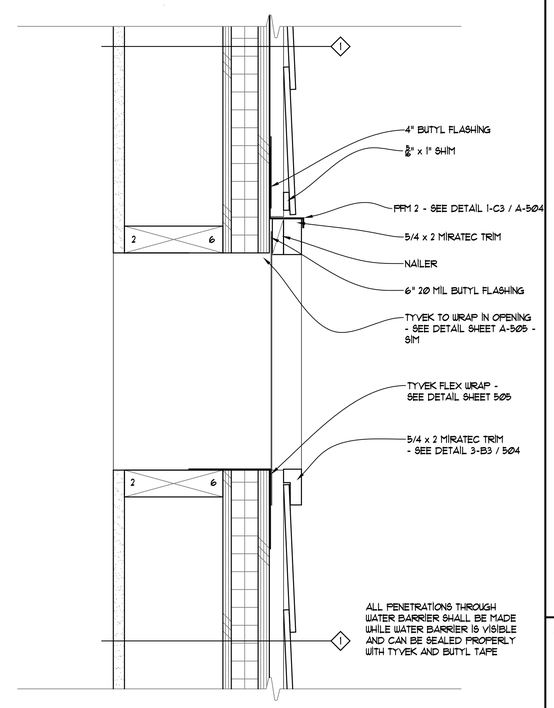


A1 A-504 DETAIL @ CORNER
3" = 1'-0"



A3 A-504 WALL PENETRATION @ VENT
3" = 1'-0"



A4 A-504 WALL PENETRATION @ LOUVER
3" = 1'-0"

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1 1/2" = 1'- 0"

EXTERIOR DETAILS

A-504

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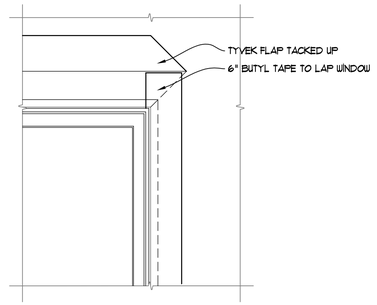
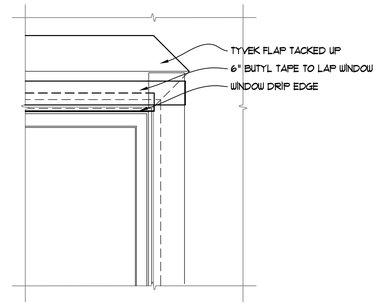
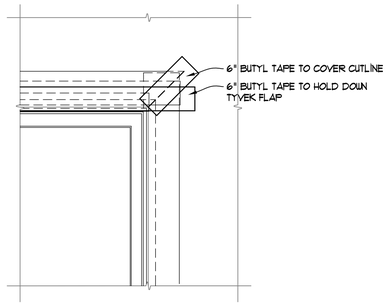


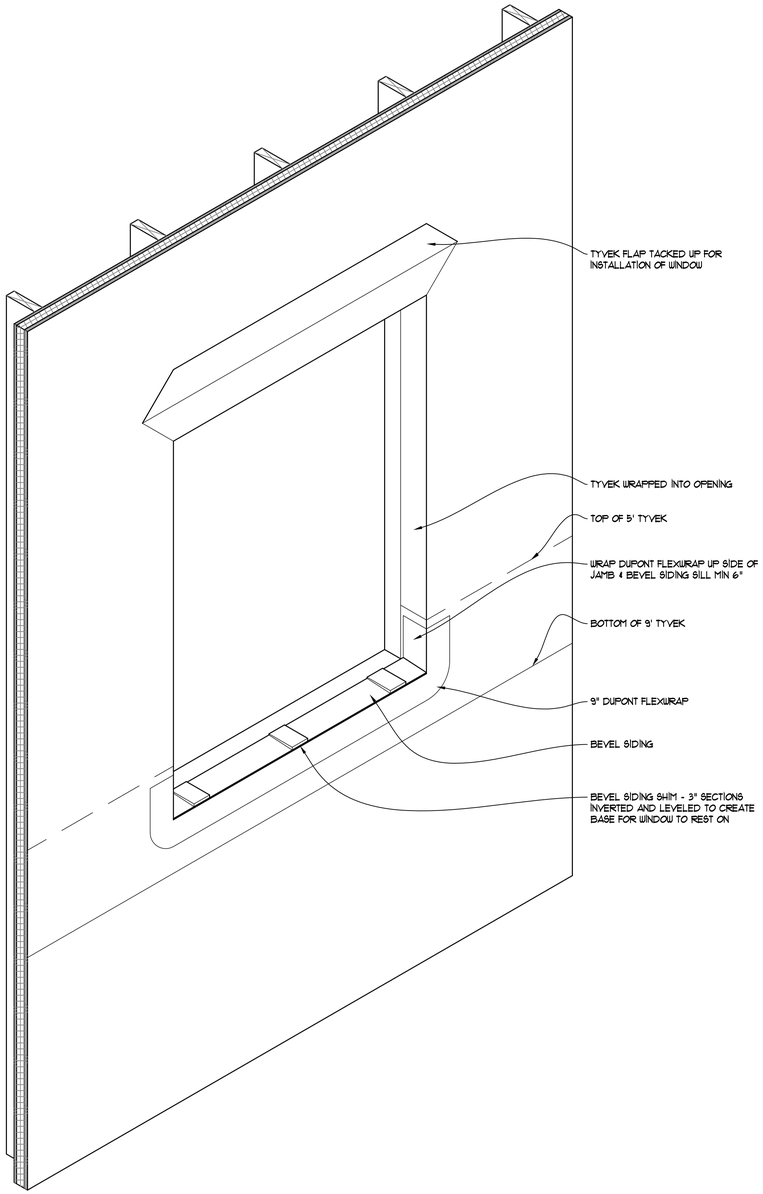
D3 A-505 TYVEK TAPE 1
1" = 1'-0"



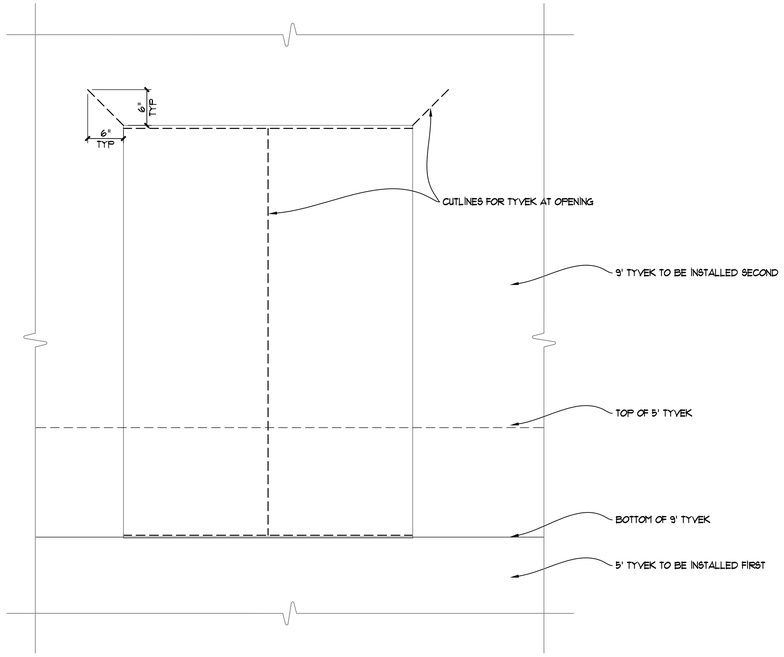
D4 A-505 TYVEK TAPE 2
1" = 1'-0"



D5 A-505 TYVEK TAPE 3
1" = 1'-0"



A1 A-505 OPENING READY FOR WINDOW
1" = 1'-0"



B3 A-505 TYVEK CUTS
3" = 1'-0"

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Minneapolis, Minnesota 55414
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http://www.sjoquist.com

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Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
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Revisions

1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

1" = 1'- 0"

EXTERIOR DETAILS

A-505

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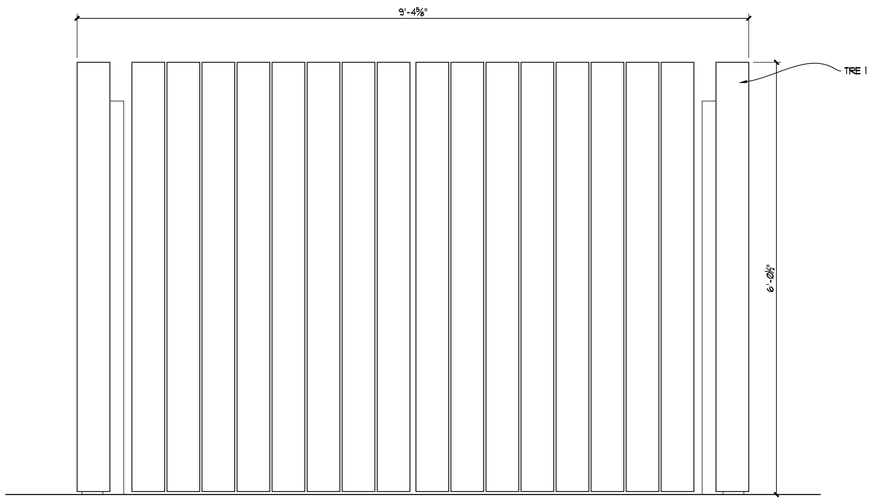
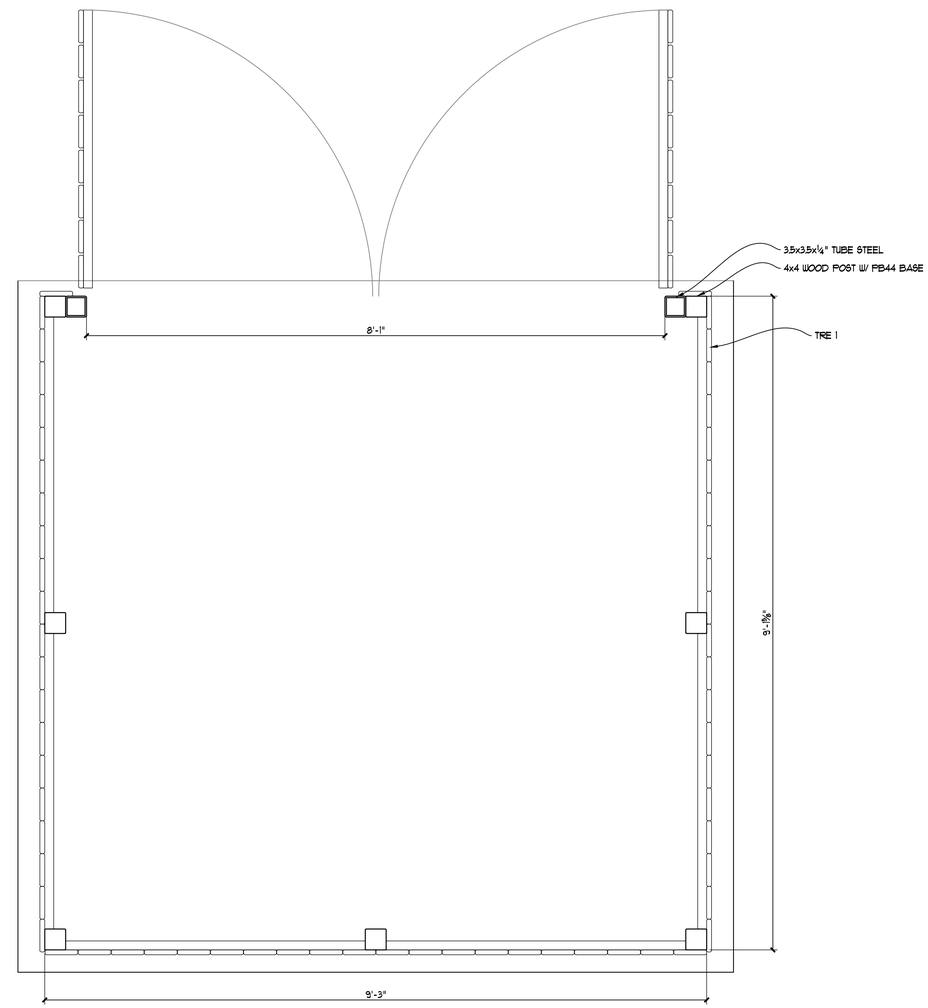
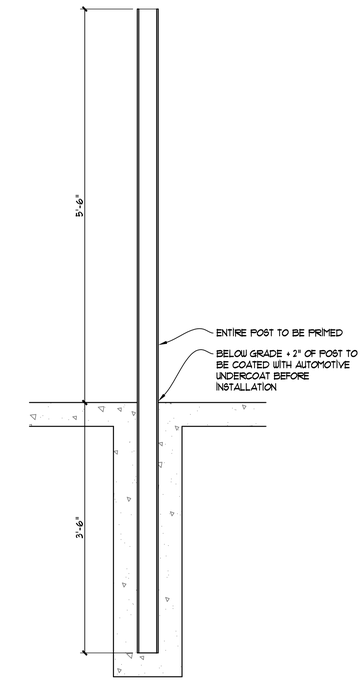
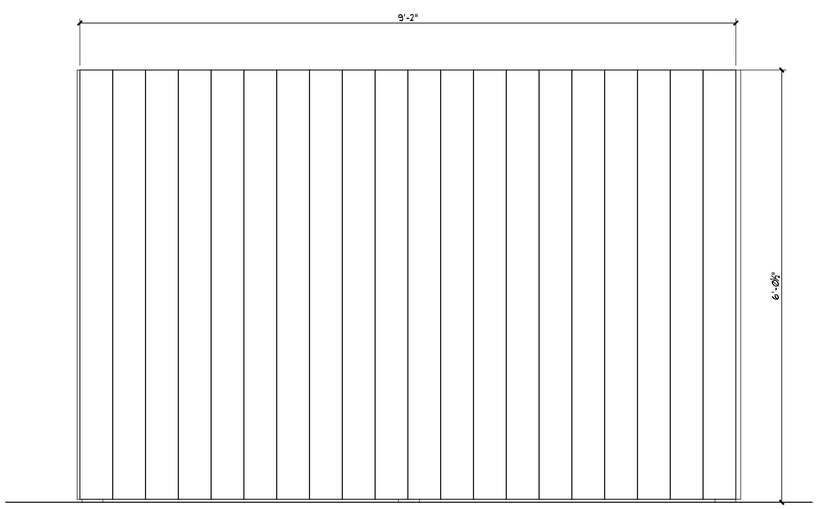


C1 A-506 TRASH ENCLOSURE DOOR
1" = 1'-0"



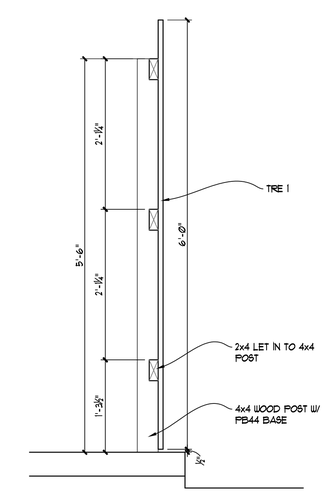


B3 A-506 POST
3" = 1'-0"



A1 A-506 TRASH ENCLOSURE WALL
1" = 1'-0"

A2 A-506 TRASH ENCLOSURE FLOOR PLAN
3" = 1'-0"



A3 A-506 ENCLOSURE SECTION
3" = 1'-0"

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1" = 1'- 0"

EXTERIOR DETAILS

A-506

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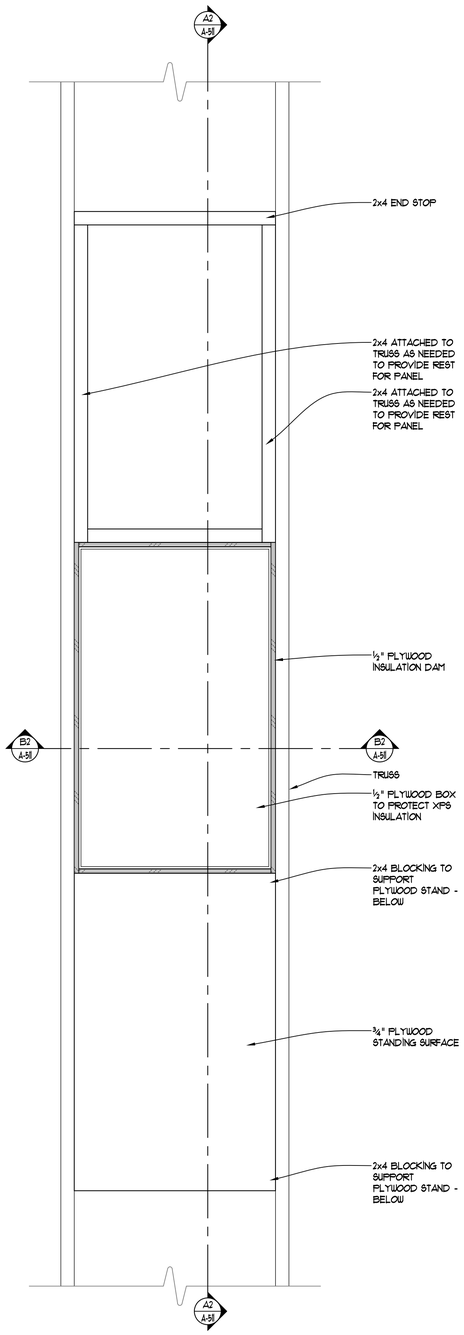
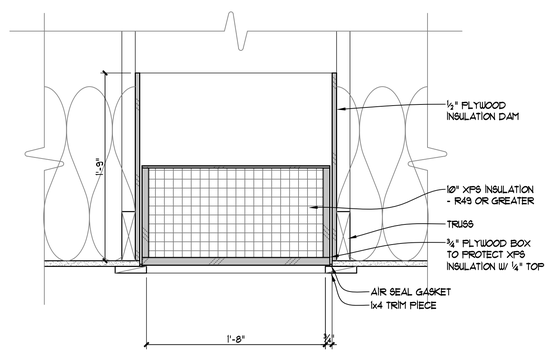
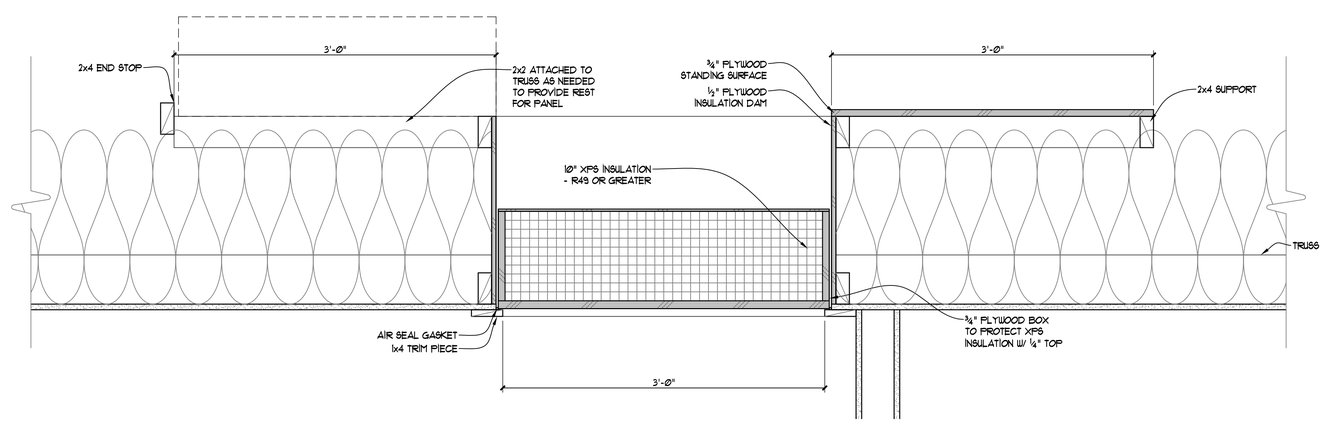


A1 A-511 ATTIC ACCESS PLAN VIEW
1½" = 1'-0"



B2 A-511 ATTIC ACCESS SECTION
1½" = 1'-0"



A2 A-511 ATTIC ACCESS SECTION - ACCESS AND SUPPORT
1½" = 1'-0"

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1 1/2" = 1'- 0"

EXTERIOR DETAILS

A-511

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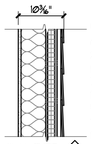
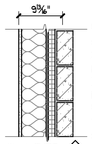
NOTES:

1. MATERIALS NOTED ARE LISTED AS THEY OCCUR GOING FROM LEFT TO RIGHT
2. ALL PARTITION FRAMING TO EXTEND TO THE DECK ABOVE
3. ALL RATED PARTITIONS & PARTITIONS W/ SOUND ATTENUATION BATTS ENTIRE PARTITION ASSEMBLY TO EXTEND TO THE DECK ABOVE - SEE REFLECTED CEILING PLAN SHEET A-111
4. ALL PENETRATIONS THROUGH PARTITIONS W/ SOUND ATTENUATION BATTS SHALL BE PROPERLY SEALED WITH ACOUSTIC CAULKING
5. ALL RETURN AIR PENETRATIONS THROUGH PARTITIONS W/ SOUND ATTENUATION BATTS SHALL HAVE ACOUSTIC DAMPENING PROPERTIES
6. GB AT SOFFITS, HEADERS, ETC TO EXTEND A MINIMUM OF 4" ABOVE ADJACENT CEILING GRID
7. ALL PARTITIONS ARE TYPE "A" UNLESS NOTED OTHERWISE
8. EXTERIOR WALL TYPES ARE SHOWN WITH EXTERIOR FACE TO THE RIGHT
9. BELOW GRADE, SUBSTITUTE STANDARD CMU FOR DECORATIVE CMU, AND INCLUDE WATERPROOFING MEMBRANE AND PROTECTION BOARD



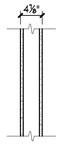
⅝" GYP BD
6 MIL AIR / VAPOR BARRIER
2X6 WOOD STUDS @ 16" OC
R21 BATT INSULATION
7/16" PLYWOOD SHEATHING
1½" XPS INSULATION (R 7.5)
⅝" PLYWOOD SHEATHING
TYVEK
1X4 WOOD NAILERS
7" HARDIEPLANK LAP SIDING

WALL TYPE 1



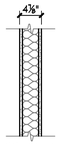
⅝" GYP BD
6 MIL AIR / VAPOR BARRIER
2X6 WOOD STUDS @ 16" OC
R21 BATT INSULATION
7/16" PLYWOOD SHEATHING
1½" XPS INSULATION (R 7.5)
⅝" PLYWOOD SHEATHING
TYVEK
CMU 2

WALL TYPE 2



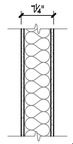
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
⅝" GYP BD

PARTITION TYPE A



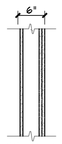
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
SOUND ATTENUATION BATTS
⅝" GYP BD

PARTITION TYPE B



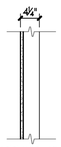
⅝" GYP BD
6" 20 GA STUDS @ 16" OC
SOUND ATTENUATION BATTS
⅝" GYP BD

PARTITION TYPE C



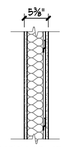
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
⅝" GYP BD
⅝" GYP BD

PARTITION TYPE D



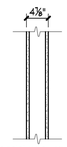
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC

PARTITION TYPE E



⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
SOUND ATTENUATION BATTS
RESILIENT CHANNELS
⅝" GYP BD

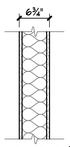
PARTITION TYPE F



⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
⅝" GYP BD

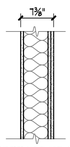
UL DESIGN NO U419

PARTITION TYPE G



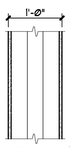
⅝" GYP BD
2X6 WOOD STUDS @ 16" OC
SOUND ATTENUATION BATTS
⅝" GYP BD

PARTITION TYPE H



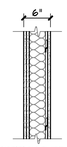
⅝" GYP BD
2X6 WOOD STUDS @ 16" OC
SOUND ATTENUATION BATTS
⅝" GYP BD
⅝" GYP BD

PARTITION TYPE J



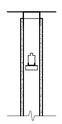
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
2X4 WOOD STUDS @ 16" OC
3⅝" 20 GA STUDS @ 16" OC
⅝" GYP BD

PARTITION TYPE K



⅝" GYP BD
⅝" GYP BD
3⅝" 20 GA STUDS @ 16" OC
SOUND ATTENUATION BATTS
RESILIENT CHANNELS
⅝" GYP BD

PARTITION TYPE F



⅝" GYP BD DECK
3" DEFLECTION TRACK - 18 GA
1½" GAP
U-CHANNEL LATERAL BRACING
MAXIMUM 12" BELOW
DEFLECTION TRACK

TYPICAL STUD WALL

DEFLECTION DETAIL

DO NOT ATTACH GYP BD OR
FRAMING TO DEEP LEG TRACK -
ALLOW FOR VERTICAL MOVEMENT

A1 / A-601 WALL / PARTITION TYPES

¾" = 1'- 0"

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HANOVER
DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

WALL / PARTITION TYPES

A-601

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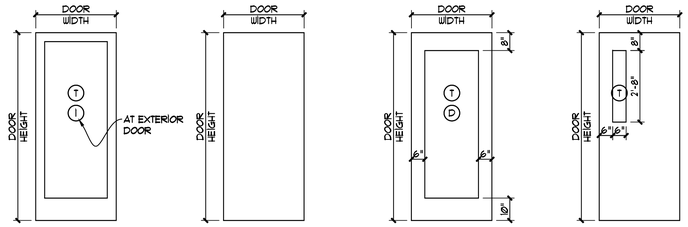
NOTES:

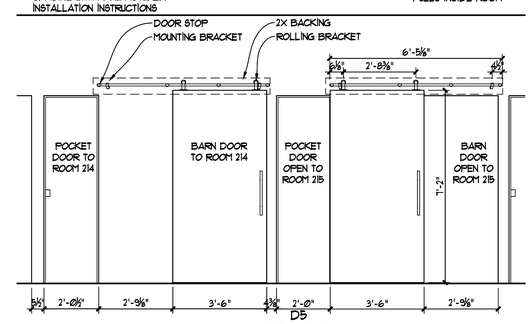
1. REFER TO FINISH MATERIALS SCHEDULE FOR WD 1 SPECIFICATIONS
2. REFER TO FINISH MATERIALS SCHEDULE FOR DECORATIVE GLASS TYPE
3. (T) INDICATES TEMPERED GLASS
4. (D) INDICATES DECORATIVE GLASS, SEE FINISH MATERIALS SCHEDULE
5. (I) INDICATES INSULATED GLASS



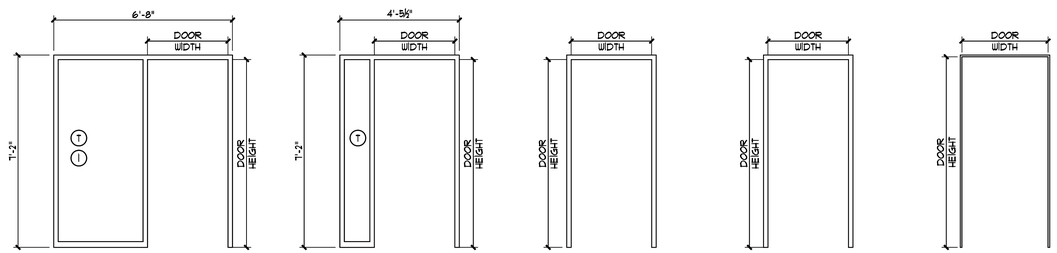
D1 AL ENTRY | D2 WD 1 / SC | D3 WD 1 / SC / FL | D4 WD 1 / SC / NL

NOTE: MOUNTING AND ROLLING BRACKETS ARE SHOWN FOR REFERENCE - VERIFY SPACING WITH MANUFACTURER INSTALLATION INSTRUCTIONS

NOTE: ADJUST DOOR STOPS TO MAINTAIN 1½" CLEAR SPACE AT DOOR PULLS INSIDE ROOM



D5 WD 2 / SC



F1 AL STOREFRONT | F2 AL STOREFRONT | F3 AL ENTRY | F4 HM | F5 WD 1

B1 / A-602

DOOR, WINDOW & FRAME ELEVATIONS

½" = 1'- 0"

DOOR SCHEDULE

DOOR NO	DOOR SIZE	DOOR TYPE	RATING	DOOR EL	FRAME TYPE	FRAME EL	HDWR GRP	REMARKS
101A	3'-0" X 7'-0" X 1¾"	ALUM/WHITE		D1	ALUM/WHITE	F1	2	
101B	3'-0" X 7'-0" X 1¾"	ALUM/WHITE		D1	ALUM/WHITE	F2	3	
107	3'-0" X 7'-0" X 1¾"	WD/SC		D2	HM	F4	5	
108	3'-0" X 7'-0" X 1¾"	WD/SC/FL		D3	HM	F4	4	
113A	3'-6" X 7'-2" X 1¾"	WD/SC		D5	NA	D5	9	
113B	2'-0" X 7'-0" X 1¾"	WD/SC		D2	WD	F5	10	
114A	3'-6" X 7'-2" X 1¾"	WD/SC		D5	NA	D5	9	
114B	2'-0" X 7'-0" X 1¾"	WD/SC		D2	WD	F5	10	
115A	3'-6" X 7'-2" X 1¾"	WD/SC		D5	NA	D5	9	
115B	2'-0" X 7'-0" X 1¾"	WD/SC		D2	WD	F5	10	
116A	3'-6" X 7'-2" X 1¾"	WD/SC		D5	NA	D5	9	
116B	2'-0" X 7'-0" X 1¾"	WD/SC		D2	WD	F5	10	
117A	3'-6" X 7'-2" X 1¾"	WD/SC		D5	NA	D5	9	
117B	2'-0" X 7'-0" X 1¾"	WD/SC		D2	WD	F5	10	
119	3'-0" X 7'-0" X 1¾"	WD/SC/FL		D3	HM	F4	1	
122	3'-0" X 7'-0" X 1¾"	WD/SC/NL		D4	HM	F4	1	
123	3'-0" X 7'-0" X 1¾"	WD/SC		D2	HM	F4	8	
128	3'-0" X 7'-0" X 1¾"	WD/SC		D2	HM	F4	1	
129	3'-0" X 7'-0" X 1¾"	WD/SC		D2	HM	F4	7	
131	3'-0" X 7'-0" X 1¾"	WD/SC	60 MIN	D2	HM	F4	6	
132	3'-0" X 7'-2" X 1¾"	ALUM/WHITE		D1	ALUM/WHITE	F3	2	

NOTES:

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THESE ITEMS FOR THE ARCHITECT'S REVIEW
2. SEE WALL / PARTITION TYPES FOR HM FRAME THROAT DIMENSION

DOOR HARDWARE SCHEDULE

GROUP	BUTTS	LOCKSETS / LATCHSETS									CLOSER	TRIM				MISC						REMARKS
		EXIT DEVICE	PASSAGE LATCH	EXIT LOCK	PRIVACY LOCK	ENTRANCE LOCK	CLASSROOM LOCK	STOREROOM LOCK	DEADBOLT	OTHER		PULL	PUSH BAR	PUSH PLATE	KICKPLATE	STOP	SMOKE GASKET	WEATHERSTRIP	ASTRAGAL	SWEEP	THRESHOLD	
GROUP 1	1½ PR (3)		X													E						
GROP 2	2PR (1A)	X								X	LCN4110 HCUSH	X	X				X		X	X		1, 2
GROUP 3	2 PR (2)										LCN4110 HCUSH	X	X									
GROUP 4	1½ PR (2)										LCN4110 HCUSH	X		X		E						4
GROUP 5	1½ PR (3)				X											E						
GROUP 6	1½ PR (3)						X									O	X					
GROUP 7	1½ PR (2)		X								LCN4110 HCUSH					E					X	3
GROUP 8	1½ PR (3)				X											O						
GROUP 9	N / A																					5
GROUP 10	N / A																					6

BUTTS (1A): HAGER BB1199
BUTTS (1): HAGER BB1168
BUTTS (2): HAGER BB1279
BUTTS (3): HAGER 179
EXIT DEVICE: VON DUPRIN SERIES 33 PANIC HARDWARE
LOCKSETS: SCHLAGE AL-SERIES, NEPTUNE LEVER HANDLE DESIGN
PASSAGE LATCH: AL10S
EXIT LOCK: AL25D
PRIVACY LOCK: AL40S
ENTRANCE LOCK: AL53PD
CLASSROOM LOCK: AL70PD
STOREROOM LOCK: AL80PD
CLOSER: LCN 4000 SERIES

PULL: HIAWATHA 537B
PUSH BAR & PULL: HIAWATHA 537B X 1081 LBP
PUSH PLATE: HIAWATHA 2000
KICK PLATE: HIAWATHA 10" HIGH W/BEVELED EDGES
WALL STOPS: IVES W5 W5407CVX & W5407CCV
OVERHEAD STOPS: GLYNN-JOHNSON 100 SERIES CONCEALED
WEATHERSTRIP: NATIONAL GUARD PRODUCTS NGP 137
ASTRAGAL WEATHERSTRIP: NGP 115
SWEEP: NGP 200
THRESHOLD: NGP 425V - ½" HIGH W/ VINYL SEAL
SMOKE/ACCOUSTIC GSKT: NGP 5050 - VERIFY COLOR
PERIMETER SOUND GSKT: NGP 1075
AUTOMATIC DOOR BOTTOM: NGP 423N (MORTISED)

FINISHES TO BE BRUSHED CHROME 26D

REMARKS:

1. VERIFY LOCKING AND KEYING WITH OWNER
2. PROVIDE VON DUPRIN 33 A-NL-OP EXIT DEVICE WITH RIM CYLINDER
3. PROVIDE SOUND GASKET & AUTOMATIC DOOR BOTTOM
4. PROVIDE MOCKETT DH6A DOOR (PULL) HANDLE & COUNTERSINK SURFACE SCREWS TO ALLOW A FLUSH PUSH PLATE MOUNTING
5. PROVIDE SURFACE MOUNTED SLIDING DOOR HARDWARE KIT - MOCKETT SDH2, WHICH INCLUDES MOCKETT DH6A WIRE DOOR PULLS
6. PROVIDE PRIME-LINE N-1079 POCKET DOOR PULL

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK — Drawn
CLR — Checked

Revisions

1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

DOOR & FRAME INFORMATION

A-602

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EQUIPMENT SCHEDULE

E #	ITEM	LOCATION	PROVIDED BY:	INSTALLED BY:	UTILITIES	REMARKS
E01	DENTAL CHAIR	113 , 114 , 115 , 116 , 117	OWNER	ELECT CONTR EQUIP SUPPLIER	120V POWER RECESSED OUTLET	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 120V RECESSED FLOOR OUTLET AT FOOT OF CHAIR - SEE EXX 2 EQUIPMENT SUPPLIER TO VERIFY OUTLET LOCATION & SET IN PLACE (3 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL CONDUIT FOR FUTURE CABLING NEEDS)
E02	UTILITY CENTER FOOT OF CHAIR	113 , 114 , 115 , 116 , 117	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	½" AIR ½" VACUUM 120V QUADRAPLEX	1 PLUMBING CONTRACTOR TO PROVIDE & INSTALL 2" PVC VACUUM LINES TERMINATING W/ ½" PVC STUB-OUT & ½" COPPER AIR LINES W/ VALVES FOR EACH TO UTILITY BOX 2 ELECT CONTRACTOR TO PROVIDE & INSTALL 120V QUADPLEX IN UTILITY BOX 3 EQUIPMENT SUPPLIER TO VERIFY EXACT LOCATION FOR UTILITIES & MAKE FINAL CONNECTIONS
E03	UTILITY CENTER HEADWALL	113 , 114 , 115 , 116 , 117	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	½" AIR ½" VACUUM 120V QUADRAPLEX	1 PLUMBING CONTRACTOR TO PROVIDE & INSTALL 1½" PVC VACUUM LINES TERMINATING W/ ½" CU STUB-OUT & ½" AIR LINES AT HEADWALL 2 ELECT CONTRACTOR TO PROVIDE & INSTALL 120V QUADRAPLEX 3 EQUIPMENT SUPPLIER TO VERIFY EXACT LOCATION FOR UTILITIES & MAKE FINAL CONNECTIONS
E04	N2O / O2 OUTLET	113 , 114 , 115 , 116 , 117	OWNER	GEN CONTR PLBG CONTR	⅜" CU N2O ½" CU O2 ½" CU VACUUM	1 GENERAL CONTRACTOR TO PROVIDE & INSTALL BACKING FOR OUTLET BOX AS REQUIRED 2 PLUMBING CONTRACTOR TO PROVIDE & INSTALL ⅜" N2O , ½" O2 LINES & ALL DROPS TO GAS MANIFOLD, & CONNECT TO ½" CU VAC LINES - PURGE & TEST ENTIRE SYSTEM AS REQUIRED BY NFPA 3 EQUIPMENT SUPPLIER TO VERIFY OUTLET BOX LOCATION
E05	N2O / O2 FLOW METER PORTER	113 , 114 , 115 , 116 , 117	OWNER	GEN CONTR PLBG CONTR	⅜" CU N2O ½" CU O2 ½" CU VACUUM	1 GENERAL CONTRACTOR TO PROVIDE & INSTALL BACKING FOR OUTLET BOX AS REQUIRED 2 PLUMBING CONTRACTOR TO PROVIDE & INSTALL ⅜" N2O , ½" O2 LINES & ALL DROPS TO GAS MANIFOLD, & CONNECT TO ½" CU VAC LINES - PURGE & TEST ENTIRE SYSTEM AS REQUIRED BY NFPA 3 EQUIPMENT SUPPLIER TO VERIFY OUTLET BOX LOCATION
E06	PANORAMIC X-RAY W/ CEPHALOMETRIC ARM	112	OWNER	ELECT CONTR GEN CONTR EQUIP SUPPLIER	220V POWER	1 GENERAL CONTRACTOR TO PROVIDE & INSTALL 2x BACKING AS REQUIRED 2 ELECT CONTRACTOR TO PROVIDE & INSTALL OUTLET OR CONNECTION WITH A DIRECT GROUND BACK TO PANEL - PROVIDE CONDUIT & CONTROL WIRES TO REMOTE CONTROL - VERIFY WIRING REQUIREMENTS W/ EQUIPMENT SUPPLIER 3 EQUIPMENT SUPPLIER TO INSTALL X-RAY MACHINE & MAKE FINAL ADJUSTMENTS
E07	X-RAY CONTROL	112	OWNER	ELECT CONTR GEN CONTR EQUIP SUPPLIER	LOW VOLT POWER	1 GENERAL CONTRACTOR TO PROVIDE & INSTALL 2x BACKING AS REQUIRED 2 ELECT CONTRACTOR TO PROVIDE & INSTALL CONDUIT & CONTROL WIRES TO X-RAY UNIT VERIFY WIRING REQUIREMENTS W/ EQUIPMENT SUPPLIER 3 EQUIPMENT SUPPLIER TO INSTALL X-RAY MACHINE & MAKE FINAL ADJUSTMENTS
E08	VACUUM	129	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	220V POWER LOW VOLT WIRE 1½" PVC VACUUM	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 220V CONNECTION NEAR UNIT - VERIFY SPECIFICATIONS - PROVIDE & INSTALL LOW VOLTAGE WIRE FROM VACUUM MACHINE TO VACUUM MASTER SWITCH EXX LOCATED IN ROOM XXX 2 PLBG CONTRACTOR TO PROVIDE & INSTALL 1½" PVC VACUUM LINES TO UTILITY CENTER EXX 3 EQUIPMENT SUPPLIER TO COORDINATE ALL LOCATIONS & MAKE FINAL CONNECTIONS
E09	COMPRESSOR	129	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	220V POWER LOW VOLT WIRE ½" CU AIR	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 220V CONNECTION NEAR UNIT - VERIFY SPECIFICATIONS - & PROVIDE AND INSTALL LOW VOLTAGE WIRE FROM COMPRESSOR TO COMPRESSOR MASTER SWITCH EXX LOCATED IN ROOM XXX 2 PLUMBING CONTRACTOR TO PROVIDE & INSTALL ½" COPPER AIR LINES TO UTILITY CENTER(S) EXX (& EXXX) & MAKE FINAL CONNECTION TO COMPRESSOR
E10	VACUUM MASTER SW	124	OWNER	ELECT CONTR	LOW VOLT WIRE	1 ELECTRICAL CONTRACTOR TO INSTALL MASTER SWITCH AT 60" AFF ON WALL WHERE INDICATED ON FLOOR PLAN , PROVIDE AND INSTALL LOW VOLTAGE WIRE TO VACUUM MACHINE EXX IN ROOM XXX , & CONNECT TO SOLENOIDS
E11	COMPR MASTER SW	124	OWNER	ELECT CONTR	LOW VOLT WIRE	1 ELECTRICAL CONTRACTOR TO INSTALL MASTER SWITCH AT 60" AFF ON WALL WHERE INDICATED ON FLOOR PLAN , PROVIDE AND INSTALL LOW VOLTAGE WIRE TO COMPRESSOR EXX IN ROOM XXX , & CONNECT TO SOLENOIDS
E12	N2O / O2 MANIFOLD	131	OWNER	GEN CONTR PLBG CONTR ELECT CONTR	120V POWER LOW VOLT WIRE ⅜" CU N2O ½" CU O2	1 ELECT CONTR TO INSTALL 120V DUPLEX OUTLET IN ROOM XXX - VERIFY EXACT LOCATION 2 ELECT CONTR TO INSTALL LOW VOLTAGE WIRE TO N2O / O2 ALARM EXX 3 GEN CONTR TO PROVIDE & INSTALL BACKING IN WALL - VERIFY WITH EQUIP SUPPLIER 4 PLBG CONTR TO PROVIDE & INSTALL ⅜" N2O & ½" O2 LINES FROM MANIFOLD TO OUTLET(S) EXX - INSTALL, PURGE & TEST ENTIRE SYSTEM PER NFPA 99 2005
E13	N2O / O2 ALARM	120	OWNER	ELECT CONTR	120V POWER	1 ELECTRICAL CONTRACTOR TO INSTALL 120V OUTLET ON WALL IN ROOM XXX PROVIDE & INSTALL LOW VOLTAGE WIRE TO MANIFOLD ELECTRICAL BOX IN ROOM XXX
E14	AIR OUTLET	120 , 122	PLBG CONTR EQUIP SUPPLIER	PLBG CONTR EQUIP SUPPLIER	⅜" CU AIR	1 PLUMBING CONTRACTOR TO INSTALL AIR STUB WHERE INDICATED ON INTERIOR ELEVATIONS - COORDINATE W/ EQUIPMENT SUPPLIER FOR PROPER CONFIGURATION 2 EQUIP SUPPLIER TO PROVIDE & INSTALL QUICK RELEASE CONNECTORS

EQUIPMENT SCHEDULE

E #	ITEM	LOCATION	PROVIDED BY:	INSTALLED BY:	UTILITIES	REMARKS
E15	AUTOCLAVE	120	OWNER	ELECT CONTR MECH CONTR EQUIP SUPPLIER	120V POWER 20 AMP	1 ELECT CONTR TO PROVIDE & INSTALL 120V 20 AMP RECEPTACLE - SEPARATE CIRCUIT - VERIFY LOCATION AND POWER REQUIREMENTS 2 MECHANICAL CONTRACTOR TO PROVIDE VENTING & HOOD ABOVE UNIT 3 EQUIPMENT SUPPLIER TO SET IN PLACE & MAKE FINAL CONNECTIONS
E16	ULTRASONIC COUNTERTOP	120	OWNER	ELECT CONTR GEN CONTR PLBG CONTR EQUIP SUPPLIER	120V POWER 20 AMP	1 GEN CONTR TO DRILL HOLE IN CABINET & PROVIDE GROMMET 2 PLUMBING CONTR TO PROVIDE & INSTALL DISHWASHER TEE AT ADJACENT SINK WASTE 3 ELECT CONTR TO PROVIDE & INSTALL 120V 20 AMP RECEPTACLE - SEPARATE CIRCUIT 4 EQUIP SUPPLIER TO VERIFY LOCATIONS, INSTALL, & MAKE FINAL CONNECTIONS
E17	STATIM	120	OWNER	ELECT CONTR MECH CONTR EQUIP SUPPLIER	120V POWER 20 AMP CIRCUIT	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 120V 20 AMP CIRCUIT TO BACK OF CABINET BELOW - VERIFY LOCATION & POWER REQUIREMENTS WITH EQUIP SUPPLIER 2 EQUIPMENT SUPPLIER TO SET IN PLACE & MAKE FINAL CONNECTIONS
E18	PLASTER TRAP	122	OWNER	PLBG CONTR	1½" WASTE & VENT	1 PLUMBING CONTRACTOR TO INSTALL PLASTER TRAP PROVIDED BY OWNER & CONNECT WASTE & VENT TO TAILPIECE OF LAB SINK
E19	MODEL TRIMMER	122	OWNER	GEN CONTR ELECT CONTR PLBG CONTR EQUIP SUPPLIER	120V POWER ¼" COLD WATER ⅜" DW HOSE	1 GEN CONTR TO DRILL HOLE IN COUNTERTOP W/ GROMMET FOR FLEX DRAIN TUBE 2 ELECT CONTR TO PROVIDE & INSTALL 120V DUPLEX NEAR UNIT 3 PLBG CONTR TO PROVIDE & INSTALL SUPPLY (PP) BEHIND UNIT 4 PLBG CONTR TO PROVIDE & INSTALL 1" X ⅜" REDUCER , ⅜" DW HOSE & DW TEE 5 EQUIP SUPPLIER TO SET IN PLACE, CONNECT TO SUPPLY & ATTACH DRAIN TUBE TO REDUCER
E20	LATHE	122	OWNER	ELECT CONTR EQUIP SUPPLIER	120V POWER	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 120V 20A OUTLET, SEPARATE CIRCUIT 2 EQUIPMENT SUPPLIER TO SET IN PLACE & MAKE FINAL CONNECTIONS
E21	HAND PIECE CLEANER	120	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	120V POWER 20 AMP CIRCUIT ½" AIR	1 PLUMBING CONTRACTOR TO PROVIDE ½" AIR LINE & VALVE- SEE EXX FOR VALVE 2 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 120V 20 AMP SEPARATE CIRCUIT 3 EQUIPMENT SUPPLIER TO SET IN PLACE & MAKE FINAL CONNECTIONS
E22	MICROETCHER	122	OWNER	ELECT CONTR GEN CONTR EQUIP SUPPLIER	(2) 120V POWER	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL 120V DUPLEX TO UNITS ABOVE & BELOW COUNTER - VERIFY LOCATION & POWER REQUIREMENTS 2 GENERAL CONTRACTOR TO PROVIDE CUTOUT IN COUNTERTOP FOR VACUUM HOSE BEHIND UNIT 3 EQUIPMENT SUPPLIER TO SET IN PLACE & MAKE FINAL CONNECTIONS
E23	VACUSPAT	122	OWNER	ELECT CONTR GEN CONTR EQUIP SUPPLIER	120V POWER	1 GENERAL CONTRACTOR TO PROVIDE 2x BACKING & CUT WALL CABINET AS REQUIRED 2 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL DUPLEX RECEPTACLE IN CABINET 3 EQUIPMENT SUPPLIER TO MAKE FINAL INSTALLATION
E24	DUST VACUUM	122	OWNER	ELECT CONTR PLBG CONTR EQUIP SUPPLIER	120V POWER	1 ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL SWITCHED DUPLEX RECEPTACLE IN CORNER CABINET 2 PLUMBING CONTRACTOR TO PROVIDE & INSTALL 1½" PVC PIPING FROM CORNER CABINET TO LOCATION BEHIND DUST COLLECTING DRAWER . 3 EQUIPMENT SUPPLIER TO MAKE FINAL CONNECTIONS

REMARKS:

1 VERIFY ALL EQUIPMENT REQUIREMENTS AND LOCATIONS WITH EQUIPMENT SUPPLIER

ACCESSORIES SCHEDULE

A #	ITEM	LOCATION	PROVIDED BY:	INSTALLED BY:	REMARKS
A1	TOILET PAPER HOLDER BOBRICK B-6861	107 , 123	GEN CONTRACTOR	GEN CONTRACTOR	SS TOILET PAPER FOR TWO ROLLS - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED INSTALL TO ADA REQUIREMENTS
A2	GRAB BARS BOBRICK B-6806.99	107 , 123	GEN CONTRACTOR	GEN CONTRACTOR	1½" GRAB BAR W/ NON-SLIP GRIP - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED INSTALL TO ADA REQUIREMENTS
A3	PAPER TOWEL DISPENSER BRADLEY 244	123	GEN CONTRACTOR	GEN CONTRACTOR	RECESSED SS PAPER TOWEL DISPENSER - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED INSTALL TO ADA REQUIREMENTS
A4	PAPER TOWEL DISPENSER BOBRICK B-2621	120 , 122 , 128	GEN CONTRACTOR	GEN CONTRACTOR	WALL MOUNTED SS TOWEL DISPENSER - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED MOUNT AT 16" ABOVE COUNTERTOP TO TOP OF DISPENSER
A5	PAPER TOWELS / WASTE BOBRICK B-3944	107	GEN CONTRACTOR	GEN CONTRACTOR	RECESSED SS PAPER TOWEL DISPENSER AND WASTE RECEPTACLE - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED INSTALL TO ADA REQUIREMENTS
A6	SOAP DISPENSER (4" SPOUT) BOBRICK B-822	107 , 123	GEN CONTRACTOR	GEN CONTRACTOR	LAVATORY-MOUNTED STAINLESS STEEL SOAP DISPENSER W/ 4" SPOUT
A7	TOWEL PIN (ADA) BOBRICK B-6777	102 (2) , 107 , 113 114 , 115 , 116 , 117 123 , 126 (3)	GEN CONTRACTOR	GEN CONTRACTOR	3½" SS PIN - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED INSTALL TO ADA REQUIREMENTS
A8	TOWEL PIN BOBRICK B-6777	125 (2)	GEN CONTRACTOR	GEN CONTRACTOR	3½" SS PIN - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED
A9	MOP HOLDER BOBRICK B-223	129	GEN CONTRACTOR	GEN CONTRACTOR	24" SS MOP & BROOM HOLDER - SATIN FINISH GENERAL CONTRACTOR TO PROVIDE BLOCKING / FRAMING AS REQUIRED

NOTE:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THESE ITEMS FOR THE ARCHITECT'S REVIEW

PLUMBING FIXTURE SCHEDULE

P #	ITEM	LOCATION	PROVIDED BY:	INSTALLED BY:	UTILITIES	REMARKS
P1	TOILET KOHLER CIMARRON K-3589	123	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER 4" WASTE 2" VENT	VITREOUS CHINA, 1.6 GALLON TOILET W/ ELONGATED BOWL & K-4650 SEAT, WHITE INSTALL TO ADA REQUIREMENTS
P2	TOILET KOHLER CIMARRON K-3589-RA	107	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER 4" WASTE 2" VENT	VITREOUS CHINA, 1.6 GALLON TOILET W/ ELONGATED BOWL & K-4650 SEAT, WHITE INSTALL TO ADA REQUIREMENTS
P3	LAVATORY KOHLER KINGSTON K-2005-R	107	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 1¼" WASTE & VENT	WALL MOUNT VITREOUS CHINA LAVATORY, WHITE, DRILLED FOR SOAP DISPENSER W/ DELTA 516LF-HDF FAUCET & OPEN GRID STRAINER INSTALL TO ADA REQUIREMENTS, USE TRUEBRO LAVGUARD PROTECTIVE PIPE COVERS
P4	LAVATORY KOHLER PENNINGTON K-2196-4	123	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 1¼" WASTE & VENT	VITREOUS CHINA SELF-RIMMING COUNTERTOP LAVATORY WITH 4" FAUCET CENTERS, WHITE W/ DELTA 516LF-HDF FAUCET & OPEN GRID STRAINER INSTALL TO ADA REQUIREMENTS, USE TRUEBRO LAVGUARD PROTECTIVE PIPE COVERS
P5	SINK (TOUCH TECH) ELKAY DLRQ22221C	120 , 122	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 1¼" WASTE & VENT	DEEP SINGLE BOWL, 18 GAUGE STAINLESS STEEL SELF-RIMMING SINK, 22" X 22" X 10" DELTA 9113-AR-DST STAINLESS STEEL FAUCET W/ SPRAY, OPEN GRID STRAINER
P6	SINK ELKAY DLRQ22221C	128	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 1¼" WASTE & VENT	DEEP SINGLE BOWL, 18 GAUGE STAINLESS STEEL SELF-RIMMING SINK, 22" X 22" X 10" DELTA 9113-AR-DST STAINLESS STEEL FAUCET W/ SPRAY, BASKET STRAINER
P7	FLOOR SERVICE SINK MUSTEE 63M	129	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 3" WASTE, 1½" VENT	24" X 24" X 10" DURASTONE FLOOR SINK W/ DURAGUARD WALL GUARDS W/ CHICAGO FAUCETS 305-VBRCP FAUCET AND FLAT GRID STRAINER
P8	MODEL TRIMMER SUPPLY BEHIND MODEL TRIMMER (E19)	122	PLBG CONTRACTOR	PLBG CONTRACTOR	⅜" COLD WATER	CHICAGO #386-CP FLANGE & SHANK W/ BALL VALVE & ¼" WATER LINE ABOVE COUNTERTOP
P9	EYEWASH STATION BRADLEY S19-460EFW	120	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER	COUNTERTOP-MOUNTED HAND-HELD HOSE SPRAY W/ DUAL SPRAYHEAD PLBG CONTRACTOR TO PROVIDE & INSTALL MIXING VALVE (W/ WATTS LF009PCQT CONTINUOUS PRESSURE BACKFLOW PREVENTER MOUNTED ABOVE CEILING)
P10	GUY GREY BOX	125	PLBG CONTRACTOR	PLBG CONTRACTOR	½" COLD WATER ½" HOT WATER 2" WASTE, 1½" VENT	
P11	FLOOR DRAIN SIOUX CHIEF FINISH LINE 832 SERIES	125 , 129	PLBG CONTRACTOR	PLBG CONTRACTOR	3" WASTE, 1½" VENT VERIFY	7" SQUARE STAINLESS STEEL ADJUSTABLE FLOOR DRAIN
P12	FLOOR DRAIN SIOUX CHIEF FINISH LINE 832 SERIES	129	PLBG CONTRACTOR	PLBG CONTRACTOR	3" WASTE, 1½" VENT VERIFY	7" SQUARE STAINLESS STEEL ADJUSTABLE FLOOR DRAIN W/ 863 - FN CONDENSATE FUNNEL
P13	WATER HEATER A O SMITH DEL-40	129	PLBG CONTRACTOR	PLBG / ELEC CONTR	¾" COLD WATER IN ¾" HOT WATER OUT 240V 30A	GLASS LINED ELECTRIC WATER HEATER, 40 GALLON DUAL ELEMENT 5000 WATT, 240V UNIT - VERIFY BUILDING VOLTAGE WITH BUILDING OWNER UNIT SHALL HAVE 17 GALLONS PER HOUR RECOVERY AT 120 DEGREES

NOTE:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THESE ITEMS FOR THE ARCHITECT'S REVIEW

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of

MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK CLR
Drawn Checked

Revisions

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EQUIPMENT SCHEDULE
ACCESSORIES SCHEDULE
PLUMBING SCHEDULE

A-603

DIVISION 0 PROCUREMENT AND CONTRACTING REQUIREMENTS

00 21 00 INSTRUCTIONS

All Bidders shall carefully examine all drawing sheets to fully inform themselves to all conditions and requirements of the project. All bidders shall visit the site and/or space to familiarize themselves with all existing conditions to prepare a Bid that includes any issues or difficulties of the surrounding conditions, such as after normal business hours work, core drilling, etc.

Should a Bidder find any discrepancies in or omissions in the Drawings or be in doubt of the intended meaning, the Bidder shall notify the Architect immediately. Should a Bidder find any discrepancies with existing site conditions and the Drawings, the Bidder shall notify the Architect immediately.

00 72 00 GENERAL CONDITIONS

The General Conditions of the Contract for Construction, AIA Document A201, latest edition, Articles 1 through 14 inclusively, is a part of this Contract, nd in corporated as fully as if herein set forth.

DIVISION 1 GENERAL REQUIREMENTS

01 11 00 SUMMARY OF WORK

The Contractor shall notify the Architect if any discrepancies exist between the drawings and the existing conditions. The Contractor is responsible for paying for all labor, materials, permits, fees, etc., except as noted otherwise. The Contractor shall comply with all Federal, State and Municipal codes, ordinances, regulations, etc. and cooperate with all parties involved in establishing schedules and coordinating subcontractors to complete the project in a timely manner.

01 23 00 ALTERNATES

Every effort shall be made to provide the products specified. Contractor substitutions may be proposed due to availability or time frame. The Contractor shall notify the Architect immediately of any proposed deviation or changes to the Contract Documents. The Architect and the Owner reserve the right to accept or reject any proposed Alternates or substitutions.

01 31 00 PROJECT MANAGEMENT AND COORDINATION

The Contractor shall coordinate all Work and coordinate a schedule with Tenant's Equipment supplier and work with installers on utilities and connections to assure a timely completion date. The Tenant may also hire other contractors for specific work such as, but limited to, telephone, data, audio and visual systems, furniture suppliers, etc. all of which will require coordination during the course of the Work.

01 31 19 PROJECT MEETINGS

The Contractor shall establish a schedule for progress meetings and it shall be reviewed and approved by the Building Owner and Architect, along with any other pertinent parties involved.

01 33 00 SUBMITTAL PROCEDURES

The Contractor shall submit shop drawings and samples for all items requested on the drawings. Provide a minimum of 5 submittals for each category, including additional copies where required to assure that all parties receive a copy who require a copy. Include samples, showing a range of color, texture, etc. for approval. Include product data and related cut sheets, especially when submitted product is different from product specified. Shop drawings and any submittals shall be delivered to the Architect in ample time to allow for a reasonable review and approval time frame. The Architect reserves the right to reject any Shop Drawing or sample that is not legible to read, incorrect products, lack of cut sheets or other pertinent information.

01 50 00 TEMPORARY FACILITIES AND CONTROLS

The Contractor shall provide and coordinate all necessary temporary power, lighting, water and HVAC required to complete the Work performed. Provide construction barriers and security at the site as required. Coordinate with building Owner on any staging areas, dumpsters, delivery areas and acceptable times for deliveries.

01 73 29 CUTTING AND PATCHING

The Contractor is responsible for any cutting and patching of existing materials. Protect adjacent finishes and materials for damage. Tie into existing utilities with minimal disruption and at appropriate times to maintain services within the building during normal business hours. Coordinate with building Owner (where applicable) for patching finishes to match existing conditions, coordinating locations of structural members, utilities in walls and floors, etc., and schedule for such work to be completed. All patching is subject to approval by the building Owner and shall be corrected where requested at no additional cost to the Tenant.

01 74 00 CLEANING AND WASTE MANAGEMENT

During the course of the Work, the contractor shall keep the site and adjacent areas clean and properly dispose of debris in a legal manner by the use of dumpsters or other acceptable means. Maintain a broom clean site during the course of Work and provide protection to any finishes that have been installed. Provide a thorough cleaning at substantial completion.

01 78 00 CLOSEOUT SUBMITTALS

Turn over all maintenance manuals and warranties to the Tenant (and building Owner where required). Obtain Certificate of Occupancy from local municipality. Train Tenant (and building Owner) in use of any systems and their operation, including shut-off valves, switches, etc.

01 78 39 PROJECT RECORD DOCUMENTS

During the course of the Work, the Contractor shall maintain a project set of documents that has a record of all significant revisions, changes, modifications, alterations that occurred during the project. Significant items may be, but not limited to, electrical, plumbing, HVAC, dimensions, etc. At the completion of the project, turn over this record set to the Tenant.

DIVISION 2 EXISTING CONDITIONS

02 41 00 SELECTIVE SITE DEMOLITION

Where applicable, provide miscellaneous demolition such as, but not limited to, core drilling and concrete slab removal for utilities, roof penetrations, wall penetrations, etc. Refer to Section 01045 Cutting and Patching for other information.

Demolition shall occur at times (weekends and/or evenings if required) coordinated with Tenant and/or building Owner. Salvage items where requested or indicated. Protect adjacent areas and provide temporary barricades as required for safety, without restricting access to exit ways, coorridors and stairwells. Provide dust tight temporary partitions where required to maintain clean areas outside of the Project.

In the event that any hazardous material is discovered, cease work immediately and notify the Architect and building Owner. Upon completion of demolition, clean all areas affected, patch finishes, etc.

DIVISION 3 CONCRETE

03 10 00 CONCRETE FORMING AND ACCESSORIES

All concrete formwork shall comply with the Recommended Practice for Concrete Formwork, ACI 347, latest edition. Use adequate sized members and panels for conditions to create straight, smooth and clean surfaces. Form removal shall comply with ACI 318, latest edition. Exposed surfaces that have voids are subject to removal and replacement.

03 20 00 CONCRETE REINFORCING

All reinforcing shall conform with the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures, latest edition. All Steel bars shall conform to ASTM A615 Grade 60, except ties shall be grade 40. Welded wire fabric shall conform to ASTM A185. Provide all ties, supports required to securely hold reinforcing in place.

Submit Shop Drawings for review by the Structural Engineer.

03 30 00 CAST-IN-PLACE CONCRETE

Provide and install concrete footings, foundation walls, slabs on grade, toppings, pads for equipment, etc., where shown on the drawings. Provide and install liquid membrane curing compound and acrylic sealer at all exposed surfaces. Unless noted otherwise, provide 6x6-W1.4xW1.4 welded wire fabric in all slabs. Use forms when placing concrete to create smooth and exact corners. All exterior concrete shall be minimum 4,000 psi at 28 days unless noted otherwise. Provide inspections and tests by an independent testing company where required by Code or indicated.

Install vapor barrier under all slabs on grade and protect from damage where welded wire fabric and/or reinforcing is installed. Install expansion joints with expansion material, where shown and at locations between abutting elements and to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute. Install contraction joints with tools or by saw, where shown on the drawings and at locations to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute.

Where exposed aggregate slabs are indicated, review aggregates with Architect and provide sample panels for approval, prior to start of work. All surfaces shall be smooth troweled finished unless noted otherwise. Protect slabs during the course of the work and replace any damaged concrete.

DIVISION 4 MASONRY

04 05 13 MASONRY MORTARING

Provide all standard and colored mortars as indicated on the drawings. Mix mortar proportions by volume in accordance to ASTM C270. Mix mortar types M for foundations and below grade, type S for load bearing and exterior walls and type N for interior wall, unless noted otherwise.

04 05 19 MASONRY ANCHORAGE

Provide galvanized, two part adjustable wall ties, 3/16 inch diameter, type required for back up wall condition at brick masonry. Provide galvanized horizontal "ladder type" joint reinforcing at unit masonry walls. Provide other items such as, but limited to: anchors, steel rods and bars, etc. as required for a complete installation.

04 05 23 MASONRY ACCESSORIES

Provide cotton rope wicks and flexible membrane flashing, minimum 20 mils thick at all grade, lintel, sill, as well as other conditions as shown. Provide cavity wall drainage material such as Mortar Net at flashed conditions to allow for any moisture drainage.

Provide masonry cleaning solution, type as required for masonry material to be cleaned. Provide all other accessories and items such as, but limited to: joint fillers, grout, deflection material, etc., as required for a complete installation.

04 22 00 CONCRETE UNIT MASONRY

Provide and install unit masonry in types, profiles, sizes, textures, colors as shown on the drawings. Provide special shape units where shown or required for job conditions. Where exposed to the exterior and/or interior, erect a 48" x 48" sample panel for each type of exposed masonry units, for approval by the Architect. If rejected, provide additional sample panels at no additional cost to the Owner. Sample panel shall represent joints, color of mortar, range in color of units (if applicable), etc. Provide and coordinate with testing agency where indicated or required by Code.

Hollow concrete masonry units shall conform to ASTM C 90 and have a maximum moisture content of 25 percent at the time of delivery. Mortar shall be as described in 04 05 13 Masonry Mortaring. Provide galvanized, ladder reinforcing, 3/16 inch diameter, type required for wall condition. Provide shapes as required for tying into perpendicular walls and/or angled walls as described in 04 05 13 Masonry Anchorage. Refer to exterior finish schedule for manufacturer and colors.

Install exposed units only after approval of sample panel. Install units as shown on the drawings, cutting neatly where required and providing special shapes where shown. Install colored mortar where shown. Strike joints flush as non-exposed areas and concave at exposed areas. If existing masonry is present, match existing joints, unless noted otherwise. Coordinate cavity insulation where it occurs as well as other items such as electrical, mechanical or other items. Install grout at locations shown and use methods to ensure all voids are filled. At completion of masonry installation, clean masonry with tools and methods as recommended by the cleaner manufacturer.

DIVISION 05 METALS

05 12 00 STRUCTURAL STEEL FRAMING

Provide all steel items in shapes and sizes as noted on the drawings. Fabricate steel members in accordance to AISC Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings. All welding shall comply with AWS Structural Welding Code. Steel fabricator and the steel erector shall have minimum of 5 years of experience. Welder shall have certification that shows passing of AWS qualification tests. Provide and coordinate with testing agency where indicated or required by Code.

Structural steel members shall meet ASTM A36± steel tubing shall meet ASTM A500, Grade B, steel pipe shall meet ASTM A53 Grade B and anchor bolts, nuts and washers shall meet ASTM A307. Provide galvanized members where shown. Other items shall have shop primer that meets SSPC Paint 15, Type 1, red oxide or equal. Provide all miscellaneous items required for a complete installation such as, but no limited to lintels, bolts, anchor bolts, grout, bituminous paint, welding materials, etc.

Erect steel items as noted on the approved shop drawings, providing steel shims, grout, and touch up primer as required. All exposed rough edges shall be ground smooth.

05 50 00 METAL FABRICATIONS

Provide all miscellaneous steel items in shapes and sizes as noted on the drawings. Refer to drawings for specific items, sizes and dimensions. Items that may be included are, but not limited to: sign posts, bollards, gate frames and posts, guardrails, handrails, stairs, metal pan stairs, ships ladders, elevator pit ladders, roof access ladders, miscellaneous lintels, bracing items, plates, angles for roof openings and poured concrete edges, brackets, frames, etc.

Fabricate items in largest pieces possible for shipping and disassemble items required for shipping with appropriate marks and notations for site installation. All welding shall comply with AWS Structural Welding Code.

DIVISION 06 WOOD, PLASTICS AND COMPOSITES

06 10 00 ROUGH CARPENTRY

Provide all rough carpentry, including all fasteners and related hardware for a complete installation. All lumber shall be identified by grade stamps and have a maximum moisture content of 19%. Provide preservative treated wood in areas that wood is in contact with concrete or masonry, roof curbs (where applicable). Provide fire retardant treated wood in walls and partitions, and areas that are noted as rated. Provide blocking and backing for all equipment, accessories and miscellaneous wall mounted items, including items provided by the Owner.

06 17 00 SHOP FABRICATED STRUCTURAL WOOD

Provide LVL's, PSL's and LSL's as shown on the drawings in shapes, sizes and bearing conditions required. Items shall be provided as noted on the Structural Drawings. Items shall be manufactured in accordance to the ICC ES or CCMC and also bear the stamp of the series and one of the above agency evaluation report numbers. Products shall meet all performance standards, fire and sound ratings where noted. Submit shop drawings for approval.

Install members as recommended by the manufacturer and per approved shop drawings. Install bracing where indicated for lateral support, until sheathing material has been installed. Any field cutting or adjusting must be approved by the manufacturer. Fasten members to adjacent framing or with approved holders/hangers to adjacent dissimilar construction materials. Temporary construction loads that cause stress are not allowed.

06 17 53 SHOP FABRICATED WOOD TRUSSES

Provide open web trusses as shown on the drawings in shapes, sizes and bearing conditions required and shown. Trusses shall be manufactured in accordance to the NER, ICBO ES or CCMC and also bear the stamp of the series and one of the above agency evaluation report numbers. Products shall meet all performance standards, fire and sound ratings where noted. Submit shop drawings for approval.

Install trusses as recommended by the manufacturer and per approved shop drawings. Install bracing where indicated for lateral support, until sheathing material has been installed. Any field cutting or adjusting must be approved by the manufacturer. Temporary construction loads that cause stress are not allowed.

06 20 00 FINISH CARPENTRY

All finish carpentry shall conform with AWI Standards and meet AWI Custom Grade Specifications. Materials shall conform to the following:

Solid Wood: Kiln Dried, AWI Custom Grade - species as indicated.
Particle Board: Medium density wood chip core and synthetic resin - thickness as indicated.
Plastic Laminate: Shall comply with NEMA LD1 - colors as indicated.
Plywood: Interior grade - AB - species as indicated with matching edge band where exposed.

All finish carpentry items shall be cut, assembled and installed by skilled workers experienced in this type of work, using concealed fasteners where possible and minimal sized at exposed areas. All joints shall be tight and lines true.

06 41 00 ARCHITECTURAL WOOD CASEWORK

All custom casework shall conform with AWI Standards and meet AWI Premium Grade for all doors, drawers and countertops; AWI Custom Grade for cabinet frames. Custom casework shall be fabricated by companies with minimum of 5 years experience. Provide all fasteners required to complete the fabrication and installation. Provide all scribes and miscellaneous pieces required for a complete installation. Provide supports and coordinate installation of solid and/or granite surfacing. Materials shall conform to the following:

Particle Board: Medium density wood chip core and water resistant adhesive - thickness as indicated.
Plastic Laminate: Shall comply with NEMA LD3, 0.040 inch thick - colors as indicated.
Hardwood Veneer: Medium density wood chip core and water resistant adhesive - species and thickness as indicated.
Solid Wood: Kiln Dried, AWI Premium Grade, maximum 6% moisture content - species as indicated.
Hardboard: Pressed wood fiber with resin binder, tempered grade, smooth both sides - thickness as indicated.
Solid Surface: Shall be homogenous material - thickness as indicated.
Melamine Surface: Standard, neutral color, typical at all cabinets with doors.
Granite: Shall be color and size as indicated on the drawings.

All casework hardware shall be heavy duty and conform to the following:

Hinges: Fully concealed, adjustable and self-closing feature. Minimum opening shall be 145 degrees. Blum or equal.
Pulls for Doors and Drawers: Brushed chrome, bent wire design with 3-1/2" center to center width.
Drawer slides: Full extension, with 100 lb. rating. Provide 150 lb. rating at deep drawers for files and plaster and other areas. Accuride or equal.
Locks (where indicated): Brushed chrome, five pin tumbler, keyed different with master keys.
Cord Grommets: Plastic, 2" diameter, TG Flip Top as manufactured by Doug Mockett and Company, Inc. (www.mocket.com).
Trash Grommets: Plastic, 6" diameter with 2" deep sides, TM-1 as manufactured by Doug Mockett and Company, Inc.

DIVISION 07 THERMAL AND MOISTURE PROTECTION

07 11 13 DAMPPROOFING

Provide emulsion type dampproofing as shown. Applicator shall have a minimum of three years experience in the installation of dampproofing system.

System shall be Sealmastic type II by W.R. Meadows or approved equal. Provide Sealmastic Spray-Mastic primer, and all flashings, etc. for a complete and installation. Provide 2 coat system with Primer and Type III finish coat trowel applied. Coordinate installation of rigid perimeter insulation with manufacturers installation instructions.

Install system in accordance to manufacturer and ensure all penetrations are sealed. Protect dampproofing membrane from damage until rigid perimeter insulation has been installed and backfilling has occurred.

07 21 00 THERMAL INSULATION

Provide thermal batt insulation in sizes and "R" values as indicated. Fill all voids with batt insulation, where they occur. Provide sound attenuation batt insulation full thickness or as indicated. Provide acoustical sealant at all perimeters and penetrations of partitions with sound attenuation batts. Provide rigid board insulation at cavity walls, perimeter foundation walls, etc in thicknesses as shown on the drawings. Patch and seal any penetrations in existing vapor barriers and insulation as required at any cutting and patched areas. Insulation shall conform to the following:

Batt Insulation: ASTM C 665, Type I and ASTM E136. Thermal Batt Insulation as manufactured by Owens Corning.
Sound Attenuation Batt Insulation: ASTM C 665, Type II Class C. QuietZone Acoustic Batts as manufactured by Owens Corning.
Rigid Board Insulation: ASTM C578 Type IV, extruded polystyrene with compressive strength of 25 psi, Foamular 250 as manufactured by Owens Corning.

At attic conditions, provide polystyrene insulation baffles at perimeters and other locations as shown, sized accordingly for framing members, to maintain proper ventilation air flow. Provide Durovent and/or Durovent Baffle or approved equal, as conditions demand.

DIVISION 07 THERMAL AND MOISTURE PROTECTION (CON'T)

07 27 00 WEATHER BARRIERS

Provide weather barrier where shown on the drawings. DuPont Tyvek or equal product with prior approval. When installed, coordinate installation with flexible flashings at window and door openings. Verify installation with manufacturer based on substrate and finish material being applied on top. Install with approved fasteners and overlap seams, corners, etc. as recommended. Provide sealants, primers and all accessories required for a complete installation.

07 27 00 AIR BARRIERS

Provide minimum 6 mil poly vapor barrier at all locations shown on the Drawings. Provide appropriate sealed edges and seams with tape or other approved methods to maintain integrity.

07 31 13 ASPHALT SHINGLES

Provide laminated textured asphalt shingles as shown on the drawings. Provide sloped roof membrane with an adhesive back (Ice and Water Shield) as manufactured by W. R. Grace or approved equal. Provide roofing felt, appropriate fasteners, edge flashings, drip flashings, step flashings as required for a complete and water tight installation.

Provide ridge venting material with fiber mesh and any related caps, trims, etc., required. Refer to Roof Plan for ventilation requirements and locations. Provide frost jackets for all plumbing vents and stacks - verify exact quantity with mechanical contractor.

Install all materials per manufacturer to maintain watertight condition and any warranty from the manufacturer.

07 42 00 SHEET METAL WALL/SOFFIT PANELS (FLUSH & VENTED)

Provide prefinished flush panel metal wall/soffit panel system, including all trims, and all color matching accessories for a watertight installation. All work shall conform to the recommended practices in the Architectural Sheet Metal Manual, Sheet Metal and Air Conditioning Contractor's National Association, Inc., latest edition.

Provide 22 gauge hot dipped galvanized steel with HYLAR 5000/Kynar 500 finish, color and seam spacing as noted on the drawings. Provide interlocking panel legs with 8" wide panel centers, unless noted otherwise. Material shall be UNA-CLAD Flush Panel System UC-500 as manufactured by Firestone Building Products. Provide all accessories, "J" Flashing with weeps as occurs, "Z" Flashing, appropriate fasteners for substrate, butyl tape at dissimilar metal conditions, etc., required for a complete installation. Provide and install framing where required. Coordinate fastener locations with gate frame fabricator for proper spacing frame pieces to eliminate other framing. Coordinate panel cutouts with any gate hardware. Allow for movement at joints where required.

07 46 00 SIDING

Provide Fiber Cement horizontal lap siding, vertical panel siding with battens, soffit panels, trims, etc. in sizes, shapes and profiles as shown on the drawings. Provide prefinished sidings, boards and trims, etc. when indicated. Where prefinished items are noted, provide matching touch up paint for field cut ends and other areas that require touch up. Where prefinished items are noted, provide color manufacturer's matching sealant color, to be installed at joints between siding and trims and other locations per manufacturer. Hardie Plank Lap Siding, as manufactured by James Hardie, is the basis of design. Equal products by other manufacturers with advance approval from the Architect. Provide manufacturer approved joint flashing at all butt joints. Provide any additional items for a complete and weatherproof installation.

Vertical siding with battens shall be Hardie Panel system as manufactured by James Hardie or approved equal. Provide sealant where recommended and "z" flashing at horizontal joints between panels and at transitions in trims.

Soffit Panels shall be solid and vented Hardie Soffit panels as manufactured by James Hardie or approved equal. Refer to the drawings for locations of vented panels. Provide additional framing as shown and/or recommended by the manufacturer to ensure proper fastening.

Install all lap siding, trims, soffit panels, siding panels in accordance to manufacturer.

Refer to exterior finish schedule on drawings for sizes, profiles, finishes, textures of all trims, panels, sidings, etc.

07 62 00 SHEET METAL FLASHING AND TRIM

Provide prefinished metal flashings and trims, vents and all color matching accessories for a watertight installation. All work shall conform to the recommended practices in the Architectural Sheet Metal Manual, Sheet Metal and Air Conditioning Contractor's National Association, Inc., latest edition.

Provide 24 gauge hot dipped galvanized steel with HYLAR 5000/Kynar 500 finish, color as noted on the drawings to match roofing where occurs. Material shall be UNA-CLAD by Firestone Building Products. Provide all accessories, clips, keepers, fasteners, etc., required for a complete installation. Form flashings to shapes of structure and provide joints that are locked or have locked cover strips. Allow for movement at joints where required. Install bituminous paint or other approved material to create insulation between dissimilar metals. Provide and install all curb flashing and counterflashing at equipment, walls, parapets or other transitions.

07 65 00 FLEXIBLE FLASHING

Provide self adhering flexible flashing at all exterior door and window openings, as shown on the drawings and details of openings. Provide self adhering flexible flashing at other locations, such as mechanical and electrical penetrations, to provide a waterproof barrier.

Provide DuPont Flexwrap NF self adhering flexible flashing and related butyl flashings for a complete system of protection. Equal products by other manufacturers with prior approval by the Architect. Install per drawings and manufacturers recommendations, based on the stage of progress of window and door installation.

07 84 00 FIRESTOPPING

At all fire rated assemblies, provide all joints in materials, dissimilar materials and penetrations with piping, conduit, duct work, etc., with appropriate firestopping materials. Provide all sealants, fire safing, annular space protection, etc., with approved sealants. Installer shall provide all cut sheets and/or all UL approved numbers to the Building Inspector if requested.

07 92 00 JOINT SEALANTS

Provide all joints in materials and dissimilar materials with sealants, using backer rods where required. Provide acrylic latex, paintable type, or colored with approval at typical interior locations. Provide mildew resistant silicone for all joints and perimeters at plumbing fixtures, white in color. All sealants shall be reviewed for color and type prior to installation.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK CLR
Drawn Checked

Revisions

1728
Project Number

NEW BUILDING
HANOVER DENTAL

411 LABEAUX AVENUE NE
HANOVER MINNESOTA

SPECIFICATIONS

A-701

DIVISION 08 OPENINGS

08 11 13 HOLLOW METAL DOORS AND FRAMES

Provide 16 gauge steel frames for all interior doors and 14 gauge for all exterior doors. Frames shall have fully welded miter corners and ground smooth and have rust inhibitive primer. Frames shall have reinforcing for hinges, closers and any other hardware. Provide rubber door mutes at all doors. Provide minimum of 3 welded anchor straps at each jamb.

Provide 18 gauge steel for interior doors and 16 gauge steel for exterior doors fabricated with a single sheet faces and have a rust inhibitive primer. All doors shall have flush channel at the entire perimeter. Provide honeycomb core at standard interior doors* insulated core at exterior doors and doors in sound rated walls. Stops for glaze and louver openings shall be flush metal with countersunk screws.

Provide appropriate labels at doors and frames at rated doors to meet NFPA requirements.

08 14 00 WOOD DOORS

Provide wood doors as indicated on drawings. Doors shall be solid core, AWI Premium Grade with hardwood veneer (PC-5 or PC-1). Cut outs shall be provided with mouldings of same species of face veneer for rated and non-rated doors. Provide appropriate labels at rated doors in accordance with NFPA. Doors shall have reinforcing for hardware and all preparation for hardware shall be done under controlled conditions. Refer to drawings and finishes for species.

08 41 00 ENTRANCES AND STOREFRONTS

Provide all aluminum framing, side lights, window walls, doors and entrance hardware as shown on the drawings. Framing systems shall be designed for a wind load of 20 pounds per square foot with a maximum deflection of L/175 and a an allowable stress safety factor of 1.65. Provide shop drawings and cut sheets of hardware for approval.

Aluminum extrusions shall be 6063-T5 alloy and all exterior doors and framing shall be constructed with thermal breaks. Exterior framing shall be designed for 1 inch insulated glazing and exterior doors designed for 5/8 inch insulated glazing unless noted otherwise. Interior framing and doors shall be designed for 1/4 inch thick glass unless noted otherwise. Exterior framing shall be thermally broken, 450TB as manufactured by CMI Architectural System or approved equal, 4-1/2 inches deep by 2 inches wide unless noted otherwise. Interior framing shall be 450RG as manufactured by CMI Architectural System or approved equal, 4-1/2 inches deep by 1-3/4 inches wide, unless noted otherwise. Door stile shall be as indicated on the door elevations. See drawings for elevations and finish color. Provide all flashings, fasteners, etc., and hardware scheduled, for a complete operating and weather tight installation. Coordinate keying of cylinders with other hardware.

Fabricate doors and frames with closures, caps, corners and tight joint lines. Install framing, doors and hardware in accordance to manufacturer and approved shop drawings. Fasteners shall be hidden in all cases. Coordinate with any conduits for electric operators, strikes, etc. Coordinate glass installation and protect all surfaces from damage.

08 52 13 METAL CLAD WOOD WINDOWS

Provide fixed and vented wood windows with clad or finished exterior and insulating glass. Provide multiple units, standard sizes and special shape units as shown on the drawings. Provide shop drawings for approval of colors, operators, accessories, etc.

Wood frames shall be constructed with a water repellant preservative treated wood. Exterior shall have a two coat acrylic Kynar coating. Interior shall be natural wood for site finishing. Glazing shall be clear insulated with low E film and inert gas filled. Provide all exterior trim, jamb extenders, flashings, nailing fins, mullion covers, mounting straps, etc., for a complete installation. All venting units shall have fiberglass screens and appropriate hardware such as locks and operators for a smooth operation. Where indicated, provide removable grids to match interior finish. Refer to drawings for manufacturer, unit sizes, color and details.

Install all windows, trims, flashings, mullion covers, etc. for a complete installation. Remove all labels and clean glass. Replace damaged units immediately.

08 71 00 DOOR HARDWARE

Provide all finish hardware indicated and that is required for a complete installation including, but not limited to locksets, latchsets, push pulls, cylinders, closers, hinges, gaskets, thresholds, stops, etc. All hardware shall be heavy duty. Refer to hardware schedule for specified hardware and finish color.

Hardware supplier shall be AHC certified and submit shop drawings with cut sheets for approval. Hardware supplier shall meet with the Tenant and /or building Owner to review all keying and locking functions prior to ordering.

08 81 00 GLAZING

Provide all glazing as indicated and required for a complete installation. Provide all mirrors indicated, in a frame-less installation with glazing quality silver and plating. Glazing shall be type and thickness required for specified conditions. Coordinate with other subcontractors for openings at entry frames, sidelights, door cut outs, etc. Provide specialty glazing, textured surface, obscure, etc. as indicated in the finish schedule. In general, the following glass shall be used at the following locations unless noted otherwise:

5/8" tempered insulating with tint and low E film at exterior doors
1" tempered insulating with tint and low E film at exterior window framing.
1/4" tempered at vestibule doors and sidelights
1/4" clear at all other locations
1/4" +/- decorative art glass where shown on the door and frame elevations and on the finish schedule
1/4" wire glass at rated doors and frames (with appropriate UL label)
1/4" mirror glazing quality silver plating at locations indicated on interior elevations

08 95 00 VENTS (SOFFIT AND ROOF)

Provide soffit and roof ventilation as shown on the drawings. Ventilation shall meet the design criteria of net free area indicated. Alternative products must be approved in advance by the Architect.

Soffit eave vents shall be continuous, in lengths shown and located where shown. Vents shall be aluminum and have a minimum of 9 square inches of net free area per linear foot. Soffit eave vents shall be model SV202 as manufactured by Air Vent Inc. Color shall be white for bidding purposes, with color to be verified with the Architect prior to ordering and installing.

Roof vents shall be plastic with a slant back, 24 inches by 24 inches in size, have a minimum of 150 square inches of net free area per unit and located where shown on the drawings. Roof vent shall be model SLP150 as manufactured by Air Vent Inc. Color shall be black for bidding purposes, with color to be verified with the Architect prior to ordering and installing.

DIVISION 09 FINISHES

09 29 00 GYPSUM BOARD

Provide all gypsum wall board and framing members as indicated and required for specific conditions. Refer to wall and partition types for types and thicknesses. All gypsum wall board work shall comply with USG "Gypsum Construction Handbook". Maintain all rated assemblies where indicated and required, by using Type "X" and/or Fire code C boards with tapered edges for finishing. Provide moisture resistant board at all wet areas and Durock cement board as manufactured by USG Corporation where shown.

At exterior walls and/or soffits, where gypsum sheathing is noted, install Fiberock Brand Sheathing as manufactured by USG Corporation or DensGlass Gold as manufactured by Georgia Pacific. Refer to wall types and details for thickness and any rating issues. Product used shall be an approved substrate for the exterior finish material to be applied. In no case shall any substrate material be used that will void any warranties.

Provide all accessories required for a complete and finished installation, including joint compound, tape, corner beads, expansion joints, etc. Sand all joints and other areas to a smooth finish to allow specified finish.

Provide all framing as indicated and required for specific conditions. Provide all metal studs, furring channels, resilient channels, angles, deep leg tracks at tops of walls for deflection, etc. Refer to wall and partition types for sizes. Framing contractor shall review all wall/partition types and adjust gauge of framing when heights require stiffer members. Provide all bracing on top of walls that are not full height or have equipment that requires rigidity.

09 30 00 TILING

All tile work shall be in accordance with the appropriate method with the Tile Council of America. All joints shall be neat, even and square. Provide appropriate mortar setting bed or adhesive for conditions. Provide all shapes required for specific conditions such as, but not limited to coved base, bull nose edges, inside and outside corners, etc. Refer to Finish Schedule for tile types and sizes. Refer to drawings for wainscot locations and heights.

Provide colored grout, with different colors at locations as indicated. Protect areas from damage after installation is complete.

09 51 00 ACOUSTICAL CEILINGS

Provide acoustical ceiling tile type and sizes including grid as indicated. Panels shall be clean and free of marks and any damage. Grid shall be standard 15/16" white exposed grid unless noted otherwise. Provide standard wall angle to match grid. Provide rated grid, panels and tents over light fixtures at ceiling systems noted as rated. Unless noted or dimensioned otherwise, center grid in rooms and avoid slivers at perimeters.

Provide Owner with a minimum of two (2) extra boxes of each type of tile specified for future replacement. Contractor shall review all installed tile and replace all panels that have finger prints or marks after low voltage wiring contractors and any other Subcontractor has completed all above ceiling work.

09 65 00 RESILIENT FLOORING

Provide all resilient flooring, vinyl composition tile, sheet vinyl, vinyl base as indicated on the Finish Schedule, including all floor leveling. Sheet vinyl flooring shall be installed with heat welded rods and integral coved base where indicated. Use manufacturers recommended adhesive for each type of installation and substrate. Provide vinyl transition strips at conditions where a change in floor material occurs.

Vinyl base shall be 4" high with coved bottom unless noted otherwise. Vinyl base corners shall be formed and adhesively applied. Base shall be installed in longest lengths possible.

Protect all floors and base from damage.

09 68 00 CARPETING

Carpet contractor shall submit a seaming layout and copy of ordered material immediately after the start of construction for approval. Provide and install all carpet as indicated on the Finish Schedule. Use manufacturers recommended adhesive for each type of installation and substrate. Install seams with appropriate heat tape and cement to avoid unraveling.

Where carpet base is indicated, provide specified height and submit samples for color of binding edge for approval.

Protect all floors and base from damage.

09 91 00 PAINTING

Painting contractor shall submit paint and stain samples, that match specified colors, for review and approval. Prepare and submit additional samples to obtain required approval at no additional cost.

Provide paint that is fresh and new in locations as indicated on the Finish Schedule. All exterior conditions shall receive an oil based type and all interior conditions shall be water based type, unless noted otherwise. In all cases, products shall be VOC compliant. Typical applications will have primer and/or sealer coat and 2 finish coats. At materials with shop primer, touch up primer as required and provide 2 finish coats. Typical finish is eggshell at walls and soffits with semi-gloss at wet areas and metal items.

Provide stain (where indicated) and sealer coats at all wood products. Sand surfaces between each coat for a smooth finish.

DIVISION 10 SPECIALTIES

10 14 00 SIGNAGE

Provide minimum interior signage at doors required by Code. Review and submit style for approval. Signs shall have text, braille and graphic symbols and be approximately 6 inches by 6 inches in size. Color shall be selected from the manufacturers standard colors. Install signs at proper accessible heights.

Provide Code required exterior traffic signage at accessible parking stalls. Provide additional site traffic signage where shown on the drawings. Mount signs on posts in locations and heights required by Code at accessible parking stalls and in other locations as indicated. Mounting of signage to buildings is to be used where no post is an option and is to be approved by the Architect prior to installation.

10 26 13 CORNER GUARDS

Provide rigid vinyl corner guard protections at all outside 90 and 135 degree corners. Corner guards shall be Textured Tape-on type as manufactured by InPro Corporation. Use manufactures tape model at all painted wall conditions and provide a no-tape on model for all vinyl wall covering corners. Refer to drawings and finish schedule for color, wing size and height.

Install corner guards with tape at painted walls and with manufacturers standard construction adhesive at all vinyl wall covering corners. Submit sample for color verification prior to ordering.

DIVISION 10 SPECIALTIES (CON'T)

10 28 13 TOILET ACCESSORIES

Provide and install all toilet accessories as indicated in the accessories schedule. All items shall be of one manufacturer, unless noted otherwise. Submit shop drawings and cut sheets for approval. Mount items securely to wall with backing, using concealed fasteners where possible and at proper heights to met codes. Surface mounted units shall not interfere with Code required access to fixtures, doors, etc. Where recessed units are specified, coordinate with other trades to ensure no pipes, conduits, etc., are in conflict. Test each accessory for each of use and replace defective units immediately.

10 44 00 FIRE PROTECTION SPECIALTIES

Provide fire extinguishers on brackets and in cabinets as indicated on the drawings. submit shop drawings and cut sheets for approval. Extinguisher shall be 10 lb. dry chemical, Type A, B, C with minimum UL rating of 4A 60BC - Cosmic 10E by J. L. Industries or approved equal. Semi-recessed cabinet shall be aluminum with double strength glass panel in door - Academy 1027V10 by J. L. Industries or approved equal. Where wall brackets are indicated, provide manufacturers standard wall mount bracket. review and coordinate locations with local Fire Marshal and notify the Architect of any revisions to locations.

DIVISION 11 EQUIPMENT

11 74 00 DENTAL EQUIPMENT

All dental equipment is provided by the Owner and/or the Equipment Supplier. General Contractor and all subcontractors shall coordinate their work with the Equipment Supplier and specific equipment connections as indicated on the Drawings in the Equipment Schedule

All equipment shall be verified for the correct utility connections prior to installation of any specific utility. Notify the Architect immediately of any discrepancies.

DIVISION 22 PLUMBING

22 00 00 PLUMBING

All plumbing work shall be by a licensed plumbing contractor. Plumbing contractor shall provide and install all items required through a design build method. Plumbing contractor shall prepare and submit any required drawing for permits and approvals.

Plumbing contractor shall use products indicated on the drawings and provide all related and accessory items for a complete installation. Submittals, cut sheets and shop drawings will be required to be submitted for approval prior to ordering any products.

Plumbing contractor shall provide rough-ins and final connections to Owner supplied equipment as scheduled or noted. Provide shut-off valves at all fixtures and other areas as required. Notify the Architect if any valves will require access panels, to coordinate location.

Plumbing contractor shall coordinate and review locations of water meters, gas meters, clean outs, etc. with the Architect prior to installation. Meters and clean outs may need to be located in non-preferred areas for aesthetic or other reasons, such as door or sidewalk clearance or for future equipment.

Coordinate all work with other contractors and any equipment suppliers. Notify the Architect immediately of any discrepancies.

DIVISION 23 HEATING, VENTILATION AND AIR CONDITIONING

23 00 00 HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

All HVAC work shall be by a licensed HVAC contractor. HVAC contractor shall provide and install all items required through a design build method. HVAC contractor shall prepare and submit any required drawing for permits and approvals.

HVAC contractor shall use products indicated on the drawings and provide all related and accessory items for a complete installation. Submittals, cut sheets and shop drawings will be required to be submitted for approval prior to ordering any products.

HVAC contractor shall review and coordinate all locations of thermostats with Architect prior to installation. Coordinate and review location of condensers with Architect prior to installation. Thermostats and condensers may need to be located in non-preferred locations due to aesthetics or other reason. At areas that are remodeled or expanded, match existing types of diffusers, returns, etc., and connect to existing units and thermostats where occurs. HVAC contractor shall balance system and make adjustments to new as well as adjacent existing diffusers (where occurs).

Coordinate all work with other contractors and any equipment suppliers. Notify the Architect immediately of any descrepancies.

DIVISION 26 ELECTRICAL

26 00 00 ELECTRICAL

All Electrical work shall be by a licensed Electrical contractor. Electrical contractor shall provide and install all items required through a design build method. Electrical contractor shall prepare and submit any required drawing for permits and approvals.

Electrical contractor shall use products indicated on the drawings and provide all related and accessory items for a complete installation. Submittals, cut sheets and shop drawings will be required to be submitted for approval prior to ordering any products. Refer to Finish Schedule on the drawings for the color of devices and plates. Unless noted otherwise, match existing device and plate color at remodeled areas.

Electrical contractor shall review and coordinate all locations of transformers, feeds, meters, sub-panels, time clocks, photocells, etc., with Architect prior to installation. Location may have an impact on cost that may need to be factored into any pricing. Items located without coordination with the Architect may be subject to relocation at Electrical contractors cost.

Coordinate all work with other contractors and any equipment suppliers. Notify the Architect immediately of any discrepancies.

DIVISION 31 EARTHWORK

31 12 00 SELECTIVE CLEARING

Protect existing trees, planting and other landscaping materials, buffers, easements and site improvements not scheduled for demolition or clearing, that might be damaged by construction activities. Where indicated or required for new construction, clear and grub area of trees, stumps, vegetation, debris and all rubbish. Provide temporary protection of adjacent property and structures. Provide temporary erosion control, siltation control and dust control at all times. Provide removal and legal disposal of materials not to be stock piled. Coordinate area for any stock piled materials with the Owner. Verify all utility locations prior to the start of work.

31 23 00 EXCAVATION AND FILL

Provide excavation, backfilling, compaction and grading for building, site improvements and utilities. Provide suitable materials for sub base, drainage fill, back fill for slabs, pavements and any improvements. Provide additional materials from offsite as required. Where landscaping and laun areas are noted, provide suitable topsoil to a minimum of 6 inches depth that is free of lumps, stones, roots and other undesirable materials. Refer to Landscape Drawings and Civil Drawings for additional information where possible.

Where Civil Engineering drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 12 00 FLEXIBLE PAVING

Provide and install bituminous paving and aggregate base course, including tack coats and painting of symbols, stripes, etc., where shown on the drawings. Aggregate base course material shall conform to MnDOT Spec. 3138, Class 5, 100% crushed quarry rock. Bituminous base course shall conform to MnDOT Spec 2360, minimum 5PWLB230B. Bituminous surface wear course shall conform to MnDOT Spec 2331, minimum 5PWEA240B. Tack coat between courses shall conform to MnDOT Spec 2357.

Where patching or replacing of bituminous paving is required, new base and paving material shall match adjacent existing thickness and courses. Provide required compaction to avoid sunken patches. Patched areas shall not divert existing drainage slopes or cause ponding. Patching in streets, roads, etc., shall meet the requirements of that jurisdiction. Any patched area that causes ponding or depressed areas will be replaced at no cost to the owner.

Unless noted or specified otherwise, bituminous paving (base and wear combined) shall be not less than 4 inches thick with a minimum of 6 inches of aggregate base for parking areas, and not less than 4-1/2 inches thick with a minimum of 6 inches aggregate base for travel areas, driveways and entrances, and not less than 5 inches thick with a minimum of 8 inches aggregate base course for truck travel areas, driveways and entrances. Truck travel areas are established as waste and recycling removal, delivery and loading docks. Truck travel area shall include areas for reasonable turning radius, access in and out, etc.

Install tack coat between base course and wear course, and between any multiple lifts (courses) per MnDOT Spec. Protect areas from traffic for the appropriate time, to avoid damage to surfaces.

Where Civil Engineering drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

32 13 00 RIGID PAVING

Provide and install exterior concrete walks, steps, pads, slabs, paving, etc., where shown on the drawings. Provide and install liquid membrane curing compound and anti-spalling treatment at all exposed surfaces. Unless noted otherwise, provide 6x6-W1.4xW1.4 welded wire fabric in all walks and 6x6-W2.9xW2.9 in drives and aprons. Use forms when placing concrete to create smooth and exact corners. All exterior concrete shall be minimum 4000 psi at 28 days unless noted otherwise. Provide inspections and tests by an independent testing company where required by Code or indicated.

Install expansion joints with expansion material, where shown and at locations between abutting elements and to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute. Install contraction joints with tools or by saw, where shown on the drawings and at locations to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute.

Where exposed aggregate slabs are indicated, review aggregates with Architect and provide sample panels for approval, prior to start of work.

All surfaces shall be broom finished unless noted otherwise. Protect slabs during the course of the work and replace any damaged concrete.

Where Civil Engineering drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

32 16 00 CURBS AND GUTTERS

Provide and install concrete curbs, gutters, drive approaches, etc., where shown on the drawings, in design and profile indicated. Provide and install liquid membrane curing compound and anti-spalling treatment at all exposed surfaces. Unless noted otherwise, provide 6x6-W2.9xW2.9 in drives and aprons. Use forms when placing concrete to create smooth and exact corners. Curb machines are to used where ever possible. All exterior concrete shall be minimum 4,000 psi at 28 days unless noted otherwise. Provide inspections and tests by an independent testing company where required by Code or indicated.

Install expansion joints with expansion material, where shown and at locations between abutting elements and to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute. Install contraction joints with tools or by saw, where shown on the drawings and at locations to create panel sizes that do not exceed maximum areas as recommended by the American Concrete Institute.

All surfaces shall be broom finished unless noted otherwise. Protect slabs during the course of the work and replace any damaged concrete.

Where Civil Engineering drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

32 17 23 PAVEMENT MARKINGS

Provide all pavement markings, where shown on the drawings, in pattern as indicated. Provide symbols, arrows, numbers, letters, words, etc., as shown. All painted stripes shall be 4 inches wide. Disabled symbols shall meet Code in size and location in designated space. Other shapes shall be sized as shown on the drawings. Stencils shall be used for symbols, arrows, numbers, letters, words, etc.

Paint shall be factory mixed, quick drying, low VOC and comply with Federal Specification TTP-115. Paint color shall be white.

Clean surfaces to receive markings. Mark areas with temporary chalk lines to create uniform installation. Install paint in appropriate weather conditions to ensure proper adhesion.

32 90 00 PLANTING

Where shown in the drawings, provide and install all plants, shrubs, trees, sod, seeding, mulch, edging and all accessories required for a complete installation. All plant materials shall be healthy, full, without any dead portions, at the time of installation. At areas indicated to have mulch, provide heavy duty weed blocking material that allows water to penetrate through. Provide fertilizer for all plant materials, type appropriate for plant materials installed.

Provide all excavation for shrubs and trees, including backfilling. Stakes, guying and wrap shall be used at all trees. Provide additional topsoil where required.

Plant in favorable weather conditions during the spring, summer and fall. All plants, shrubs, trees and sod shall have a one year guarantee.

Where Landscape drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

DIVISION 33 SITE UTILITIES

33 00 00 UTILITIES

Provide site utilities and utilities to building as required.

Coordinate locations of utilities into the building with the Architect, prior to installation. Routing of utilities to building may need to change to accommodate locations of meters, transformers, etc. at the building for aesthetic or other reasons. Provide access covers, cleanouts, etc. where required.

Backfill and compact all trenches, holes, etc. appropriately to avoid low spots. Where existing pavement has been disturbed, patch with matching compacted sub-base material and matching pavement, without affecting drainage. Where landscaped areas are disturbed, return area to existing conditions and replace sod and/or plantings.

Where Civil Drawings are incorporated into the documents, these drawings and specifications will take precedence over this specification section.

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http://www.sjoquist.com

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of MINNESOTA

Signature

C L ROBERTSON / 22275
Architect / Registration

2018. 03. 09
Date

ACK CLR
Drawn Checked

Revisions

1728
Project Number

NEW BUILDING
HANOVER
DENTAL

411 LABEAUX AVENUE NE

HANOVER
MINNESOTA

SPECIFICATIONS

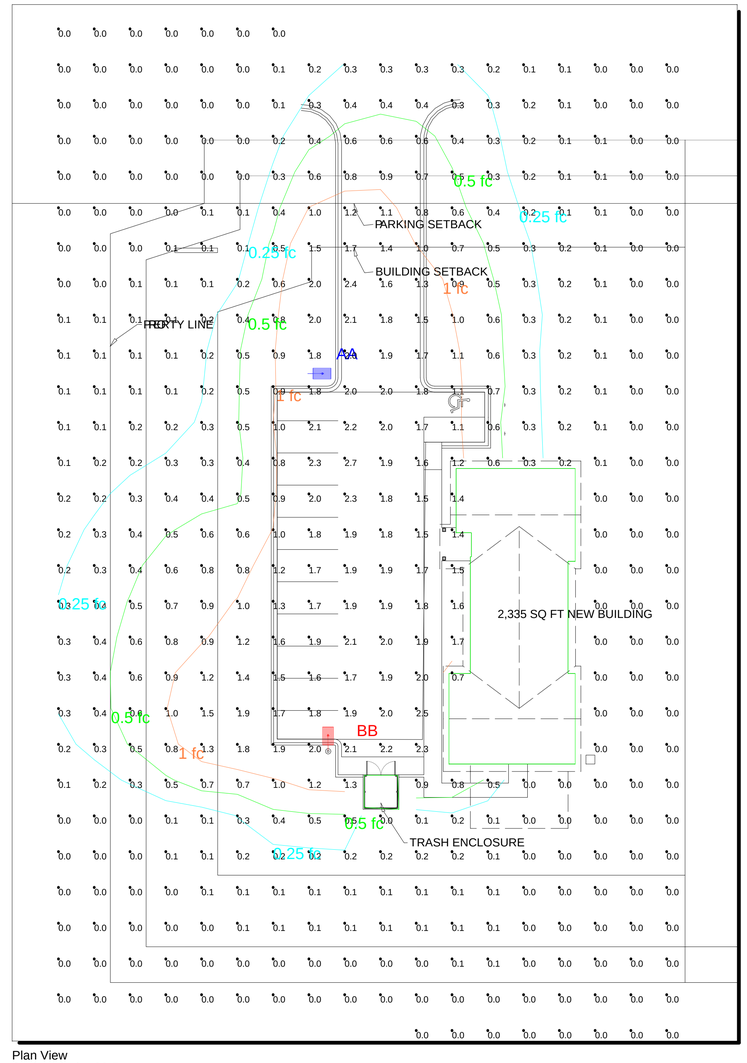
A-702

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Watts	Lum. Lumens
	1	AA	SINGLE	0.900	LUMARK PRV-A40-D-UNV-T3-BZ MOUNT ON 25FT POLE WITH 30IN BASE	143	15203
	1	BB	SINGLE	0.900	LUMARK PRV-A40-D-UNV-T4-BZ MOUNT ON 25FT POLE WITH 30IN BASE	143	15157

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE GROUND	Illuminance	Fc	0.47	2.7	0.0	N.A.	N.A.
PARKING	Illuminance	Fc	1.89	2.7	1.1	1.72	2.45

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
24	AA	-39.4	113.9	27.5	0	0
25	BB	-33.7	8.6	27.5	90	0

TYPE AA & BB



Plan View
Scale: 1 inch= 20 Ft.

GENERAL NOTES:

A. PULSE PRODUCTS DOES NOT ASSUME RESPONSIBILITY FOR THE INTERPRETATION OF THIS CALCULATION OR COMPLAINCE TO THE LOCAL, STATE, OR FEDERAL LIGHTNG CODES OR ORDINANCES.

B. LIGHTING LAYOUT IS NOT INTENDED FOR CONSTRUCTION DOCUMENTS BUT ONLY TO ILLUSTRATE THE PERFORMANCE OF THE PRODUCT.

C. ALL READINGS/CALCULATIONS SHOWN ARE SHOWN ON OBJECTS/SURFACES.

PULSE never ordinary

#	Date	Comments

Revisions

Drawn By: SANDY
Checked By: TRENT
Date:3/16/2018
Scale: AS NOTED

HANOVER DENTAL

HANOVER
DENTAL

HANOVER
DENTAL

CITY OF HANOVER
COUNTIES OF WRIGHT AND HENNEPIN
STATE OF MINNESOTA

A regular meeting of the City Council of the City of Hanover, Minnesota, was called to order by Mayor Kauffman at 6:00 p.m. in the Council Chambers of the City Hall, in the City of Hanover, Minnesota, on the 17th day of April, 2018.

The following Council Members were present:

The following Council Members were absent:

A motion to adopt the following resolution was made by _____ and seconded by _____.

RESOLUTION NO 04-17-18-44

A RESOLUTION APPROVING EDA MATCHING GRANT REQUEST

WHEREAS, the Hanover Economic Development Authority received a Matching Grant Program application from Hanover Dental; and

WHEREAS, Hanover Dental requested a $7,500 grant towards exterior aesthetics in the form of adding masonry block to the front of the building; and

WHEREAS, the Hanover EDA supports the request; and

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Hanover, Minnesota, hereby approves the matching grant through the Hanover Economic Development Authority business incentive fund in the amount of $7,500, subject proof of payment for work related the addition of masonry to the front of the building.

Council members voting in favor:

Opposed or abstained:

Adopted by the city Council this 17th day of April, 2018.

APPROVED BY:

_____
Chris Kauffman, Mayor

ATTEST:

_____
Jackie Heinz, Deputy Clerk

Collaborative Planning, LLC

MEMORANDUM

TO: Honorable Mayor and Council

FROM: Cindy Nash, AICP, City Planner

DATE: April 17, 2018

SUBJECT: **Hanover Cove** for Concept Plan

APPLICANT: Paxmar, LLC

LOCATION: Generally located east of River road and south of 8th Street

COMPREHENSIVE PLAN: Neighborhood Residential

Description of Request

The applicant has submitted a revised concept plan to develop the Duininck gravel mine into a mixed-residential neighborhood consisting of single-family homes and patio homes. The gravel mine has not been reclaimed. The property contains approximately 82.6 acres. The concept plan shows approximately 286 new housing units.

A concept plan is a courtesy review of a proposed project prior to engineering design being completed. Comments and approval by the City Council is non-binding and meant to be used as a guide when preparing a preliminary plat for a development. Full review of project plans occurs at the preliminary plat stage, and there are frequently additional changes made to the plans prior to preliminary plat submission.

At the February 26, 2018 Planning Commission meeting, numerous residents provided questions or comments on the proposed plans. As this is a concept plan review, there is not sufficient detail available to address many of the questions and comments received by residents. This information would be forthcoming in the Environmental Assessment Worksheet (EAW) and preliminary plat.

At the March 6, 2018 City Council meeting, the City Council reviewed the concept plan and took additional public comment. After discussion, the developer offered to revise the concept plan and bring it back to City Council.

Utilizing the density calculations, this development would have the following approximate density:

Gross Acreage	82.6 acres
Less Ponding	8.8 acres
Equals Net Acreage	73.8 acres

Density = 286 units/73.8 acres = 3.88 units/acre

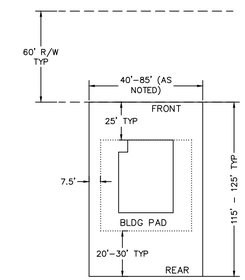
This density is consistent with the Comprehensive Plan guidance. However, the density calculations made at this time are an estimate and would be recalculated with a preliminary plat application.

Staff Comments

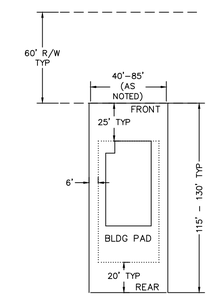
Staff and consultants have reviewed the concept plan and offer the following comments:

1. The site must be designed to meet the density requirements of the Comprehensive Plan (2 to 4 units per net developable acre). This design appears to meet this requirement.
2. An application for a Planned Unit Development may be needed.
3. Homes adjacent to River Road should be provided with additional depth and a buffer should be installed between the back yards and River Road.
4. Consideration should be given for the location of entrance monument signage.
5. Right of way would likely need to be acquired to make the connection to 5th Street.
6. The City's Comprehensive Plan does not identify a need for additional park land in this location. More information will need to be submitted with the preliminary plat application that shows the use and purpose of this additional park land, as well as how it could be usefully improved and incorporated with the existing park. It may be sufficient for this neighborhood to link to the existing park by a trail connection instead of adding additional park land.
7. The pool shown would be an HOA amenity. Design plans for this amenity should be submitted with the preliminary plat application. No park dedication credit would be given for this feature.
8. Corner lots should be wider than a typical lot to accommodate increased corner side yard setbacks.
9. City standard details will be provided.

PRELIMINARY LOT CONFIGURATIONS



SINGLE FAMILY HOMES



PATIO HOMES

DEVELOPER:

PAXMAR, LLC
3495 NORTHDALE BLVD
SUITE 210
COON RAPIDS, MN 55448

0 200 400 Feet

CONCEPT DATA

GROSS SITE AREA: 82.6 ACRES
LOT AREA: 58.6 ACRES
POOL AREA: 0.5 ACRES
R/W AREA: 14.7 ACRES
PONDING/OPEN AREA: 8.8 ACRES

LOT LEGEND	# OF LOTS
75-85' SINGLE FAMILY LOTS	26
75'-85' PATIO HOME LOTS	23
65'-75' SINGLE FAMILY LOTS	101
50-60' PATIO HOME LOTS	81
40'-48' PATIO HOME LOTS	34
40'-48' PATIO HOMES/MULTI LEVEL HOMES FLEX LOTS	21
TOTAL	286

DATE	REVISIONS	NO.	BY

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SCALE GRAPHIC
DRAWN BY: JVS
CHECKED BY: JVS
SURVEYED BY: KVD

HANOVER COVE
CONCEPT PLAN – OPTION 14

HANOVER, MN

DATE REVISED: APRIL 10, 2018

SHEET 1 OF 1

Collaborative Planning, LLC

Memorandum

Date: April 12, 2018

To: Honorable Mayor and Council

From: Cindy Nash, City Planner

RE: Shoreland Ordinance

The Anderson property is for sale and is located within the shoreland management area. During discussions with their realtor and interested potential developers, I have been reviewing the shoreland ordinance to provide some guidance as to what may be allowed for development on that parcel. During my review, I've discovered that the City's ordinances are not consistent with state shoreland management rules. Some standards are more restrictive, while others are less restrictive.

Shoreland ordinances and amendments thereto are required to be reviewed and approved by the DNR. Since our ordinance is not consistent with state shoreland rules, I reached out to the DNR to determine the status of the ordinance in their view. Based on their records, the City's ordinance that existed in 1980 had been approved by the DNR, but the revisions that were made in 2004 had been submitted to the DNR but not approved by them.

I recommend that we prepare an update to the City's shoreland regulations (contained in the zoning ordinance) and follow the appropriate procedures to have those approved by the DNR.

To: **Mayor Kauffman & Members of the Hanover City Council**

From: **Brian Hagen, City Administrator**

Re: **GASB 67 & 68 Requirements Pertaining to FRA Pensions**

Date: **April 12, 2018**

Enclosed with this memo is a memo from our auditor, Bergan KDV. The memo outlines GASB 67 and 68 requirements pertaining to fire relief association pension funds. Please read the enclosed memo prior to reading the remainder of this memo.

To further outline our options, I spoke with Tammy Omdal, Northland Public Finance, who assisted Hanover with its recent bonding. I asked what the potential downside may be based on this year's audit findings. Based on information received from bonding rating agencies, it appears that a negative impact on our future bonds is unlikely, yet not 100% known. It is believed that rating agencies are most interested in the health of the pension fund versus compliance with GASB requirements. The FRA's pension fund has historically remained very healthy.

With that being said, staff is seeking direction on how the City would like to proceed:

Option 1
Continue as we have and complete the required audit, but do not hire an actuarial to meet GASB 67 and 68. This would mean we would continue to utilize the SC form to gauge an estimate of the FRA's Net Pension Asset. For 2017 financials, the percentage funded is likely going to see a large increase. A further item to note on this is that historically, the Council has ratified an increase in the annual pension payout amount. Further consideration should be given to an increase in 2018 due to a couple factors. First, the department is anticipating upwards of five retirements in coming years which would receive payouts of 25 plus years to each retiree. Second, the FRA saw successful investments in 2017. There has been concern expressed by financial advisors of a correction to the market, meaning the potential of investment losses, and a reduction to the pension fund. Both Bergan KDV and Northland Public Finance support a more conservative approach to this year's review of a pension increase based on the two factors identified.

Option 2
Hire an actuarial to complete the requirements of GASB 67 and 68. This would allow a true assessment of the FRA Pension Fund and its Net Pension Asset. This would then allow a more confident approach to an adjustment of the annual pension payout amount. If this option is desired, staff would then seek official quotes for the actuarial costs. Direction on who funds this cost would also be desired. This would also remove the modified finding of the financial statements.

MEMO REGARDING THE FIRE RELIEF ASSOCIATION(FRA) NET PENSION ASSET

CITY OF HANOVER

GASB has issued statements 67 and 68 related to pensions. GASB 67 is related to the pension liability measurement for the FRA and GASB 68 is related to the asset/liability required to be recorded on the City's government-wide financial statements. The Hanover Fire Relief Association has chosen not to implement these standards and the opinion on their financial statements has been modified in relation to this, since December 31, 2014.

The FRA has used the SC form as required by the MN Office of the State Auditor to determine the liability and projected deficit or excess of funds in the Association's Pension Fund. Each year an excess has been calculated. This excess has been used by the City as an estimate of the Net Pension Asset that would be required to reported on the City's government-wide financial statements in accordance with GASB 68. Each previous year, this amount has not been material to the City and the asset has not been recorded. For the year ended December 31, 2017, this estimate has become material.

So, the City has a couple of options:

- Obtain the actuarial study and record the associated asset on the government-wide statements and include the required footnotes disclosures and Required Supplementary Information (RSI). We have seen the study cost range around $3,000 - $5,000. A true cost would have to be obtained directly from the actuary.
- Omit the asset, related note disclosures and RSI. This option would modify the opinion on the financial statements to indicate that Generally Accepted Accounting Principles require this information and it has been omitted.